Bracketed Courses 2021-2022

The courses were not offered during the 2021-2022 academic year, but were displayed as expected to be offered.

African and African American Studies

AAAS S-171 Study/So Africa: Perspectives
CourseID: 214430
Faculty:
Next Term Offered:

AAAS S-188 Study/So Africa: Colonialism
CourseID: 214431
Faculty:
Next Term Offered:

AAAS 130Y Mobility, Power and Politics
CourseID: 000130
Faculty:
Next Term Offered:

This course incorporates insights from the new mobilities paradigm in studying the linkages between movement, power and politics in the contemporary era. The course will discuss how issues of mobility are central to many lives and many organizations, and how movement intersects with the spatialization and materialization of power, difference and inequality within societies. Students will come to an understanding of how mobility, and control over mobility, both reflects and reinforces power; why mobile subjects are increasingly a risk and at risk; and the impact of the regulation and governance of mobility on conflict, security and development. Students will also benefit from the new light that this course sheds on how issues of mobility and immobility intersect with security and development in at least five core areas: (1) questions of power and government (2) spaces of regulation and intervention (3) the quandary of freedom and control in a globalized world; (4) infrastructures that enable and constrain movement; and (5) issues of justice and ethics. Confirming the analytical appeal of the mobilities paradigm, this course will serve as a melting pot for a variety of disciplines, including sociology, anthropology, geography, gender studies, social work and social policy, disability and health studies, conflict analysis and resolution, urban studies, political science and international relations. Topics will include mobility and terrorism after 9/11; mobility and mobilization of the urban poor; youth, mobility and being 'stuck'; social mobility; roads, corruption and policing; mobility and il/legality; gender and mobility; and mobility as fieldwork.

AAAS 196Y African Trauma Literature and the Politics of Memory
CourseID: 214584
In this course, we will examine literary representations of trauma in African postcolonial and contemporary literature and elucidate the politics of memory in Africa from the theoretical and psychoanalytic standpoint of Pumla Gobodo-Madikizela, Frantz Fanon, Kali Tal, Ifi Amadiume, Shoshana Felman, Cathy Caruth, Dori Laub, Judith Butler, Achille Mbembe, and others. We will focus on the various aspects of trauma theory as related to contemporary trauma narrative including memory and forgiveness, retrospective narrative, testimony and bearing witness, PTSD, mourning, war and violence, transgenerational trauma as well as healing and working through trauma. In order to understand how trauma impacts African communities and individuals in their daily life and their political, social and economic struggles, we will be analyzing "structural disorder" and "historical event" (Petar Ramadanovic) narratives, including fiction by Aminata Forna, Boubacar Boris Diop, Tayeb Salih, Yaa Gyasi, Ben Okri, Chris Abani, Jennifer Makumbi, with a special focus on the various strategies used by the individuals and communities as represented in African literature to cope with their traumatic experiences.

AAAS 197Y Critiquing Black Muslim Reason

This seminar asks: What does it mean to be Black in the United States? What does it mean to be a Muslim in the United States? What happens when these two identities compound or collide with one another? Well, what about Black Muslim Womanhood, for example? There are scholars who have discussed the "triple constraints" that Black Muslim Women, for example, face as they navigate the American public sphere. As well, while we directly confront questions of citizenship and belonging and without relying too heavily on critical race theory, we will take some time to think about how these sites of identity (and their reception) specifically impact Black Muslims in the United States. The primary purpose of this course?seminar?is to try to disentangle these sites of identity while understanding that for the people who are Black, Muslim, Female, and/or Migrant, there is no way to properly understand how people are subjected to various forms of marginalization, or resist structural racism or sexism, combat Islamophobia, or articulate what it means to either have or gain citizenship, or build communities where their whole selves are affirmed, by thinking that these identities are ever separable.

The secondary aim of this course on Black Muslims is to think more deeply about how such a term has historically been applied to African-American Muslims (that is, American-born Muslims of African descent). Yet, our task is take up Edward Curtis’ assertion that the popular use of the term ‘Black Muslim’ has not traditionally included Senegalese, Gambian, Somali, Sudanese, Trinidadian, or otherwise dark-skinned
Muslims whose point of origin is beyond the United States. Nonetheless, Senegalese or Somali-American Muslims must contend with the othering effects of racism and Islamophobia?they are similarly impacted by police violence and structural discrimination. However, in some cases, they must also combat racially and religiously-motivated legislation that results in exclusion masked as immigration reform (e.g. Muslim Ban).

AAAS 219A Race and Ethnicity in Latin America  
CourseID: 213432  
Faculty:  
Next Term Offered:

AAAS 299 Introduction to Graduate School: Skills and Practices for Scholarly Success  
CourseID: 212836  
Faculty:  
Next Term Offered:

The course trains graduate students in the humanities and social sciences in foundational skills that lead to scholarly success. Students learn to read journal articles swiftly and with high comprehension and retention, to write clear and persuasive prose, to teach effectively, and to identify and apply for grants. The course also leads students through a process by which they orient themselves to the major journals, scholarly organizations, and conferences in their respective disciplines. Students in the course produce a series of documents of direct, practical value: a polished academic C.V., a Harvard Scholar website, and a syllabus, among others. The purpose of this course is to reveal the "hidden curriculum" of grad school and to develop the skills and habits of mind that will benefit students in their doctoral programs and throughout their diverse careers.

AFRAMER 100 Race and Modernity: W. E. B. Du Bois, James Baldwin and Lorraine Hansberry  
CourseID: 205689  
Faculty:  
Next Term Offered:

This course will examine the classic texts of the towering intellectual figures who exemplify profound interpretations of race and modernity. Works include Du Bois's The Souls of Black Folk, Dusk of Dawn, Baldwin's Notes of a Native Son, No Name in the Street and Hansberry's Raisin in the Sun and To Be Young, Gifted and Black.
AFRAMER  125X Urban Inequality after Civil Rights  
CourseID: 156259  
Faculty:  
Next Term Offered: 2019 Spring  

Why is the United States more segregated today than ever before? By examining the impact of social, political, and economic transformations in the decades after the civil rights movement, this course addresses historical developments that functioned to increase segregation and income stratification in African American communities in the late twentieth century and into the twenty-first. Offered jointly with the Graduate School of Design as SES 5507.

AFRAMER  130X Richard Wright: Literature, Philosophy, and Politics  
CourseID: 156260  
Faculty:  
Next Term Offered:

This course examines the major fiction and nonfiction works of Richard Wright from a literary, philosophical, and political perspective. We will take an interdisciplinary approach to this wide-ranging and canonical American author, contextualizing him within the broader tradition of black letters. Readings include but are not limited to Uncle Tom's Children, Native Son, Black Boy, American Hunger, 12 Million Black Voices, The Outsider, Black Power, The Color Curtain, White Man Listen!, and Eight Men. The course also explores major influences in Wright's development including the work of Marx, Sartre, and Freud.

AFRAMER  131X Faulkner, Interracialism and Popular Television  
CourseID: 208092  
Faculty:  
Next Term Offered:

What could Scandal or How To Get Away with Murder possibly have in common with the works of William Faulkner? This course puts our classic literature in conversation with current canonical pop culture. Each week we will examine how Shonda Rhimes's hit television shows Scandal and How To Get Away With Murder resurrect the same charged topics of interracial sex, black personhood and white anxieties that William Faulkner described and imagined in his novels Absalom, Absalom and Light in August. All of these texts tackle themes such as othering, violence as liberation and the spectre of interracialism but what do they say about them in particular? What does Rhimes highlight about this? Faulkner? What is achieved textually versus visually? This course looks at how all of these expressions discuss the highly charged topic of race and blackness and offers a lens through which to look at our daily life.

AFRAMER  154X Learning Languages: Communication, Acquisition, Translation and Authorship from Africa and Beyond
This interdisciplinary, experimental, social engagement course explores the foundations of language learning and communicative competence from an African perspective. What do language learners at Harvard have to learn from the polyglots of rural Cameroon, the transnational traders of the Sahara Desert, the code-switching "beach boys" of the Swahili Coast, and the code-mixing/code-scrambling urban dwellers? How might studying language acquisition, communicative commerce, and the pragmatics of association and affiliation from Africa help to make us better language learners, translators, and global citizens in an increasingly connected world? What does it mean to "know" a language? How is "fluency" best achieved? Is language best understood as a "skill" as an "opportunity" as a "space" -what? What happens when we start to think of language not just as an avenue but as a locus of knowledge production, wealth generation and cultural participation. How does fluency (competence and performance) through social engagement learning compare to fluency attained through scholarly study? Calling into question dominant Western modes of language teaching and learning, this course explores new theoretical, methodological, and practical approaches to language learning, translation, and intellectual engagement. This course will allow students to bring their own linguistic questions and projects into the classroom, while at the same time studying the Harvard African Language Program's ongoing experiment in language teaching and learning. Encouraging hands-on, practical language learning, the course will offer students the opportunity to attain new linguistic capacities and strategies through "shock language lessons," to practice collaborative translations with language speakers and tradition bearers, and to undertake their own communicative adventures in local communities. Readings will include a wide range of interdisciplinary texts, including Nigerian novels, Anthropological theory, Swahili rap lyrics, historical Linguistics, Zulu praise poetry, Colonial-era grammars, and STS (science and technology studies) ethnographies. Coursework will include translations of foreign language texts, reading responses, social engagement work, and a final analytic or creative project.

AFRAMER 158X The Key to Making It? Educational progress and barriers among black Americans
CourseID: 160402
Faculty:
Next Term Offered:

This course combines the study of the historical trajectory of educational achievement among African Americans with a sociological analysis of the challenges they have faced in attaining educational equity, with a focus on the current situation. The course will review the structural barriers to educational achievement that blacks have faced at different periods in the history of the US and the cultural strengths, such as the high value placed on education, that have driven them to achieve. The persistence of racial barriers in the current era and their importance for social mobility, particularly among working class and poor blacks, will be discussed.
AFRAMER  187X The Creole Spirits  
CourseID: 208021  
Faculty:  
Next Term Offered:  

This course explores the ways that various religious ideas and practices shaped racial formation in the Afro-diasporic Americas from the colonial period through the twentieth century. The course covers European and African religious understandings of the Atlantic slave trade in the colonial era as well as slaves' reactions to colonial social structures and the formation of creolized religions. Students will also explore topics such as black missionary endeavors, Afro-Creole Spiritualism, Rastafarianism, and Haitian Vodou.

AFRAMER  199Z Majesty and Mythology in African Art  
CourseID: 207767  
Faculty:  
Next Term Offered:  

This course serves as an introduction to key themes in Africa art framed around both questions of rulership and the array of mythological forms that define these and other arts. The course also examines what these arts reveal about the nature of power, society, and religion in Africa more generally. The diverse ways that Africans have employed art and architecture to define individual and group identity will also be examined. Among the topics that will be discussed are palace and community architecture, regalia, women, divine kingship, cosmology, enthronement ceremonies, history, and the importance of art in diplomacy and war. The importance of broader art and architectural connections between Africa and other world areas will be engaged as well, bringing into play issues of colonialism, the global economy, questions of display, and current concerns with art appropriation and return.

AFRAMER  212 Entrepreneurship in Africa  
CourseID: 110092  
Faculty: Jacob Olupona  
Next Term Offered: 2019 Spring  

This course is designed to help students develop an understanding of the socio-economic revolution in the emerging African market. The goal will be to inspire and equip budding social entrepreneurs with knowledge and skills specific to context, challenges and innovation in enterprises that advance the continent with strong social impact. Designed as a seminar course, and team taught by faculty from across the Harvard schools, each session will focus on a theme - Agriculture & Food, Energy, Healthcare and Education - that affect development across the African Continent. The course will explore the unique challenges and opportunities of launching and growing an enterprise in the African context. Students will examine conditions in North, West, East, Central and Southern Africa and study how the current environments - political, social, technological and economic - can impact entrepreneurs' approach to growth, scalability.
and partnerships as they launch new businesses or social ventures. The course will explore questions such as how social entrepreneurship theory manifests in practice, how Africa’s challenges are identified and solutions developed, the evolving role of leadership, ethics, governments, and social sector development in Africa and how entrepreneurs can leverage their ideas to create systems and policy level social change in Africa. The course will meet weekly including a 1-hour weekly group section focused on a final project. Students will work in teams to produce a final project business plan for a social enterprise or a strategy paper that addresses a business and development need specific to a region in Africa. The course will be open for cross-registration to all Harvard graduate students, limited by capacity to undergraduate students.

AFRAMER 218 Topics in African American History
CourseID: 115728
Faculty:
Next Term Offered: 2019 Spring

This graduate readings seminar surveys African American history from the slave trade through the early twentieth century. We will examine the experiences of African Americans alongside the history of race relations in a larger American context. Topics include slavery, abolition, and the transition to freedom; regional and cultural differences among African Americans; black politics; and issues of gender and class in black communities. We will also discuss the nature of historical inquiry and differing modes of historical interpretation.

AFRAMER 256 Advanced Readings in Legal Anthropology
CourseID: 204463
Faculty:
Next Term Offered: 2021 Spring

AFRAMER 402 Theory and Race in the Americas
CourseID: 211218
Faculty:
Next Term Offered:

AFRAMER 402 Theory and Race in the Americas
CourseID: 211219
Faculty: Marla Frederick
Next Term Offered:

AFRIKAAN 101BR Advanced Afrikaans II
CourseID: 205836
Faculty:
Next Term Offered:
A study of Afrikaans a major language spoken in South Africa at the Advanced level in the Spring semester. As needed, successive advanced readings in Afrikaans may be taken under Afrikaans 101br every Spring.

**BEMBA BA Intermediate Bemba**
CourseID: 205992
Faculty:
Next Term Offered:

A study of Bamanankan the major language and lingua franca of Mali and Côte-d'Ivoire at the Intermediate level (Second year part 1). Contact hours supplemented by language lab sessions. Emphasis on written expression, reading comprehension, and oral fluency. Students are strongly encouraged to take both parts of the course (AA and AB) within the same academic year. The curriculum builds throughout the year. Students taking Bemba BA in the Spring must note that Bemba BB is offered only in the Spring and must therefore wait for Spring to complete the course.

**BEMBA BB Intermediate Bemba**
CourseID: 206344
Faculty:
Next Term Offered:

A study of Bemba a major language spoken in Zambia at the Intermediate level (Second year part 2). Contact hours supplemented by digital resources sessions. Emphasis on written expression, reading comprehension, and oral fluency. Students are strongly encouraged to take both parts of the course within the same academic year. The curriculum builds throughout the year. Students taking Bemba BA in the Spring must note that Bemba BB is offered only in the Spring.

**BEMBA 101BR Advanced Bemba II**
CourseID: 205994
Faculty:
Next Term Offered:

A study of Bamanankan the major language and lingua franca of Mali and Côte-d'Ivoire at the Advanced level in the Spring semester. As needed, successive advanced readings in Bamanankan may be taken under Bamanankan 101br every Spring.

**CAMEROON AA Elementary Cameroonian Pidgin**
CourseID: 205669
Faculty:
Next Term Offered:
A study of Cameroonian Pidgin the most widespread lingua franca in Cameroon at the Elementary level (First year part 1). Contact hours supplemented by digital resources. Emphasis on written expression, reading comprehension, and oral fluency. Students are strongly encouraged to take both parts of the course (AA and AB) within the same academic year. The curriculum builds throughout the year.

CAMEROON  BA Intermediate Cameroonian Pidgin
CourseID: 205857
Faculty:
Next Term Offered:

A study of Cameroonian Pidgin the most widespread lingua franca in Cameroon at the Intermediate level (Second year part 1). Contact hours supplemented by language lab sessions. Emphasis on written expression, reading comprehension, and oral fluency. Students are strongly encouraged to take both parts of the course (AA and AB) within the same academic year. The curriculum builds throughout the year. Students taking Cameroonian Pidgin BA in the Spring must note that Cameroonian Pidgin BB is offered only in the Spring and must therefore wait for Spring to complete the course.

CAMEROON  101AR Advanced Cameroonian Pidgin
CourseID: 205851
Faculty:
Next Term Offered:

A study of Cameroonian Pidgin the most widespread lingua franca in Cameroon at the Advanced level in the Fall semester. As needed, successive advanced readings in Cameroonian Pidgin may be taken under Cameroonian Pidgin 101ar every Fall.

EGYPTARB  AB Elementary Egyptian Arabic
CourseID: 206880
Faculty:
Next Term Offered:

A study of Egyptian Arabic the de facto national working language in Egypt at the Elementary level (First year part 1). Contact hours supplemented by digital resources. Emphasis on written expression, reading comprehension, and oral fluency. Students are encouraged to complete both parts of this course (parts AA and AB) within the same academic year.

EGYPTARB  101AR Advanced Egyptian Arabic
CourseID: 206883
Faculty:
Next Term Offered:
A study of Egyptian Arabic the de facto national working language in Egypt at the Advanced level in the Fall semester. As needed, successive advanced readings in Egyptian Arabic may be taken under Egyptian Arabic 101ar every Fall.

EWE AA EWE AA CourseID: 214450 Faculty: Next Term Offered:

A study of a Niger-Congo language spoken in southeastern Ghana at the elementary level. Contact hours supplemented by language lab sessions. Emphasis on written expression, reading comprehension, and oral fluency. Students are strongly encouraged to take both parts of the course within the same academic year. The curriculum builds throughout the year.

EWE AB EWE AB CourseID: 214454 Faculty: Next Term Offered:

A study of a Niger-Congo language spoken in southeastern Ghana at the elementary level. Contact hours supplemented by language lab sessions. Emphasis on written expression, reading comprehension, and oral fluency. Students are strongly encouraged to take both parts of the course within the same academic year. The curriculum builds throughout the year.

GIKUYU AB Elementary Gikuyu CourseID: 159781 Faculty: Next Term Offered:

Gikuyu is a Bantu language spoken by Kenya’s most populous ethnic group. The Gikuyu are among Africa’s most recognized peoples because of the Mau Mau freedom fighters who were mainly Gikuyu. Students are strongly encouraged to take both parts of the course within the same academic year. The curriculum builds throughout the year.

HAITIAN AA Elementary Haitian Creole CourseID: 126306 Faculty: Next Term Offered:

A study of Haitian Creole the dominant official and native language of Haiti at the Elementary level (First year part 1). Contact hours supplemented by digital resources.
Emphasis on written expression, reading comprehension, and oral fluency. Students are strongly encouraged to complete both terms of this course (parts AA and AB) within the same academic year.

HAITIAN AB Elementary Haitian Creole
CourseID: 205859
Faculty:
Next Term Offered:

A study of Haitian Creole the dominant official and native language of Haiti at the Elementary level (First year part 2). Contact hours supplemented by language digital resources. Emphasis on written expression, reading comprehension, and oral fluency. Students are strongly encouraged to take both parts of the course within the same academic year. The curriculum builds throughout the year. This course is offered only in the Spring.

HAITIAN BA Intermediate Haitian Creole
CourseID: 205848
Faculty:
Next Term Offered:

A study of Haitian Creole the dominant official and native language of Haiti at the Intermediate level (Second year part 1). Contact hours supplemented by language lab sessions. Emphasis on written expression, reading comprehension, and oral fluency. Students are strongly encouraged to complete both terms of this course (parts AA and AB) within the same academic year. Students taking Haitian Creole BA in the Spring must note that Haitian Creole BB is offered only in the Spring and must therefore wait for Spring to complete the course.

HAITIAN BB Intermediate Haitian Creole
CourseID: 205843
Faculty:
Next Term Offered:

A study of Haitian Creole the dominant official and native language of Haiti at the Intermediate level (Second year part 2). Contact hours supplemented by digital resources sessions. Emphasis on written expression, reading comprehension, and oral fluency. Students are strongly encouraged to take both parts of the course within the same academic year. The curriculum builds throughout the year. Students taking Haitian Creole BA in the Spring must note that Haitian Creole BB is offered only in the Spring.

HAITIAN 101AR Advanced Haitian Creole
CourseID: 205856
Faculty:
Next Term Offered:

   A study of Haitian Creole the dominant official and native language of Haiti at the Advanced level in the Fall semester. As needed, successive advanced readings in Haitian Creole may be taken under Haitian Creole 101ar every Fall.

HAITIAN  101BR Advanced Haitian Creole II
CourseID: 205839
Faculty:
Next Term Offered:

   A study of Haitian Creole the dominant official and native language of Haiti at the Advanced level in the Spring semester. As needed, successive advanced readings in Haitian Creole may be taken under Haitian Creole 101br every Spring.

HASSANIY     AA Hassaniyah  AA
CourseID: 214369
Faculty:
Next Term Offered:

   Individualized study of Hassaniyah at the elementary levels. Contact hours with language coach. Emphasis on literacy.

HASSANIY     AA Elementary Hassaniyah
CourseID: 206906
Faculty:
Next Term Offered:

   A study of Hassaniyah a Maghrebi Arabic language in several west African countries including Mali, Algeria, Libya, Mauritania at the Elementary level (First year part 1). Contact hours supplemented by digital resources. Emphasis on written expression, reading comprehension, and oral fluency. Students are encouraged to complete both parts of this course (parts AA and AB) within the same academic year.

HAUSA  101BR Advanced Hausa II
CourseID: 205870
Faculty:
Next Term Offered:

   A study of Hausa a most widely used native language and lingua franca in West Africa at the Advanced level in the Spring semester. As needed, successive advanced readings in Hausa may be taken under Hausa 101br every Spring.
JAMAICAN AA Elementary Jamaican Patois
CourseID: 156750
Faculty:
Next Term Offered:

A study of Jamaican Patois the primary native language of Jamaica at the Elementary level (First year part 1). Contact hours supplemented by digital resources. Emphasis on written expression, reading comprehension, and oral fluency. Students are strongly encouraged to complete both terms of this course (parts AA and AB) within the same academic year.

JAMAICAN BA Intermediate Jamaica Patois
CourseID: 205863
Faculty:
Next Term Offered:

A study of Jamaican Patois the primary native language of Jamaica at the Intermediate level (Second year part 1). Contact hours supplemented by language lab sessions. Emphasis on written expression, reading comprehension, and oral fluency. Students are strongly encouraged to complete both terms of this course (parts AA and AB) within the same academic year. Students taking Jamaican Patois BA in the Spring must note that Jamaican Patois BB is offered only in the Spring and must therefore wait for Spring to complete the course.

JAMAICAN BB Intermediate Jamaican Patois
CourseID: 205881
Faculty:
Next Term Offered:

A study of Jamaican Patois the primary native language of Jamaica at the Intermediate level (Second year part 2). Contact hours supplemented by digital resources sessions. Emphasis on written expression, reading comprehension, and oral fluency. Students are strongly encouraged to take both parts of the course within the same academic year. The curriculum builds throughout the year. Students taking Jamaican Patois BA in the Spring must note that Jamaican Patois BB is offered only in the Spring.

JAMAICAN 101AR Advanced Jamaican Patois
CourseID: 205869
Faculty:
Next Term Offered:

A study of Jamaican Patois the primary native language of Jamaica at the Advanced level in the Fall semester. As needed, successive advanced readings in Jamaican Patois may be taken under Jamaican Patois 101ar every Fall.
JAMAICAN 101BR Advanced Jamaican Patois II  
CourseID: 205878  
Faculty:  
Next Term Offered:  

A study of Jamaican Patois, the primary native language of Jamaica at the Advanced level in the Spring semester. As needed, successive advanced readings in Jamaican Patois may be taken under Jamaican Patois 101br every Spring.

KAMBA AA Elementary Kamba  
CourseID: 206920  
Faculty:  
Next Term Offered:  

A study of Kamba, a major language spoken by the Kamba people of Kenya at the Elementary level (First year part 1). Contact hours supplemented by digital resources. Emphasis on written expression, reading comprehension, and oral fluency. Students are encouraged to complete both parts of this course (parts AA and AB) within the same academic year.

KAMBA AB Elementary Kamba  
CourseID: 206921  
Faculty:  
Next Term Offered:  

A study of Kamba, a major language spoken by the Kamba people of Kenya at the Elementary level (First year part 2). Contact hours supplemented by language digital resources. Emphasis on written expression, reading comprehension, and oral fluency. Students are encouraged to complete both parts of this course (parts AA and AB) within the same academic year. This course is offered only in the Spring.

KINYARWA AA Elementary Kinyarwanda  
CourseID: 206603  
Faculty:  
Next Term Offered:  

A study of Kinyarwanda, the language spoken in all of Rwanda at the Elementary level (First year part 1). Contact hours supplemented by digital resources. Emphasis on written expression, reading comprehension, and oral fluency. Students are strongly encouraged to complete both terms of this course (parts AA and AB) within the same academic year.

KINYARWA AB Elementary Kinyarwanda  
CourseID: 206604
A study of Kinyarwanda the language spoken in all of Rwanda at the Elementary level (First year part 2). Contact hours supplemented by language digital resources. Emphasis on written expression, reading comprehension, and oral fluency. Students are strongly encouraged to take both parts of the course within the same academic year. The curriculum builds throughout the year. This course is offered only in the Spring.

KINYARWA BA Intermediate Kinyarwanda
CourseID: 206605
Faculty:
Next Term Offered:

A study of Kinyarwanda the language spoken in all of Rwanda at the Intermediate level (Second year part 1). Contact hours supplemented by language lab sessions. Emphasis on written expression, reading comprehension, and oral fluency. Students are strongly encouraged to take both parts of this course (parts AA and AB) within the same academic year. Students taking Kinyarwanda BA in the Spring must note that Kinyarwanda BB is offered only in the Spring and must therefore wait for Spring to complete the course.

KINYARWA BB Intermediate Kinyarwanda
CourseID: 206606
Faculty:
Next Term Offered:

A study of Kinyarwanda the language spoken in all of Rwanda at the Intermediate level (Second year part 2). Contact hours supplemented by digital resources sessions. Emphasis on written expression, reading comprehension, and oral fluency. Students are strongly encouraged to take both parts of the course within the same academic year. The curriculum builds throughout the year. Students taking Kinyarwanda BA in the Spring must note that Kinyarwanda BB is offered only in the Spring.

KINYARWA 101AR Advanced Kinyarwanda
CourseID: 206607
Faculty:
Next Term Offered:

A study of Kinyarwanda the language spoken in all of Rwanda at the Advanced level in the Fall semester. As needed, successive advanced readings in Kinyarwanda may be taken under Kinyarwanda 101ar every Fall.

KINYARWA 101BR Advanced Kinyarwanda II
CourseID: 206608
Faculty:
Next Term Offered:

A study of Kinyarwanda the language spoken in all of Rwanda at the Advanced level in the Spring semester. As needed, successive advanced readings in Kinyarwanda may be taken under Kinyarwanda 101 every Spring.

LINGALA     AA Elementary Lingala
CourseID: 206679
Faculty:
Next Term Offered:

A study of Lingala a major spoken in the Democratic Republic of the Congo (DRC), The Republic of Congo, Angola and the Central African Republic at the Elementary level (First year part 1). Contact hours supplemented by digital resources. Emphasis on written expression, reading comprehension, and oral fluency. Students are strongly encouraged complete both terms of this course (parts AA and AB) within the same academic year.

LINGALA     AB Elementary Lingala
CourseID: 206680
Faculty:
Next Term Offered:

A study of Lingala a major spoken in the Democratic Republic of the Congo (DRC), The Republic of Congo, Angola and the Central African Republic at the Elementary level (First year part 2). Contact hours supplemented by language digital resources. Emphasis on written expression, reading comprehension, and oral fluency. Students are strongly encouraged to take both parts of the course within the same academic year. The curriculum builds throughout the year. This course is offered only in the Spring.

LINGALA     BA Intermediate Lingala
CourseID: 206681
Faculty:
Next Term Offered:

A study of Lingala a major spoken in the Democratic Republic of the Congo (DRC), The Republic of Congo, Angola and the Central African Republic at the Intermediate level (Second year part 1). Contact hours supplemented by language lab sessions. Emphasis on written expression, reading comprehension, and oral fluency. Students are strongly encouraged complete both terms of this course (parts AA and AB) within the same academic year. Students taking Lingala BA in the Spring must note that Lingala BB is offered only in the Spring and must therefore wait for Spring to complete the course.

LINGALA     BB Intermediate Lingala
Course ID: 206682
Faculty:
Next Term Offered:

A study of Lingala, a major spoken in the Democratic Republic of the Congo (DRC), The Republic of Congo, Angola and the Central African Republic at the Intermediate level (Second year part 2). Contact hours supplemented by digital resources sessions. Emphasis on written expression, reading comprehension, and oral fluency. Students are strongly encouraged to take both parts of the course within the same academic year. The curriculum builds throughout the year. Students taking Lingala BA in the Spring must note that Lingala BB is offered only in the Spring.

LINGALA 101AR Advanced Lingala
Course ID: 206683
Faculty:
Next Term Offered:

A study of Lingala, a major spoken in the Democratic Republic of the Congo (DRC), The Republic of Congo, Angola and the Central African Republic at the Advanced level in the Fall semester. As needed, successive advanced readings in Lingala may be taken under Lingala 101ar every Fall.

LINGALA 101BR Advanced Lingala II
Course ID: 206684
Faculty:
Next Term Offered:

A study of Lingala, a major spoken in the Democratic Republic of the Congo (DRC), The Republic of Congo, Angola and the Central African Republic at the Advanced level in the Spring semester. As needed, successive advanced readings in Lingala may be taken under Lingala 101br every Spring.

LUGANDA AA Elementary Luganda
Course ID: 206567
Faculty:
Next Term Offered:

A study of Luganda, the major language spoken in Uganda at the Elementary level (First year part 1). Contact hours supplemented by digital resources. Emphasis on written expression, reading comprehension, and oral fluency. Students are strongly encouraged to take both parts of the course within the same academic year. The curriculum builds throughout the year.

LUGANDA BA Intermediate Luganda
Course ID: 206569
A study of Luganda the major language spoken in Uganda at the Intermediate level (Second year part 1). Contact hours supplemented by language lab sessions. Emphasis on written expression, reading comprehension, and oral fluency. Students are strongly encouraged to take both parts of the course within the same academic year. The curriculum builds throughout the year. Students taking Luganda BA in the Spring must note that Luganda BB is offered only in the Spring and must therefore wait for Spring to complete the course.

LUGANDA 101AR Advanced Luganda
CourseID: 206571
Faculty: 
Next Term Offered:

A study of Lingala a major spoken in the Democratic Republic of the Congo (DRC), The Republic of Congo, Angola and the Central African Republic at the Advanced level in the Fall semester. As needed, successive advanced readings in Lingala may be taken under Lingala 101ar every Fall.

MALAGASI AA Elementary Malagasi
CourseID: 206685
Faculty: 
Next Term Offered:

A study of Malagasi the language spoken in Madagascar at the Elementary level (First year part 1). Contact hours supplemented by digital resources. Emphasis on written expression, reading comprehension, and oral fluency. Students are strongly encouraged to take both parts of the course within the same academic year. The curriculum builds throughout the year.

MALAGASI BA Intermediate Malagasi
CourseID: 206687
Faculty: 
Next Term Offered:

A study of Malagasi the language spoken in Madagascar at the Intermediate level (Second year part 1). Contact hours supplemented by language lab sessions. Emphasis on written expression, reading comprehension, and oral fluency. Students are strongly encouraged to take both parts of the course within the same academic year. The curriculum builds throughout the year. Students taking Malagasi BA in the Spring must note that Malagasi BB is offered only in the Spring and must therefore wait for Spring to complete the course.
MALAGASI  101AR Advanced Malagasi
CourseID: 206689
Faculty: 
Next Term Offered:  
A study of Malagasi the language spoken in Madagascar at the Advanced level in the Fall semester. As needed, successive advanced readings in Malagasi may be taken under Malagasi 101ar every Fall.

NKO     BA Intermediate Nko (Bamanankan)
CourseID: 206581
Faculty: 
Next Term Offered:  
A study of Bamanankan the major language and lingua franca of Mali and Côte-d'Ivoire at the Intermediate level (Second year part 1). Contact hours supplemented by language lab sessions. Emphasis on written expression, reading comprehension, and oral fluency. Students are strongly encouraged to take both parts of the course within the same academic year. The curriculum builds throughout the year. Students taking Bamanankan BA in the Spring must note that Bamanankan BB is offered only in the Spring and must therefore wait for Spring to complete the course.

OROMO     AA Elementary Oromo
CourseID: 206575
Faculty: 
Next Term Offered:  
A study of Oromo a major language spoken in several countries including Ethiopia, Kenya, and Somalia at the Elementary level (First year part 1). Contact hours supplemented by digital resources. Emphasis on written expression, reading comprehension, and oral fluency. Students are strongly encouraged to take both parts of the course within the same academic year. The curriculum builds throughout the year.

PULAAR     AA Elementary Pulaar
CourseID: 206946
Faculty: 
Next Term Offered:  
A study of Pulaar the most widely spoken international language in West Africa at the Elementary level (First year part 1). Contact hours supplemented by digital resources. Emphasis on written expression, reading comprehension, and oral fluency. Students are encouraged to complete both parts of this course (parts AA and AB) within the same academic year.
PULAAR AB Elementary Pulaar
CourseID: 206947
Faculty:
Next Term Offered:

A study of Pulaar the most widely spoken international language in West Africa at the Elementary level (First year part 2). Contact hours supplemented by language digital resources. Emphasis on written expression, reading comprehension, and oral fluency. Students are encouraged to complete both parts of this course (parts AA and AB) within the same academic year. This course is offered only in the Spring.

SHONA AA Elementary Shona
CourseID: 205977
Faculty:
Next Term Offered:

A study of Shona a major language spoken mainly in Zimbabwe at the Elementary level (First year part 1). Contact hours supplemented by digital resources. Emphasis on written expression, reading comprehension, and oral fluency. Students are strongly encouraged to take both parts of the course within the same academic year. The curriculum builds throughout the year.

SHONA AB Elementary Shona
CourseID: 205979
Faculty:
Next Term Offered:

A study of Shona a major language spoken mainly in Zimbabwe at the Elementary level (First year part 2). Contact hours supplemented by language digital resources. Emphasis on written expression, reading comprehension, and oral fluency. Students are strongly encouraged to take both parts of the course within the same academic year. The curriculum builds throughout the year. This course is offered only in the Spring.

SHONA BA Intermediate Shona
CourseID: 205980
Faculty:
Next Term Offered:

A study of Shona a major language spoken mainly in Zimbabwe at the Intermediate level (Second year part 1). Contact hours supplemented by language lab sessions. Emphasis on written expression, reading comprehension, and oral fluency. Students are strongly encouraged to take both parts of the course within the same academic year. The curriculum builds throughout the year. Students taking Shona BA in the Spring must note that Shona BB is offered only in the Spring and must therefore wait for Spring to complete the course.
SHONA     BB Intermediate Shona
CourseID: 205981
Faculty: 
Next Term Offered:

   A study of Shona a major language spoken mainly in Zimbabwe at the Intermediate level (Second year part 2). Contact hours supplemented by digital resources sessions. Emphasis on written expression, reading comprehension, and oral fluency. Students are strongly encouraged to take both parts of the course within the same academic year. The curriculum builds throughout the year. Students taking Shona BA in the Spring must note that Shona BB is offered only in the Spring.

SHONA  101AR Advanced Shona
CourseID: 205982
Faculty: 
Next Term Offered:

   A study of Shona a major language spoken mainly in Zimbabwe at the Advanced level in the Fall semester. As needed, successive advanced readings in Shona may be taken under Shona 101ar every Fall.

SHONA  101BR Advanced Shona II
CourseID: 205983
Faculty: 
Next Term Offered:

   A study of Shona a major language spoken mainly in Zimbabwe at the Advanced level in the Spring semester. As needed, successive advanced readings Shona may be taken under Shona 101br every Spring.

SOMALI     AA Elementary Somali
CourseID: 206574
Faculty: 
Next Term Offered:

   A study of Somali the official language of Somalia at the Elementary level (First year part 1). Contact hours supplemented by digital resources. Emphasis on written expression, reading comprehension, and oral fluency. Students are strongly encouraged to take both parts of the course within the same academic year. The curriculum builds throughout the year.

SOMALI     AB Elementary Somali
CourseID: 206578
A study of Somali the official language of Somalia at the Elementary level (First year part 2). Contact hours supplemented by language digital resources. Emphasis on written expression, reading comprehension, and oral fluency. Students are strongly encouraged to take both parts of the course within the same academic year. The curriculum builds throughout the year. This course is offered only in the Spring.

**SOMALI**  **BA Intermediate Somali**
CourseID: 206582
Faculty: 
Next Term Offered:

A study of Somali the official language of Somalia at the Intermediate level (Second year part 1). Contact hours supplemented by language lab sessions. Emphasis on written expression, reading comprehension, and oral fluency. Students are strongly encouraged to take both parts of the course within the same academic year. The curriculum builds throughout the year. Students taking Somali BA in the Spring must note that Somali BB is offered only in the Spring and must therefore wait for Spring to complete the course.

**SOMALI**  **BB Intermediate Somali**
CourseID: 206586
Faculty: 
Next Term Offered:

A study of Somali the official language of Somalia at the Intermediate level (Second year part 2). Contact hours supplemented by digital resources sessions. Emphasis on written expression, reading comprehension, and oral fluency. Students are strongly encouraged to take both parts of the course within the same academic year. The curriculum builds throughout the year. Students taking Somali BA in the Spring must note that Somali BB is offered only in the Spring.

**SOMALI  101AR Advanced Somali**
CourseID: 206590
Faculty: 
Next Term Offered:

A study of Somali the official language of Somalia at the Advanced level in the Fall semester. As needed, successive advanced readings in Somali may be taken under Somali 101ar every Fall.

**SUDANESE**  **BA Intermediate Sudanese Arabic**
CourseID: 205886
Faculty: 
Next Term Offered:

A study of Sudanese Arabic the official and national working language in Sudan at the Intermediate level (Second year part 1). Contact hours supplemented by language lab sessions. Emphasis on written expression, reading comprehension, and oral fluency. Students are strongly encouraged to take both parts of the course within the same academic year. The curriculum builds throughout the year. Students taking Sudanese Arabic BA in the Spring must note that Sudanese Arabic BB is offered only in the Spring and must therefore wait for Spring to complete the course.

SUDANESE   BB Sudanese Arabic  
CourseID: 205868  
Faculty:  
Next Term Offered:

A study of Sudanese Arabic the official and national working language in Sudan at the Intermediate level (Second year part 2). Contact hours supplemented by digital resources sessions. Emphasis on written expression, reading comprehension, and oral fluency. Students are strongly encouraged to take both parts of the course within the same academic year. The curriculum builds throughout the year. Students taking Sudanese Arabic BA in the Spring must note that Sudanese Arabic BB is offered only in the Spring.

TWI  101AR Reading in Twi  
CourseID: 120948  
Faculty:  
Next Term Offered:

Advanced reading in Twi.

TWI  101BR Reading in Twi II  
CourseID: 120950  
Faculty:  
Next Term Offered:

Advanced reading in Twi II.

WOLOF     AA Elementary Wolof  
CourseID: 205984  
Faculty:  
Next Term Offered:

A study of Wolof the major language spoken in Senegal at the Elementary level (First year part 1). Contact hours supplemented by digital resources. Emphasis on written
expression, reading comprehension, and oral fluency. Students are strongly encouraged to complete both terms of this course (parts AA and AB) within the same academic year.

WOLOF  BA Intermediate Wolof
CourseID: 205986
Faculty: 
Next Term Offered:

A study of Wolof the major language spoken in Senegal at the Intermediate level (Second year part 1). Contact hours supplemented by language lab sessions. Emphasis on written expression, reading comprehension, and oral fluency. Students are strongly encouraged to complete both terms of this course (parts AA and AB) within the same academic year. Students taking Wolof BA in the Spring must note that Wolof BB is offered only in the Spring and must therefore wait for Spring to complete the course.

WOLOF  101AR Advanced Wolof
CourseID: 205988
Faculty: 
Next Term Offered:

A study of Wolof the major language spoken in Senegal at the Advanced level in the Fall semester. As needed, successive advanced readings in Wolof may be taken under Wolof 101ar every Fall.

WOLOF  101BR Advanced Wolof II
CourseID: 205989
Faculty: 
Next Term Offered:

A study of Wolof the major language spoken in Senegal at the Advanced level in the Spring semester. As needed, successive advanced readings Wolof may be taken under Wolof 101br every Spring.

WSTAFRCN  101AR Advanced West African Pidgin
CourseID: 205877
Faculty: 
Next Term Offered:

A study of West African Pidgin a major lingua Franca spoken in West Africa at the Advanced level in the Fall semester. As needed, successive advanced readings in West African Pidgin may be taken under West African Pidgin 101ar every Fall.
WSTAFRCN  101BR Advanced West African Pidgin II
CourseID: 205883
Faculty:
Next Term Offered:

A study of West African Pidgin a major lingua franca spoken in West Africa at the Advanced level in the Spring semester. As needed, successive advanced readings in West African Pidgin may be taken under West African Pidgin 101br every Spring.

XHOSA     AA Elementary Xhosa
CourseID: 206994
Faculty:
Next Term Offered:

A study of Xhosa a major language spoken in South Africa at the Elementary level (First year part 1). Contact hours supplemented by digital resources. Emphasis on written expression, reading comprehension, and oral fluency. Students are encouraged to complete both parts of this course (parts AA and AB) within the same academic year.

YORUBA  101AR Reading in Yoruba
CourseID: 120954
Faculty:
Next Term Offered:

Advanced reading in Yoruba.

YORUBA  101BR Reading in Yoruba II
CourseID: 120955
Faculty:
Next Term Offered:

Advanced reading in Yoruba II.
Art, Film, and Visual Studies

AFVS 15AR Silkscreen
CourseID: 121758
Faculty:
Next Term Offered:

For the student who is interested in the manipulation of found and original imagery. Students will create monotypes on paper and other surfaces utilizing the silkscreen process. Through slide presentations, the class will be introduced to the work of artists such as Rauschenberg and Warhol, as well as others who use the silkscreen process.

AFVS 20 Visual Composition
CourseID: 218572
Faculty:
Next Term Offered:

Course created to support student import

AFVS 21 Visual Composition
CourseID: 218555
Faculty:
Next Term Offered:

Course created to support student import

AFVS 21S New Grounds: Painting Course
CourseID: 127166
Faculty: Matt Saunders
Next Term Offered: 2020 Fall

What role does a studio "foundation" play in a technologically and ideologically diverse moment? This will be a painting foundations course, with an emphasis on building skills and exposure to different materials and methods; yet, we also aim to question what the grounds for a painting practice could be, with consideration of conceptual and personal motivation, technical proficiency, and openness to process and experimentation.

AFVS 22 One Thing Leads to Another: Introduction to Oil Painting
CourseID: 205073
Faculty:
Next Term Offered:
This studio class will introduce students to the use of oil paints as a tool for image making, with an emphasis on process over product. Assignments will morph and evolve, one building on another, while drawing on a variety of source materials. Expanded visual acuity and an openness to experimentation will be developed as students explore the nature of oil paint and how it can be used to transform experience into art.

AFVS 24 Painting, Smoking, Eating
CourseID: 127177
Faculty: Matt Saunders
Next Term Offered: 2021 Fall

Titled after Phillip Guston, this course has two agendas: technical assignments that improve your ability to move paint around, and laying conceptual groundwork for personal projects. One task of an artist is to have a relationship with a world. From the vantage of individual studios, we will discuss the boundaries between interior and exterior discourse, as well as the social role of artists and the artist's voice through self-expression as well as abnegation? auteurs, flaneurs, and ventriloquists.

AFVS 63 On Objects: A Studio Course in Sculpture and Performance
CourseID: 205410
Faculty: Karthik Pandian
Next Term Offered: 2019 Fall

This introductory course will investigate the contemporary status of the object through studio projects in sculpture, video and performance. Students will make things, make moving images that represent these things and make language and movement around these things in an exploration of medium, materiality and artistic persona. Work by artists such as Hollis Frampton, David Hammons, Hito Steyerl, Richard Tuttle, Lee Lozano and Mark Leckey will help introduce and guide our projects.

AFVS 123R Post Brush: Studio Course
CourseID: 119644
Faculty: Annette Lemieux
Next Term Offered: 2022 Spring

Using the silkscreen printing process, students will create paintings and objects that incorporate images and text found in popular culture. Through slides, videos and informal discussions, students will be introduced to the Pop artists of the 20th century as well as other contemporary artists.

AFVS 154G Scientific Sites
This course aims to explore scientific-technical sites—places of research, production, teaching, testing, and disposal. Some may be historical (such as disused Cold War relics) others in current use. How are these places shaped by the work that goes in them, how do the sites, in return, condition the work? Our sources will be a mix of site visits, texts (e.g. historical, ethnographic) and films (documentary). Each student will produce both a paper and a short cell-phone filmed video (no experience, we will teach all you need). Open to undergraduates and graduates.

AFVS 155 Documentary Fictions  
CourseID: 205241  
Faculty:  
Next Term Offered: 2022 Fall

In this film production course, students will make short films that explore the fluid boundaries between fiction and documentary. We will discuss the generative possibilities of the real in the production of fiction works, and fictional strategies for working in documentary film. Assignments will encompass video and sound recording and editing, cinematography and montage. Class time will include technical workshops, film screenings, discussions of student work and occasional visiting filmmakers.

AFVS 158BR Sensory Ethnography 2  
CourseID: 110043  
Faculty:  
Next Term Offered:

Students are introduced to current issues in art, aesthetics, and anthropology, and produce collaborative experimental works of sensory ethnography.

AFVS 163R Moving Images: Advanced Projects in Film and Video  
CourseID: 207843  
Faculty: Karthik Pandian  
Next Term Offered: 2021 Spring

This is a workshop for undergraduate and graduate students pursuing self-directed projects in film, video and moving image installation. Students will be responsible for conducting research that culminates in the completion of an ambitious work or series of works in moving image. Regular screenings, readings, discussions, presentations, field trips and group critiques will help students develop their practice as well as find their stakes in the field of production.

AFVS 173 Visual Music
A course that explores the history of visual music throughout the 20th century and across different media. Our topics will range from early avant-garde films and Disney animations to post-war art scenes and pioneers of electronic music to a survey of jukebox films and music videos. By bridging the gap between experimental and popular approaches to visual music, this course will provide a multi-layered history of the interrelations between film, video, animation, and music.

AFVS 181 Film Theory, Visual Thinking
CourseID: 114647
Faculty: Giuliana Bruno
Next Term Offered: 2022 Spring

How do moving images transform the way we think? Introduction to film theory aimed at interpreting the visual world, and developing skills to analyze films and media images. Survey of classical and contemporary film theory goes from turn-of-the-century scientific motion studies to the virtual movements of today. Considers theories of space, time, and motion, including Eisenstein's theory of montage and architecture. Treats visual technology and sensate space, the cultural history of the cinematic apparatus, the body and physical existence, affect and gender, and screen theory. Different theoretical positions guide us in understanding and reading films.

AFVS 182 Film Architectures: Seminar
CourseID: 119771
Faculty: Giuliana Bruno
Next Term Offered: 2021 Fall

What is our experience of architecture in cinema? Considering the relation of these two arts of space, we look at how film and architecture are linked in history on the "screen" of the modern age. Highlighting the interaction of modernity, urban culture and cinema, we explore the architecture of film in relation to the architectures of transit and the culture of travel. Emphasis on readings and case study analysis to pursue research projects and conduct presentations.

AFVS 192 Cinema and French Culture from 1896 to the Present
CourseID: 123960
Faculty: Tom Conley
Next Term Offered: 2021 Fall

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.

**AFVS 193 Fortunes of a Genre: The Western**

CourseID: 110037  
Faculty: Tom Conley  
Next Term Offered: 2020 Fall

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.

**AFVS 205 Graduate Seminar in Curricular Development: What is Media?**

CourseID: 205203  
Faculty: Laura Frahm  
Next Term Offered: 2020 Fall

A graduate seminar in curriculum development that explores the theoretical and historical underpinnings of media studies with an emphasis on media in art and visual culture. Graduate students will be collaborators in proposing and composing course syllabi for a new introductory lecture course "Introduction to Media Theory" to be offered within VES in the coming years. This course will be constructed around novel media-based assignments, and curricular preparation will include research and resource development on media-based scholarship.

**AFVS 215 Critical Printing**

CourseID: 205183  
Faculty: Matt Saunders  
Next Term Offered: 2022 Fall

Incorporating both studio and seminar instruction, this intensive course will explore printmaking's history, trace its particular forms of intelligence, and test its future potential. The class will meet for three hours of studio and two hours of seminar/discussion per week. Assignments will include weekly readings, a short scholarly paper, and two studio projects. For the first half of the semester, students will pursue a rigorous grounding in a particular historical technique (etching/intaglio); in the second half students will translate what they have learned to another medium, thus exploring printmaking as an expanded field of practice.

**AFVS 274 Vision and Power: Introduction to Visual Studies (New Course)**

CourseID: 215119  
Faculty: David Joselit  
Next Term Offered: 2022 Spring
This course will serve as a theoretical introduction to the field of Visual Studies by addressing six key-words, associated with a significant literature related to visual studies. These are: Archaeology (of knowledge; or Media Archaeology); Forensics (in relation to the recent work of Forensic Architecture and others); Subjectivity (as developed through visual means); Spectacle (as an "empire of the visual"); and Art (as a special realm of visuality whose worldly power is often underestimated).

AFVS 279 Materiality, Visual Culture, and Media
CourseID: 203315
Faculty: Giuliana Bruno
Next Term Offered: 2022 Fall

What is the place of materiality in our visual age of rapidly changing materials and media? How is it fashioned in the arts, architecture and media? This seminar investigates a "material turn" in philosophy, art, media, visual and spatial culture. Topics include: actor-network theory, thing theory, the life of objects, the archive, the haptic and the affect, vibrant materialism, elemental philosophy, light and projection, and the immateriality of atmosphere.
American Studies

AMSTDIES 201 Themes in American Studies
CourseID: 118017
Faculty:
Next Term Offered: 2021 Fall

Interdisciplinary study of one or several topics.
Near Eastern Languages and Civilizations

ANE 122 Biblical Interpretation  
CourseID: 113798  
Faculty:  
Next Term Offered:  
Topic for 2000$01: To be announced.

ANE 226 Political History of the Old Babylonian Period  
CourseID: 218322  
Faculty:  
Next Term Offered:  

ANE 301 Reading and Research in Ancient Near Eastern Studies  
CourseID: 214505  
Faculty:  
Next Term Offered:  

ARABIC 150R Travel and Autobiography in Arabic Literature  
CourseID: 122191  
Faculty:  
Next Term Offered: 2020 Spring  
Travel is a persistent feature of Arabophone societies through which they have consistently sought to understand and extend their physical, spiritual and imaginative worlds. This course explores the literary tropes of travel and how real, imaginary and spiritual geographies have been described and developed. It encourages students to think about the theme of travel in Arabic literature, its formal and stylistic modes of expression, and the deeper and diverse implications of writing about traveling. Closely connected to travelogues are biographical and autobiographical works through which themes of identity, belonging, and depiction of the other will be explored. Material is taken from a broad range of Arabic literary works with a focus on modern texts such as The Days by Taha Husayn, The Journey of Ibn Fattuma by Najib Mahfouz, A Mountainous Journey by Fadwa Tuqan, and Season Migration to the North by Tayyib Salih among others. All texts will be read in translation. No previous knowledge of Arabic is required. Students who have reading knowledge of Arabic may participate in an extra weekly session to read the original texts in Arabic.

ARABIC 243DR Advanced Readings in Classical Arabic Bridge IV: Religious Sciences  
CourseID: 109804  
Faculty: Shady Nasser
Next Term Offered: 2022 Spring

ARABIC 245R Classical Arabic Seminar: Introduction to Qur'anic sciences  
CourseID: 114291  
Faculty:  
Next Term Offered: 2019 Fall

A close reading of major selections from al-Suyūṭī’s work on Qur’anic sciences (al-Itqān fī 'Ulūm al-Qur'ān). Topics include history of the transmission of the Qur’anic text, schools of exegesis, abrogation, occasions of revelation, inimitability, revelation, and rhetorical devices (bagai, majz, ilṭīf, tāj?ūl al-?arif, etc.). Al-Suyūṭī’s Itqān will be the main text, however, selections from other manuals will be used such as those by al-Zarkashī, al-Zurqānī, and Muḥammad Bqir al-?akīm. The seminar will be dedicated to reading the primary sources in Arabic as well as discussing the secondary literature and scholarship written on the relevant topics. Weekly response papers/reviews on the secondary scholarship are required, as well as weekly translations of the primary text.

Advanced knowledge of classical Arabic is required (AT LEAST four years of formal, academic training)

ARABIC 250R Islamic Theological Texts: Seminar  
CourseID: 122571  
Faculty: Khaled El-Rouayheb  
Next Term Offered: 2022 Spring

Readings on selected topics in Islamic theology.

ARABIC 251R Classical Arabic Texts: Seminar  
CourseID: 156121  
Faculty:  
Next Term Offered:

Readings in Classical Arabic texts.

EGYPTIAN AA The Language of the Pharaohs: Introduction to Egyptian Hieroglyphs I  
CourseID: 126691  
Faculty: Peter Manuelian  
Next Term Offered: 2021 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
EGYPTIAN AB The Language of the Pharaohs: Introduction to Egyptian Hieroglyphs II  
CourseID: 126692  
Faculty: Peter Manuelian  
Next Term Offered: 2022 Spring

Continues Middle Egyptian I. 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.

HEBREW 131 The Jewish Library: Four Jewish Classics  
CourseID: 214616  
Faculty: David Stern  
Next Term Offered: 2022 Spring

Judaism is a famously text-centric religious culture, founded not only on a single book, the Hebrew Bible, but profoundly involved in the study and ritual use of other classic texts like the Babylonian Talmud, the Prayerbook, Biblical commentaries like that of Rashi, and the Passover Haggadah. This course will study the development of these four books and their transformation from texts into books with distinct physical and material features. In the case of each book, the text will be studied historically—"excavated" for its sources and roots, and its subsequent development over the centuries—and holistically, as a canonical document in Jewish tradition. Class time will be devoted primarily to learning to read the primary sources in translation; supplementary secondary readings will provide historical and cultural context. The seminar will also include regular visits to Houghton Library to look at manuscripts, early printed editions, and facsimiles of these books in order to study the changing shapes these books have taken as a key to understanding how they were studied and used, and to consider the relationship of materiality to textuality. While each book will raise its own set of issues, we will repeatedly deal with three basic questions: What makes a "Jewish" text? How do these books represent different aspects of Jewish identity? What can these books tell us about the canonical books of other religious traditions? No previous background in either Judaism or Jewish history is required. All readings in English translation. While this course is not a formal introduction to Judaism, it does aim to introduce students to Judaism and Jewish culture from inside its classic texts.

HEBREW 167 Prayer and Prayerbook (Tefillah and Siddur)  
CourseID: 214617  
Faculty: David Stern  
Next Term Offered: 2022 Spring
The institution of organized prayer?Tefillah be-Tzibbur?is one of the most complex phenomena in Judaism because it has served historically not only as a medium for worshipping God but also for expressing communal religious identity. In the first half of this course, we will study the development of prayer from the Bible until the medieval period through reading primary sources--select passages from the Bible, Talmud and midrash, Geonic literature and other rabbinic texts—as well as secondary works for historical and literary background. We will also trace the development of piyyut, Hebrew liturgical poetry, and what it can tell us about the character of Jewish prayer. In the second part of the course, we will study the history of the prayerbook as a physical, material object from the early medieval period into the modern. Special attention will be paid to the great illustrated Ashkenazi and Italian mahzorim (holiday prayerbooks) and siddurim, and to the place of the visual imagination in Jewish religious culture. One class will also be devoted to the development of the synagogue and sacred space. The course will also include visits to Houghton Library to view original editions and rare facsimiles of manuscripts.

While the class itself will be conducted in English, all primary sources will be read in Hebrew. Students should be able to read unpointed Hebrew texts.

**HEBREW 239 Exodus 2 in Three Contexts: Seminar**
CourseID: 156094
Faculty: Jon Levenson
Next Term Offered: 2020 Fall

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.

**HEBREW 241 Talmudic Narrative**
CourseID: 205531
Faculty: Jon Levenson
Next Term Offered: 2020 Fall

Talmudic literature is full of stories. This is surprising, even odd, given the fact that Talmud is primarily a legal literature. What purpose do these stories serve? How, in particular, does narrative serve legal discourse? How are these narratives to be analyzed and understood, both as examples of narrative "art" and within their legal context? In addressing these questions, we will look at narrative theory in general as well as contemporary scholarship on Talmud and Talmudic narrative, with a particular focus on Mishnah and the Babylonian Talmud. Assignments will include secondary readings on and about narrative more generally, but the focus of the course—and the majority of class-time—will be on reading the Rabbinic texts in their original language.
ISLAMCIV 110 Major Works of Islamic Civilizations
CourseID: 214543
Faculty: Khaled El-Rouayheb
Next Term Offered: 2022 Spring

This course offers a reading of a number of major works of Islamic Civilization, for example from the universal chronicle of al-Tabari (d. 923), the forty hadith of al-Nawawi (d. 1277), a work on the lives of the Shi'i Imams by al-Shaykh al-Mufid (d. 1044), the autobiography of al-Ghazali (d. 1111), the Gulistan by Sa'di (d. 1291), the famous Introduction to History by Ibn Khaldun (d. 1406), a manual on Sufism by Aisha al-Ba'uniyya (d. 1516), and the description of Paris by al-Tahtawi (d. 1873). The course aims to give students an exposure to different, co-existing cultural traditions within Islamic civilization, including chronicles and hagiographies, Islamic creeds, Sufism, belles-lettres, popular folktales and travelogues.

ISLAMCIV 158X Introduction to the Quran
CourseID: 160949
Faculty: Shady Nasser
Next Term Offered:

A critical introduction to the Qur'an as text and as scripture, focusing on its origins, form, and content, with attention to its ongoing life in the Arab-Islamic society. As we examine traditional scholarship, contemporary views on the Qur'an (mainly through YouTube videos, lectures, interviews) will be presented and discussed in comparison with the classical-traditional views on various themes of the Qur'anic text. No previous study of Arabic or Islam is required. Mainly for undergraduate students.

Topics include: Prophetic traditions, Oral and written transmissions, schools of Qur'anic Exegesis (Commentaries), women and family in Islam, Qur'anic science, animals in the Qur'an, the supernatural, tradition and reform in Arab-Islamic societies. Students will read weekly selections from the Qur'an, watch lengthy videos and interviews, and write response papers on the secondary literature.

ISLAMCIV 158Y Qur'anic Exegesis and Prophetic Tradition
CourseID: 205290
Faculty:
Next Term Offered: 2020 Fall

An introduction to Qur'anic exegesis and prophetic tradition (Hadith). A survey of different schools of Qur’anic interpretation within the Islamic tradition. The course introduces the discipline of Hadith and the role it plays in Qur’anic commentary. Topics include: Hadith, transmission, collections of sound Prophetic traditions, Sunni and Shii Hadith collections, Schools of Qur'anic Exegesis, Esoteric interpretation, Modern Interpretation, Qur'an, science and modernity.
ISLAMCIV  160 Islamic Ethics: Between Reason, Revelation and Reform
CourseID: 213612
Faculty:
Next Term Offered:

What are the central concerns and disputes that characterize Islam's ethical tradition? How does it differ from other religious and moral traditions? To what extent is it sourced in reason and revelation? How is Islam's pre-modern ethical tradition engaged to solve contemporary ethical dilemmas? These are some of the questions we will explore in this course, which examines discourses and developments in Islam's ethical tradition, from the inception of Islam to the present day (spanning the seventh to the twenty-first century). While Islamic ethics is usually located in the science of character reification (akhl?q), many other aspects of Islam's intellectual and lived traditions comprise major ethical concerns, such as Islamic law, theology, mysticism and philosophy. Accordingly, the first half of our course will examine and critically interrogate the diverse approaches towards ethical concerns found first in Muslim scripture and then in this range of literatures.

In the second half of the course, we will use the tools and principles of Islamic ethical reasoning to collaboratively deliberate political, sexual, biomedical and environmental ethical dilemmas debated by contemporary Muslims. For example, how does Islam's ethical tradition address such issues as the morality of animal testing, abortion and the torture of POWs? Is polygamy ever ethical? Can Muslims support marriage equality? What are the community's ethical obligations to LGBTQ+ Muslims? In examining these questions, we will explore the diverse, if at times contradictory, approaches offered by Islam's ethical tradition towards these timely issues. In particular, we will reflect about how these constructive ethical projects draw on or transform the received resources in the classical Islamic tradition.

ISLAMCIV  181 Islam and Religious Diversity
CourseID: 207167
Faculty:
Next Term Offered: 2020 Fall

The problem of religious diversity recurs in all of the major branches of Islamic thought and appears in complex permutations in diverse cultural contexts. Focusing primarily on pre-modern Islam, this course invites students to investigate perspectives on the religious other in the Quran, Islamic law, theology, philosophy and Sufism. In the final portion of the course we will look at Muslim Spain, Mughal India, and the Muslim-Confucians of late imperial China as examples of how these complex dynamics played out on the ground. The larger aim of this course is for students to develop interpretive skill in dealing with the internal complexity of a number of Islamic discourses and contexts by pursuing a single problematic across them. To this end the course will be taught in seminar format and participants will be encouraged to engage creatively with primary and secondary sources to develop their own scholarly points of view.
This course explores traditions of Islamic spirituality in South Asia through the lens of three genres: the qawwali, concerts of mystical poetry; sufiana kalam, Sufi romantic epics and folk poems; and the ginans, hymns of esoteric wisdom recited by the Satpanthi Ismailis. Since these genres represent examples of language, symbols and styles of worship shared across Islamic and non-Islamic denominational boundaries, we will also examine their relationships with other Indic traditions of devotion, particularly those associated with the so-called sant and Hindu bhakti movements. Special emphasis will be given to the impact of contemporary political ideologies, globalization and the revolution in media technology on the form and function of these genres and their relationship with contemporary communities of faith in South Asia and beyond.

We will start with a short introduction of constitutional courts into the Egyptian judicial system from the end of the 1960s on. We will then start to read decisions of the SCC in the 1970s and 1980s focusing on the growing importance assigned to Islamic Law as one of the sources of Egypt’s modern constitutional law during the 1970s and 1980s. If we find the time we will discuss the court’s position in the failed efforts of democratization attempted by the mass manifestations in 2011.

The main topic treated in this course is the integration of the mentally ill into the Muslim religious community through their integration into the ritual community of Islam. We will read two introductory texts in English and French that I published on this topic recently. From the fourth session on we will read classical Arabic texts from Transoxania written by jurists of the eleventh and twelfth centuries who? still today? exert a strong influence on the interpretation of Islamic Law in the Arab World and in Turkey.
The theme of this course is the boundary between Jews and gentiles in antiquity. We examine some Jewish conceptions of the self (who or what is Israel?), instances of conversion to Judaism (proselytes), conversion from Judaism (apostasy), marriage between Jews and non-Jews, and the offspring of intermarriage. Readings from: the Tanakh, the apocrypha, Qumran scrolls, New Testament, Josephus, and rabbinic literature. All readings done in translation. Final research paper.

The course is open for credit for undergraduates and graduates.

JEWSHT 160 BERLIN: GERMAN CAPITAL, JEWISH CENTER
CourseID: 213605
Faculty:
Next Term Offered:

When the Nazis took power in Germany in 1933, they vilified Berlin as a haven for "rootless cosmopolitans," a catchall for immigrants, communists, and Jews. What made the German capital seem so Jewish? Who were Berlin's Jews, where did they come from, and how did they contribute to the city's cosmopolitan identity? In this course, we will look at the rise of Berlin as a major hub of German-Jewish, Hebrew and Yiddish culture during the late nineteenth and early twentieth centuries, the decline of Jewish culture under the Nazi Regime, and its revival since German reunification in 1990. Now that Berlin is home to many Jews from the former Soviet Union and Israel, has the dynamic Jewish culture of the early twentieth century reemerged? To what extent do the threats that once faced Berlin's Jewish population persist today? We will examine a wide range literary texts translated from German, Hebrew and Yiddish alongside visual art and film.

JEWSHT 178 Writing Jewish Modernity
CourseID: 215967
Faculty:
Next Term Offered:

This course will trace the ways in which Jewish writers, in multiple languages, responded to the challenges and opportunities of modernity: emancipation, acculturation, nationalism, antisemitism, industrialization and urbanization, migration and war, and the Holocaust. We will explore the creation of radically new modes of Jewish cultural expression and interrogate the simultaneous attempts to invent a unified Jewish literary tradition. We will read texts (in translation) by such writers as Franz Kafka, Sholem Aleichem, Isaac Babel, Devora Baron, S.Y. Agnon, Delmore Schwartz, and others.

JEWSHT 179 Ghostwriters and Ventriloquists: Postwar Jewish American Culture
This course takes ideas of the "ghostwriter" and the "ventriloquist" as a lens through which to read postwar Jewish American culture. In the wake of the Holocaust, Jewish American writers and cultural producers began to feel a responsibility to a lost civilization that seemed to haunt their every creative act. Even as they achieved worldwide fame, these artists felt both burdened and inspired by old world ghosts. Often the very success of a given work was attributed to the ways in which it reanimated and revoiced ghosts in order to alternately dazzle and comfort audiences. This course asks: How do strategies of ghostwriting and ventriloquy compensate for trauma and loss? In what ways do such reenactments modify an original text? Through analysis of postwar texts and films in English and Yiddish (in translation), this course studies how specters of the past function both as arbiters of cultural value and as reminders of the discontinuities and traumas of the Jewish American present. Films include Tevya, Fiddler on the Roof, The Diary of Anne Frank, and the TV series Transparent. We will read texts by Sholem Aleichem, Isaac Bashevis Singer, Philip Roth, Cynthia Ozick, Grace Paley, and others.

MODMDEST 100 The Modern Middle East, Real and Imagined: An Introduction
CourseID: 107349
Faculty: Malika Zeghal
Next Term Offered: 2021 Fall

An introduction to Middle Eastern Studies focusing on the modern period (19th and 20th centuries). Lectures will be broadly sequenced according to historical chronology but will be thematically organized. They will provide some historical context for each topic examined, as well as present specific examples through primary sources, visual sources, and numerical data when relevant. This course is designed to give students an overall good grasp of the history of the modern Middle East and of some of the major themes in modern Middle Eastern Studies. Students will critically engage with some of the most important topics that resonate in that area of the world. We will cover topics such as reformism, economic development, colonialism and nationalism, authoritarianism and democratization, sectarianism, culture, gender, literature and the arts, as well as the role of religion in politics. Most of these topics, in one way or another, will speak to the construction of nation-states in the Middle East and to the challenges they have been confronting. This is not a survey course. In particular, it will not be exhaustive in its coverage of the region in space or time, and in its coverage of topics. Students in search of a specific topic, country, or period are strongly encouraged to take a look at the syllabus prior to enrolling to make sure their specific interests will be covered. Assigned readings will consist of primary and secondary sources. Students will be exposed to first-hand accounts by protagonists in the history of the Middle East (primary sources) as well as to the diversity of approaches that the scholarly literature (secondary sources) has taken across disciplines, e.g. anthropological studies, quantitative analysis, philology and textual studies. The larger aim of the course is to develop students' critical thinking in dealing with the history, cultures, politics, and political economies of the contemporary Middle East.
Required for all NELC concentrators in The Modern Middle East. **Other students must request instructor's permission before enrolling.** There are no prerequisites for this course.

**MODMDEST 101 The Politics of Religion in the Modern Middle East**
CourseID: 216223  
Faculty: Malika Zeghal  
Next Term Offered: 2021 Fall

**NEC 102 Approaches to the Study of the Near East**
CourseID: 215960  
Faculty: Gojko Barjamovic  
Next Term Offered: 2021 Fall

**NEC 106 Poets, Kings, and Travellers: Encountering Alexander in the Medieval World**
CourseID: 212866  
Faculty:  
Next Term Offered:  

Organized around three archetypal characters—the poet, the king, and the traveller—this course offers a compelling and interdisciplinary introduction to the medieval world. Our guide on this journey is Alexander the Great, the historical and legendary figure celebrated across the medieval globe, from Asia to the Middle East to Europe and beyond. Alexander's rich and varied story, as told by his medieval admires, will provide students with a road map for their own exploration of medieval cultures, societies, and economies, enriched by encounters with the manuscripts, images, and objects they left behind.

**NEC 290 Direction of Master's Thesis**
CourseID: 112819  
Faculty:  
Next Term Offered:  

**PERSIAN 105 Beyond Akhl?q: Ethical Literatures of the Persianate World**
CourseID: 211354  
Faculty:  
Next Term Offered:  

This course offers an overview of the development of classical Persian literature through the lens of ethics (broadly conceived as normative or prudent conduct), from the 10th
through 15th centuries. Students will become acquainted with the key themes and beliefs at work in pre-modern Persian literature, and with the variety of literary forms, images and rhetorical devices employed to train the reader.

In this course, I aim to illustrate that the medieval and early modern Persianate worlds witnessed a flowering of literary production on normative conduct within a wide variety of literary genres including belles lettres (adab), Sufi prose and poetry, epic poetry, and akhl?q the genre whose title is normally translated as "ethics." Although akhl?qis usually translated into English as "ethics," in light of a broader conception of ethics, akhl?q was only one of many genres dedicated to the subject. Readings on akhl?qwill include T?s?’ s Akhl?q-i N?sir? and K?shif?’sAkhl?q-i Muhsin,? while readings outside of it will include selections from Ferdowsi's Sh?hn?mahSa’d?’sGulist?n and K?shif?’sFutuvvat-n?mah-yi Sult?n.

PERSIAN 155 "Beginnings": Prefaces and Exordiums in Classical Persian Literature
CourseID: 159759
Faculty: Justine Landau
Next Term Offered:

Readings from major Persian poetic and prose works from the 10th to the 15th century, with a focus on prefaces and exordiums. Spanning across genres, from epic, lyric and narrative verse to didactic andarz, scientific treatise and historiography, the course will explore the various possible openings of classical Persian texts and survey the functions and techniques of literary thresholds. Authors will include Ferdowsi, Keyka?vu’s, Ne??m?, Joveyni?, R?m? and J?m?.

PERSIAN 157 Storytellers' Drama: Iranian Theatre and Persian Play
CourseID: 213652
Faculty:
Next Term Offered:

What does a storyteller do when every character of the story tells one story? Persian literature is partly known for its epic-heroic and narrative poetry: drama in verse. This seminar is a survey of Iranian theatre from the pre-Islamic era until the present with a focus on the modern period. The objective is identifying the indigenous genres of Iranian performance, understanding the evolution of Iranian drama in its religious and non-religious contexts, reading the major translated works of Persian dramatic literature, and watching subtitled films and recorded plays. The themes revolve around artistic creation, gender and class (in)equality, political resistance, Westernization and anti-Westernization, cultural imperialism, revolution, and civil disobedience. Students are asked to write one-page weekly reports to reflect on the material, plus a midterm paper and a final paper. For the final project, students of the Theatre Department have the option of collaborating to perform a play accompanied by a shorter paper that explains
their approach. No knowledge of Persian is necessary.

SUMERIAN  241 Sumerian Economic Documents: Seminar
CourseID: 111442
Faculty:
Next Term Offered:
The economic and social milieu of the Ur III period in Mesopotamia examined through analysis of primary documents. Texts of various economic categories read and considered as sources for historical reconstruction and interpretation.

SYRIAC     BA Intermediate Syriac I
CourseID: 213622
Faculty:
Next Term Offered:
Readings in classical Syriac prose and poetry. Emphasis on expanding knowledge of grammar and vocabulary, and reading unpointed Syriac. Texts include the Odes of Solomon, Bardaisan, Ephrem, Timothy I, and literature pertaining to the School of Nisibis. Introduction to the study of Syriac manuscripts. Prerequisite: Elementary Syriac or permission of instructor.

SYRIAC  130A Advanced Syriac
CourseID: 213626
Faculty:
Next Term Offered:
A close reading of select texts in Syriac, working from both critical editions and manuscripts. The selection of texts will be done in consultation with students.
Prerequisites: Three semesters of Syriac or permission of instructor. Students must complete both terms of this course (parts A and B) within the same academic year in order to receive credit.

HDS 4105A

YIDDISH  115 The Yiddish Short Story: Folk Tales, Monologues, and Post-Apocalyptic Parables
CourseID: 203377
Faculty: Saul Zaritt
Next Term Offered:
Who are the storytellers of Yiddish literature? Where did their stories come from? Why did the short story become the central genre of modern Jewish literary culture? This course explores the genealogy of the Yiddish short story from the hasidic folk tale to the modernist sketch, from the monologues of Sholem Aleichem and Isaac Bashevis Singer to the haunting narratives of David Bergelson and Der Nister. Stretching from the nineteenth century to the present, we follow the short story in its comparative contexts from Eastern Europe to Western Europe, Palestine/Israel, and the US.

YIDDISH 166 Jews, Humor, and the Politics of Laughter
CourseID: 214613
Faculty:
Next Term Offered:

By mistake some thieves found their way into Hershele's house late at night while he was sleeping. They searched and searched but found nothing. Meanwhile, Hershele heard their rummaging and slowly crept up behind one of the thieves. He grabbed him by the arm and the thief, naturally, tried to run away. Hershele held him close, whispering, "Be still. Maybe together we'll actually find something." Beginning with jokes like this one, this course will examine the question of Jewish humor, exploring the concept of therapeutic joking, the politics of self-deprecation, and strategies of masking social critique behind a well-timed joke. Rather than reach some essential definition, we will instead investigate literature, stand-up comedy, film, and television of the twentieth and twenty-first century in order to 1) think together about the theory, mechanics, and techniques of comedy and humor and 2) ask how and when a text or performance gets labeled Jewish, by whom and for what purposes. Texts, films, and performers include: Freud, Kafka, Sholem Aleichem, the Marx Brothers, Belle Barth, Mel Brooks, Joan Rivers, Larry David, Sarah Silverman, Broad City, and Rachel Bloom.
Anthropology

ANTHRO 102B Human Variation: Body form, Growth, and Constitution
CourseID: 218556
Faculty:
Next Term Offered:

Created to support student import

ANTHRO 1038 Game of Stones: The Archaeology of Europe from Handaxes to Stonehenge
CourseID: 215108
Faculty:
Next Term Offered:

Game of Stones: The Archaeology of Europe from Handaxes to Stonehenge
Buried beneath modern cities, Roman amphitheaters, and Medieval churches lie subtle traces of Europe's earlier occupants: campsites littered stone tools and animal bones, human bodies preserved in bogs and frozen in ice, and cave walls decorated with extinct animals. This course will explore European prehistory from the first colonization of Europe by Homo erectus, around a million years ago, to the building of Stonehenge, c. 2000 B.C. We will cover some of those most exciting topics in archaeology today: How similar were Neanderthals to us and why did they go extinct? When and why did groups subsisting on hunting and gathering take up farming? And finally, for what purpose were large stone monuments such as Stonehenge and Newgrange built?

ANTHRO 1130 Archaeology of Harvard Yard
CourseID: 121141
Faculty: Diana Loren
Next Term Offered: 2020 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
CourseID: 123195
Faculty: Patricia Capone
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 1182 People of the Sun: The Archaeology of Ancient Mexico
CourseID: 109568
Faculty: William Fash
Next Term Offered: 2021 Spring

When Europeans first arrived in what is today Mexico and Central America, they encountered indigenous cities and empires rivaling those of Europe at the time. This course examines the builders of these civilizations, focusing on the cultures of highland Mexico such as the Aztec and Zapotec, as well as their predecessors and contemporary descendants. Topics include the origins of food production; development of regional exchange networks; rise of towns, temples, and urbanism; emergence of states and empires; and resilience of native lifeways through Conquest and Colonial periods. Peabody Museum collections are incorporated into class discussions and assignments.

ANTHRO 1190 The Invasion of America: The Anthropology of American Encounters, 1492-1830
CourseID: 125450
Faculty: Matt Liebmann
Next Term Offered: 2019 Fall

In 1492 Native Americans discovered Europeans, changing the world forever. The European invasion of the Americas triggered demographic, economic, and ecological changes on an unprecedented scale. The subsequent movement of plants, animals, and goods prompted global shifts in population, exploitation of resources, and the transformation of environments on both sides of the Atlantic. What can archaeology tell us about early encounters between Native Americans and Europeans? Why did the European conquest of the Americas play out as it did? This course investigates these questions through the sites where first contacts occurred, the objects exchanged by Native peoples and colonists, and the scars that remain in the ground. Through investigations of first contacts, Indigenous politics, disease epidemics, Native rebellions, and ecological changes, Anthropology 1190 presents a sweeping continent-wide treatment of the historical archaeology of Native Americans between 1492-1800.

ANTHRO 1210 The Archaeology of Ancient China
CourseID: 119371
Faculty: Rowan Flad
Next Term Offered: 2020 Spring
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 1250 The Pyramids of Giza: Technology, Archaeology, History
CourseID: 127050
Faculty: Peter Manuelian
Next Term Offered: 2018 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 1255 Human Diet: from Neanderthals to the future of food
CourseID: 212875
Faculty:
Next Term Offered:

This course surveys the evolution of human diet, from the foods of our earliest ancestors to the contents of today's supermarkets. We'll cover the definition of food, human nutritional requirements, major dietary transitions and food innovations in human history, the roots of world cuisine, the modern food industry, and current and future food challenges.

ANTHRO 1401 Migration & Mexico/U.S. Borderlands: Moral Dilemmas, Religion & Liminal/Latinx Modes of Being
CourseID: 160434
Faculty:
Next Term Offered:

This course explores the current crisis at the Mexico-U.S. borderlands within the epic context of human migration and mobility in historical and global perspectives. Focusing on individual lives and collective stories of homeland and displacement we investigate various forms of religiosity, violence and non-violence, artistic responses, coping strategies, transculturation and the fluidity of national and cultural borders. We consider the material, symbolic and existential conditions of the traveling self.
This course uses Professor David Carrasco's "ensemble approach" (texts, art, music, film) to understand the deepening crisis and tragedy of "Greater Mexico", the symbolism and contents of 'sacred bundles', the cultural and political dynamics of 'center and peripheries' and 'deep rivers of devotion' that animate these Latinx worlds. Drawing on the interpretive approaches of anthropologists, sociologists, and historians of religion (including the literature on 'rites of passage') the course explores the question of 'what cultural and religious resources help migrants survive the ordeal of migration, establish new identities and strive for well-being as strangers in a strange land?'

ANTHRO 1603 The Law and Its Limits: Anthropological Approaches to Law
CourseID: 215111
Faculty:
Next Term Offered:

We often talk about the power of law to shape our worlds but what about its powerlessness. The aim of this class is to disrupt commonsense pieties about law and its place in social life. People the world over increasingly are turning to the law to address social, political and environmental ills. An axiom of contemporary life is that modern societies need the rule of law to address social, political and environmental ills. Yet, in the face of entrenched problems, including expanding who belongs, addressing inequality, and confronting environmental crisis, law often appears impotent or, worse, detrimental. This course grapples with the simultaneous hunger for and weakness of law, its power and its powerlessness, by guiding students through an exploration of the following questions. How, why and to whose benefit or expense is the law posed as an answer to political and social problems? What can we learn from situations in which law harms? Who asks for law? Who resists law? How does legal process transform conflict and define the terms of its resolution? The course will seek answers to these questions via an engagement with the empirical -- case studies from around the world -- and the theoretical, ultimately building to an understanding of the various ways that law disables and enables change today.

ANTHRO 1638 Megafauna Among Us: Humans and Other Charismatic Animals
CourseID: 215112
Faculty:
Next Term Offered:

Whales, wolves, great apes, big cats, buffalo, bears-- these animals populate human cultural imaginations. From animal advocacy groups to zoos to movies, so-called "charismatic megafauna" and/or "flagship species" dominate a wide swath of debates. By focusing on a selection of animals, this course explores a) how people interpret these animals, and b) how human interactions impact these animals and their natural environments. Organized around different animals and the controversies, questions, and events surrounding them, this course will emphasize how animals reflect human understandings of morality, culture, and history. Course themes focus heavily on
environmental activism, public and environmental policy, Indigeneity, and animals in tourism markets. While this class centers on North American case studies, international examples will help create a cross-comparative global context. In addition to exploring the cultural context of large animals, students will also learn how to approach these issues as anthropologists. Every class will feature a module wherein students tackle problems with different theory and methodology from anthropological research. This course relies on interspecies approaches to anthropological research on animals: critical use of interdisciplinary materials will generate multiple perspectives on the animals we study. Finally, Indigenous methodology and ontology about animals and the environment will serve as a foundation for discussion.

ANTHRO 1640 Language and Culture
CourseID: 112218
Faculty:
Next Term Offered:

This is a course in linguistic anthropology. We explore key theoretical issues in the semiotic anthropology of language use, focusing on communication, social (inter)action, representation, cultural conceptualization, and language ideology. By presenting many of the most influential and innovative contributions to the study of language in culture and society?both recent and classic?the course aims to guide students in asking fundamental questions about language and communication more broadly as facts of everyday sociocultural experience.

ANTHRO 1681 Incarceration, Capitalism, and Mental Health
CourseID: 215942
Faculty:
Next Term Offered:

Mental health and mental illness are categories whose very definitions are highly contested. Yet by all counts and regardless of definition, rates of mental illness in the United States have been rising dramatically over the past few decades. With a private healthcare system that guarantees adequate healthcare only to the country's ruling class, individuals experiencing psychiatric symptoms in the United States are largely treated (or left untreated) within the country's jails and prisons. And yet, the violence of the United States' system of policing and incarceration is psychologically damaging ? making the country's jails, prisons, and detention centers paradoxically both a key cause of and the primary solution to the country's rising rates of mental illness. The goal of this course is to better understand this paradox, and to begin to build a shared language to work our way out of its restrictive grasp. The course will draw on writers and thinkers in anthropology, sociology, history, black studies, and disability studies in an attempt to grasp the slippery concepts of madness, capitalism, and captivity and to understand the ways in which these categories interact in the U.S. today.

ANTHRO 1698 Anthropology of Death and Immortality
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 1711 Global Intimacies: Love and Labor in a Mobile World
Course ID: 215113
Faculty: 
Next Term Offered:

By analyzing the intersections of love, sex, labor, power, and money, this course will explore theoretical and ethnographic approaches to global intimacies, particularly intimate and reproductive labor. Readings will focus on ethnographic works that illustrate how global mobilities and intimate relations are linked and delinked. By engaging with some of the most influential contributions to the study of gender, labor, and migration, this course will guide students in understanding global and transnational transformations; and in doing so, help students connect issues of gender, sexuality, race, class, and power to changing practices of love, intimacy, and livelihood.

ANTHRO 1752 In/security: Walls, Guns, and the Politics of Protection
Course ID: 216006
Faculty: 
Next Term Offered:

"Now, it is true that the nature of society is to create, among its citizens, an illusion of safety; but it is also absolutely true that the safety is always necessarily an illusion."
James Baldwin

We live in the age of security-making: Concerns over threats to public safety and public health have become the guiding principles of ordering social life, justifying the building of walls and the arming of civilians. And yet our lives seem increasingly insecure. Is it a paradox? Or is security and insecurity intertwined and the former, instead of erasing, only magnifies the latter? Anthropology offers us conceptual and methodological approaches to examine the topic of security in contemporary societies, to understand
how and why appeals to security make such an effective (and affective) mode of
governance, and to delve into how the designation of threats and the policies of security
that address those threats are mapped onto and exacerbate structural inequalities based
on class, race, gender, religion, age, and other social distinctions. This course
interrogates the cultures of fear and the political engineering of the global security
regime and reckons with its consequences at various scales. Drawing on social theory,
ethnographic research, and public culture, we'll examine such diverse, but interrelated
set of issues as climate change and environmental emergencies, the fear of crime and of
pandemics as well as architectural, infrastructural and social responses to them, debates
over the right to bear arms and gun safety, survivalist movements and the prepper
culture, and more. Our explorations of security-making will entail grappling with the
materiality of danger and protection as well as with affect and its political use, taking us
across land, sea, and sky, and deep into cyberspace. As an anthropological inquiry, this
course begins with the premise that there is nothing self-evident about security and we
should not take this set of discourses and practices for granted but rather ask about their
underlying assumptions, about how and why they come into being and what
consequences they have on our societies, in our communities, and to our ways of life.

ANTHRO 1785 States of Violence in Latin America
CourseID: 203531
Faculty: Ieva Jusionyte
Next Term Offered: 2023 Spring

Why does "the rule of law" ? the mode of governance to which contemporary democratic
states nearly uniformly aspire ? fail to stop violence? Conversely, what happens when
the law is suspended in the name of maintaining political and social order? This course
draws on ethnographic studies and social theory to examine the disturbing, but not
paradoxical entanglement between law and violence in Latin America. Building on Tilly's
comparison between state-making and organized crime and Benjamin's concept of law-
making violence, we will explore how different modes of violence - from brutal force to
more nuanced structural and symbolic forms of oppression - intersect with policies and
practices of governance in the region. Anthropological approaches will be used to
analyze the concepts of sovereignty, security, and justice, as we will trace their
meanings across disjunctive cultural and legal terrains. Case studies, presented in
ethnographic accounts, documentary film, and investigative journalism, will focus on the
origins and effects of "the war on drugs" in Colombia; logics and deleterious
consequences of security build-up on the U.S.-Mexico border, complicity between gangs
and police in Brazil's favelas; and popular justice in urban Bolivia, among other issues.

ANTHRO 1800 Race and Caste
CourseID: 207678
Faculty: Ajantha Subramanian
Next Term Offered: 2021 Spring

Race and caste are two of the most enduring forms of social stratification. While their
histories date well before the advent of political democracy, they have taken on new forms in the context of democratic social transformation and capitalist development. In this course, we will grapple with the meanings, uses, and politics of race and caste historically and in the contemporary moment. Drawing on mid-20th century sociological debates on race and caste as comparative categories, empirical work in history and anthropology that traces the legacies of imperialism and capitalism in shaping race and caste, and insights from anti-racist and anti-caste social movements, this course considers the intersections of (and divergences between) the two forms of stratification. What does thinking race and caste together illuminate about the nature of ascriptive identity and inequality today?

ANTHRO 1815 Empire, Nation, Diaspora: Asians in the U.S.
CourseID: 126267
Faculty:
Next Term Offered:

The U.S. is commonly described as a multicultural society and Asian Americans as "model minorities" with strong group identities. But when did multiculturalism become a defining characteristic of American society? What is its relationship to race and class? Why did migrants from Asia come here and how has their reception changed over time? When do they call themselves "Asians" and when do they privilege other self-representations? We will explore these questions through history, anthropology, literature, and film.

ANTHRO 1836AR Sensory Ethnography 1
CourseID: 156390
Faculty:
Next Term Offered:

Students use video and audio to produce short works about embodied experience, culture, and nature.

ANTHRO 1836BR Sensory Ethnography 2
CourseID: 122149
Faculty:
Next Term Offered:

Students are introduced to current issues in art, aesthetics, and anthropology, and produce collaborative experimental works of sensory ethnography.

CourseID: 212905
Faculty:
Next Term Offered:
How does paper work in contemporary life? Few terms are as evocative of the drudgery of modernity, yet are as unexamined as is paperwork. Tacking between ethnography and social theory, this course examines how paper artifacts—from forms, reports and memoranda to identity papers, receipts and business cards—mediate, materialize, constitute, and shape the collective projects that produce them. What does the paperwork's perspective allow us to see about the institutions, collaborations and polities in which we take part? Given its ubiquity, how does paperwork become understood as alienating? The course begins with a discussion of methods. With what conceptual and ethnographic tools have social scientists made sense of paper forms? The class is then divided in thirds: the first examines the relationship of documents and bureaucracy; the second asks about the ways in which paperwork makes people and power; and the final section considers how paper artifacts construct pasts and (purportedly paperless) futures.

ANTHRO 1900 Counseling as Colonization? Native American Encounters with the Clinical Psy-ences
CourseID: 208154
Faculty:
Next Term Offered:

American Indian, First Nations, and other Indigenous communities of the USA and Canada contend with disproportionately high rates of "psychiatric" distress. Many of these communities attribute this distress to their long colonial encounters with European settlers. Concurrently, throughout the 20th century, the disciplines and professions associated with mind, brain, and behavior (e.g., psychiatry, psychology, psychoanalysis) consolidated their authority and influence within mainstream society. These "psy-ences" promote their professional practices (e.g., diagnosis, psychotherapy) as plausible remedies for Indigenous social suffering, but many Indigenous communities remain skeptical of—and resistant to—these clinical approaches, primarily for cultural and political reasons. In this seminar, we will consider whether and how the concepts, categories, tools, and techniques of the mental health professions might be appropriately adapted and/or adopted for use with Indigenous communities in an increasingly globalized world. In recognition of the (post)colonial status of these populations, we will attend closely to alterNative cultural and spiritual approaches that have been identified and promoted by Indigenous people themselves as conducive to healing and wellness. This course is designed for upper-level undergraduate students interested in medical anthropology, professional psychology, pre-medicine, Indigenous studies, and related social and health sciences. Students will participate in regular seminar discussions, write routine responses to assigned readings, and submit major independent research papers addressed to the promotion of Indigenous well-being. Student engagement and exchange during class is essential, so routine attendance and participation are expected throughout the semester.

ANTHRO 2010AR Materials in Ancient Societies: Ceramics
CourseID: 120535
Faculty:
Next Term Offered:
This course examines the technologies used in the production of ceramic vessels, bricks, tiles, and mortars in ancient and non-industrial societies. It also focuses on the laboratory-analytical techniques that enable reconstruction of these technologies.

The course has been designed to consider: (1) the principles of geology and of materials science and engineering that provide an understanding of the properties and behavior of clays (and other ceramic materials) as materials systems; (2) the activities involved in producing, using, and distributing ceramic materials and ceramic products; (3) the culture-producing and culture-using aspects of ceramic technologies.

Laboratory sessions include microscopy with emphasis on petrography of ceramics and geological materials, mechanical testing of fired ceramics, and the appropriate methods for documenting and reporting the analyses of archaeological artifacts made from ceramic materials.

**ANTHRO 2020 GIS & Spatial Analysis In Archaeology**
CourseID: 120580
Faculty: Jason Ur
Next Term Offered: 2021 Spring

An introduction to the GIS and remote sensing methods used by archaeologists to document and analyze datasets at the scale of the site and the region. This class will involve the hands-on use of printed maps, aerial photography, satellite imagery, digital terrain models, GPS-based observations, and UAV (drone) photogrammetry to approach archaeological research questions. Students will gain competence in creating spatial data for fieldwork, print publication, and online visualization (web maps and 3D modeling), and in basic spatial analysis of archaeological datasets. Labs will use data from the instructor's Middle Eastern case studies, but students will be responsible for assembling a GIS database for their own region of interest.

**ANTHRO 2064 The Archaeology of Mesopotamia**
CourseID: 212757
Faculty:
Next Term Offered:

A survey of current issues in the archaeology and history of ancient Mesopotamia (today within the states of Iraq, Syria, Turkey, and Iran). The course focus will be on urban origins, the nature of urban societies in the Bronze Age, and the expansion and impact of empires in the Iron Age. Issues will include kinship and "the State," the economic infrastructure of cities, the nature of political control, and the different theoretical approaches that archaeologists and historians have used to investigate them.

Intended for graduate students in archaeology, NELC, and history, or advanced
undergraduate archaeology concentrators.

ANTHRO 2070 Archaeological Method and Theory: Seminar
CourseID: 120489
Faculty:
Next Term Offered: 2019 Fall

The class covers archaeological method and theory emphasizing the 1950s onwards. Large-scale trends in social theory will be balanced with attention to the ideas and writings of significant anthropologists and archaeologists.

ANTHRO 2177 Jaguar-Men and Golden Cities: The Archaeology of South America
CourseID: 128017
Faculty: Gary Urton
Next Term Offered: 2021 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 2211 Archaeology and Heritage
CourseID: 160955
Faculty:
Next Term Offered:

The links between archaeology, cultural heritage, and nation building have been fundamentally important to archaeological practice since the origins of the discipline. The uses and abuses of archaeology by the state over the past fifty years have been criticized by all manner of social scientists, journalists, local communities and indigenous people in countries across the globe, in dozens of books, hundreds of articles, and The International Journal of Heritage Studies. Archaeological practice and heritage management continue to be the topic of lively theoretical and legal debates by multiple stakeholders with competing claims to the past. The ideological uses and commodification of archaeological heritage by diverse factions has led many archaeologists to become actively involved in creating sustainable solutions that promote responsible heritage stewardship in this dynamic context. The members of the seminar will read and discuss theoretical schema, practice and critiques from the Americas and the Old World in examining innovative approaches to archaeological heritage management. The focus in this seminar will be on finding a ‘third way’ to address the valid claims of local communities and indigenous peoples, vis-à-vis the ways central governments construct their own origin myths and legitimation of the state
through archaeological research and its presentation to the public.

ANTHRO 2250B Proseminar in Archaeology
CourseID: 125735
Faculty: Gary Urton
Next Term Offered: 2019 Fall

This graduate seminar reviews critical issues in archaeological approaches to the study of complex societies, including writing, trade, craft specialization, technology, landscape, urbanism, and political organization.

ANTHRO 2637 Subaltern Anthropology & the Politics of Method
CourseID: 212943
Faculty:
Next Term Offered:

Why have anthropologists found it necessary to imagine, and then craft, a "decolonization" of their discipline? What kinds of insurgencies get enveloped in social scientific methodologies through which scholars, black scholars in particular, have studied the colonial epistemologies and uneven socialities that configure how we experience our world(s)? This course engages in a reading of particular anthropological discourses on race, gender, and varying social institutions theorized and examined through Black scholarship as inherently and necessarily political. While there has been illumination on African-American legacies within Anthropology, this course builds on those recognitions by looking more broadly, into preoccupations with Black Feminist discourse and other kinds of emancipatory ethics, for example, while relying on ethnography as a medium and methodology for problematizing critical assumptions about "cultures". We attempt to further this by finding commonality in the methodological concerns shared from within both African continental and diasporic scholarship alike. Insofar as the humanities and social sciences has served as colonial weaponry in order to subjugate entire aspects of the human terrain, the working assumption pushed forward here is that such disciplines have always been political. This course examines how, and by what means, subaltern scholarship is, and has been, invested in shifting broadly-held misconceptions about human beings and their relations.

ANTHRO 2688 The Frankfurt School, Film, and Popular Culture
CourseID: 123876
Faculty: Steven C. Caton
Next Term Offered: 2017 Spring

Focus in the Frankfurt School and such concepts as the culture industry, critical theory and research, art and mass media reproduction, negative dialective, public sphere, and other of its contributions to social and aesthetic theory.
ANTHRO 2705 Semiotic Anthropology
CourseID: 160462
Faculty: 
Next Term Offered:

This seminar examines the mediation of socio-cultural life by sign phenomena in multiple modalities of experience.

ANTHRO 2725 History and Anthropology: Seminar
CourseID: 110313
Faculty: Vincent Brown
Next Term Offered: 2021 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 2738 Remaking Life and Death
CourseID: 211109
Faculty: Anya Bernstein
Next Term Offered: 2022 Spring

This course is a critical reading graduate seminar focusing on how defining the boundaries between life and death became a matter of profound political, cultural, and scientific debate. Guided by the concepts of bio- and necropolitics, we will explore the shifting relations between body and person, human and time, and technology and biology while attending to the changing political, biomedical and religious contexts. The course includes readings from a number of anthropological subfields, including medical anthropology, anthropology of science and technology, religion, politics, and the Anthropocene. We will discuss the range of issues, from the classic studies of mortuary rituals to political lives of dead bodies to technoscientific reconfigurations of the human and of life itself.

ANTHRO 2800 Social Theory, In and Out of Africa
CourseID: 160345
Faculty: John Comaroff
Next Term Offered: 2020 Fall

Examines, in critical depth, the major theoretical and methodological approaches that have shaped the history of Anglo-American anthropology and, more generally, social thought through the prism of Africa. In so doing, it will address (i) the historical roots and philosophical foundations of these approaches and (ii) their significance for contemporary concerns in the social sciences at large.
What is ethnography, as a mode of witnessing, a method of research, a form of storytelling? How is it distinct from other ways of producing knowledge about human experience? How do ethnographers understand and engage with the ethics and politics of fieldwork and writing? This seminar raises these and other questions underlying the practice and genre of ethnography. It delves into the issues of participation, power, and perspective; the nature of evidence; the reliability of representation; the relation between description and interpretation and between narrative and theory; and the role of different viewpoints and of the author’s voice. Through close reading and discussion of selected texts, the course examines ethnography’s epistemology, ethics, politics, and poetics. Experience in ethnographic research is not required in order to enroll; however, students who have previously conducted fieldwork, even if limited in scope, and are preparing on doing it again in the future will benefit from this seminar the most.

This course offers a conceptual overview of research methods used by anthropologists. We will hear from faculty members their experience of doing fieldwork—from formulating a research question, choosing a site, entering the field to ethical issues they face in the field. Students will not only learn about but also practice these various methods and reflect on their projects in lights of the discussion about methods. To that end, students will complete several exercises and craft a method paper for their own project.
In this Course, we shall familiarize with the main computational methods which permit to simulate and analyze the behavior of a wide range of problems involving fluids, solids, soft matter, electromagnetic and quantum systems, as well as the dynamics of (some) biological and social systems. The course consists of three main parts,

Part I : Classical and Quantum Fields on Grids

Part II : Mesoscale Methods

Part III: Statistical Data Analysis and Learning

In Part I, we shall discuss the fundamentals of grid discretization and present concrete applications to a broad variety of problems from classical and quantum physics, such as Advection-Diffusion Reaction transport, Navier-Stokes fluid-dynamics, nonlinear classical and quantum wave propagation. Both regular and complex geometrical grids will be discussed through Finite Differences, Volumes and Elements, respectively.

In Part II we shall discuss mesoscale technique based on the two basic mesoscale descriptions: probability distribution functions, as governed by Boltzmann and Fokker-Planck kinetic equations, and stochastic particle dynamics (Langevin equations). The lattice Boltzmann method will be discussed in great detail, with applications to fluids and soft matter problems.

In addition, we shall provide the opportunity of hands-on on a multi scale codes for X (extreme) simulations at the interface between physics and molecular biology.

Finally, in Part III, we shall present data analysis & learning tools of particular relevance to complex systems with non-gaussian statistics, such as turbulence, fractional transport and extreme events in general. An introduction to Physics-Aware Machine Learning will also be presented.

Computer simulations are recognized as an essential part of scientific and engineering
pursuits. Their predictive power will play an ever more important role in scientific
discoveries, national competitiveness, and in solving societal problems. For predictions
of real-world problems, the ability to scale solution techniques, algorithms, and software
to large-scale is of utmost importance. This course will explore the techniques,
infrastructure, and algorithms used for extreme computing. The course will be organized
into two modules, each focusing on a different aspect of fluid mechanics. The first
module will focus on simulating turbulence in incompressible fluids using the finite
element method, while the second module will focus on hemodynamic simulations using
the Lattice Boltzmann Method. Both topics have important scientific and societal
relevance and benefit enormously from large scale computing. The faculty from
Harvard, in collaboration with visiting researchers from Sandia National Laboratories,
Sapienza University, and the Institute for Calculus Applications in Italy, will conduct the
lectures and lab sessions. Computing resources will be provided for the class projects.
APMTH 106 Applied Algebra  
CourseID: 135449  
Faculty:  
Next Term Offered: 2022 Fall  

Introduction to abstract algebra and its applications. Sets, subsets, and partitions; mappings, operations, and equivalence relations; groups, rings, and fields, polynomials, encryption, computer coding, application of modular arithmetic, combinatorial designs, lattices, application of trellis representation of lattices, fast algorithms.

APMTH 111 Introduction to Scientific Computing  
CourseID: 120198  
Faculty:  
Next Term Offered: 2022 Spring  

Many complex physical problems defy simple analytical solutions or even accurate analytical approximations. Scientific computing can address certain of these problems successfully, providing unique insight. This course introduces some of the widely used techniques in scientific computing through examples chosen from physics, chemistry, and biology. The purpose of the course is to introduce methods that are useful in applications and research and to give the students hands-on experience with these methods.

APMTH 202 Physical Mathematics II  
CourseID: 143530  
Faculty:  
Next Term Offered: 2023 Spring  

Theory and techniques for finding exact and approximate analytical solutions of partial differential equations: characteristics, eigenfunction expansions, transform techniques, integral relations, Green functions, variational methods, perturbation methods and asymptotic analysis.

APMTH 203 Introduction to Disordered Systems and Stochastic Processes  
CourseID: 156203  
Faculty:  
Next Term Offered: 2022 Spring  

The course will familiarize the students with various applications of probability theory, stochastic modeling and random processes, using examples from various disciplines,
including physics, biology and economics.

APMTH 217 Patterns
CourseID: 204956
Faculty:
Next Term Offered: 2023 Spring

The topic for the course this year will be the dynamics of fluid flow, on scales that range from MHD in stars to active matter flows in cells to 2D electron gases, and of course fluid flows on the human scale, with which we will start. Specific content will include: Hydrodynamic Stability and Turbulence, Coherent Structures and Dynamical Systems, Methods for Numerical Simulation, Multiphase and Non-Newtonian Flows, Thin Film Flows, Biophysical, Geophysical and Astrophysical Flows, Active Matter Flows, Viscous Electronics. The course will meet for 150 minutes once a week, with 90 minutes devoted to lecture, and 60 minutes devoted to a discussion of 2-4 papers that build on the theory.

APMTH 221 Advanced Optimization
CourseID: 107600
Faculty:
Next Term Offered: 2022 Spring

This is a graduate level course on optimization which provides a foundation for applications such as statistical machine learning, signal processing, finance, and approximation algorithms. The course will cover fundamental concepts in optimization theory, modeling, and algorithmic techniques for solving large-scale optimization problems. Topics include elements of convex analysis, linear programming, Lagrangian duality, optimality conditions, and discrete and combinatorial optimization. Exercises and the class project will involve developing and implementing optimization algorithms.

APMTH 227 Computational Methods in the Physical Sciences
CourseID: 207546
Faculty:
Next Term Offered: 2021 Fall

In this Course, we shall familiarize with the main computational methods which permit to simulate and analyze the behavior of a wide range of problems involving fluids, solids, soft matter, electromagnetic and quantum systems, as well as the dynamics of (some) biological and social systems. The course consists of three main parts,

Part I : Classical and Quantum Fields on Grids

Part II : Mesoscale Methods

Part III: Statistical Data Analysis and Learning
In Part I, we shall discuss the fundamentals of grid discretization and present concrete applications to a broad variety of problems from classical and quantum physics, such as Advection-Diffusion Reaction transport, Navier-Stokes fluid-dynamics, nonlinear classical and quantum wave propagation. Both regular and complex geometrical grids will be discussed through Finite Differences, Volumes and Elements, respectively.

In Part II we shall discuss mesoscale technique based on the two basic mesoscale descriptions: probability distribution functions, as governed by Boltzmann and Fokker-Planck kinetic equations, and stochastic particle dynamics (Langevin equations). The lattice Boltzmann method will be discussed in great detail, with applications to fluids and soft matter problems.

In addition, we shall provide the opportunity of hands-on on a multi scale codes for X (extreme) simulations at the interface between physics and molecular biology.

Finally, in Part III, we shall present data analysis & learning tools of particular relevance to complex systems with non-gaussian statistics, such as turbulence, fractional transport and extreme events in general. An introduction to Physics-Aware Machine Learning will also be presented.

APMTH 232 Learning, Estimation, and Control of Dynamical Systems
CourseID: 161259
Faculty:
Next Term Offered: 2022 Spring

This graduate level course studies dynamic systems in time domain with inputs and outputs. Students will learn how to design estimator and controller for a system to ensure desirable properties (e.g., stability, performance, robustness) of the dynamical system. In particular, the course will focus on systems that can be modeled by linear ordinary differential equations (ODEs) and that satisfy time-invariance conditions. The course will introduces the fundamental mathematics of linear spaces, linear operator theory, and then proceeds with the analysis of the response of linear time-variant systems. Advanced topics such as robust control, model predictive control, linear quadratic games and distributed control will be presented based on allowable time and interest from the class. The material learned in this course will form a valuable foundation for further work in systems, control, estimation, identification, detection, signal processing, and communications.

APMTH 254 Information Processing and Statistical Physics
CourseID: 160447
Faculty:
Next Term Offered: 2022 Fall

This course introduces students to several fundamental notions and methods in statistical physics that have been successfully applied to the analysis of information processing systems. Discussions will be focused on studying such systems in the
infinite-size limit, on analyzing the emergence of phase transitions, and on understanding the behaviors of efficient algorithms. This course seeks to start from basics, assuming just undergraduate probability and analysis, and in particular assuming no knowledge of statistical physics. Students will take an active role by applying what they learn from the course to their preferred applications.
**Applied Physics**

**APPHY 227 Landmark Papers in Soft Matter**  
CourseID: 109668  
Faculty:  
Next Term Offered: 2022 Fall

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**  
CourseID: 124723  
Faculty:  
Next Term Offered: 2021 Fall

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 278 Computational Physics of Solids and Fields**  
CourseID: 208932  
Faculty:  
Next Term Offered: 2021 Fall

This is a completely revamped advanced computational physics course. This course will be split into two segments: first half will be computational physics of solids and computational quantum chemistry, and the second half will focus on computational physics of fields including light-matter interactions and transport. Our mission is simple: how do we compute properties of quantum materials and their response to light, temperature and external perturbations? We will note that properties of complex systems frequently involve going beyond conventional DFT approaches. In these cases, it is important to go from formalism and approximations to exactly how these are implemented and to recognize where beyond leading-order terms become essential to capture the physics. Whether you are an experimentalist working on low dimensional systems and topological matter or a theorist looking to expand your toolkit, this class is for you!

Topics include GW and Bethe-Salpeter Equation methods, DMFT, linear and nonlinear optical property predictions in low dimensional materials, properties of quantum defects in solids, computing scattering and response of topological materials like Dirac and Weyl semimetals among others. Please see [here](#) for week-by-week plan.
Concepts of condensed matter physics are applied to the science and technology of beyond-CMOS devices, in particular, mesoscale, low-dimensional, and superconducting devices. Topics include: quantum dots/wires/wells and two-dimensional (2D) materials; optoelectronics with confined electrons; conductance quantization, Landauer-Buttiker formalism, and resonant tunneling; magneto oscillation; integer and fractional quantum Hall effects; Berry phase and topology in condensed matter physics; various Hall effects (anomalous, spin, valley, etc.); Weyl semimetal; topological insulator; spintronic devices and circuits; collective electron behaviors in low dimensions and applications; Cooper-pair boxes and superconducting quantum circuits.
Astronomy

ASTRON  2 Celestial Navigation
CourseID: 111305
Faculty:
Next Term Offered:

Never be lost again! Find your way on sea, land, or air by employing celestial and terrestrial techniques. Acquire expertise in using navigators' tools (sextant, compass, and charts) while learning the steps to the celestial dance of the sun, moon, stars, and planets. This 108-year-old course continues to rely on practical skills and collaborative problem-solving, while utilizing historical artifacts (instruments, maps, captains' logs) and student-built devices. Culminating in a day-long cruise to practice navigation skills.

ASTRON  110 Exoplanets
CourseID: 125881
Faculty:
Next Term Offered: 2019 Fall

A survey of the rapidly-evolving field of the detection and characterization of planets orbiting other stars. Topics includes proto-stellar collapse and star formation; protoplanetary disk structure; models of planet formation; methods of detecting extrasolar planets; composition and physical structure of planets; planetary atmospheres; habitable zones; greenhouse effect; and biosignatures.

ASTRON  120 Stellar Physics
CourseID: 125882
Faculty:
Next Term Offered: 2020 Spring

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  140 Introduction to General Relativity and applications in Astrophysics
CourseID: 218228
Faculty:
Recent exploration of black holes and gravitational waves have revealed the relativistic Universe like never before. This course will introduce students to the theory of general relativity and some of its key applications. Topics include: review of special relativity, physics in curved spacetimes, the Einstein field equations, gravitational lensing, black holes, and gravitational waves. Mathematics used in general relativity will be introduced along the way.

ASTRON 191 Astrophysics Laboratory
CourseID: 113262
Faculty:
Next Term Offered:

Laboratory and observational projects in astrophysics. Students design and undertake two projects from a selection including: observational studies of the cosmic microwave background radiation, molecules in interstellar clouds, the rotation of the galaxy, galactic molecular sources with the submillimeter array (SMA), stars and clusters with the Clay Telescope; and laboratory experiments including superconducting submillimeter detectors, x-ray CCDs, and hard x-ray imaging detectors and telescopes.

ASTRON 202A Extragalactic Astronomy and Cosmology I
CourseID: 118139
Faculty:
Next Term Offered: 2019 Fall

This course provides an integrated introduction to extragalactic astrophysics and cosmology. Notable topics include: fundamentals of cosmology, growth of cosmic structure, gravitational dynamics of halos and galaxies, and astrophysics of galaxy evolution.

ASTRON 202B Extragalactic Astronomy and Cosmology II
CourseID: 111660
Faculty:
Next Term Offered: 2020 Spring

This continues the integrated presentation of extragalactic astronomy and cosmology, focusing on more advanced topics such as: big bang nucleosynthesis, CMB anisotropies, large-scale structure, gravitational lensing, the intergalactic medium, active galactic nuclei, reionization, inflation, and dark matter.

ASTRON 209 Exoplanet Systems
CourseID: 108130
Faculty:
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 214 Seminar in Observational Astronomy
CourseID: 212787
Faculty:
Next Term Offered:

Observational techniques associated with relativistic and high-energy astrophysical phenomena. Accretion onto compact stars (white dwarfs, neutron stars, black holes); active galactic nuclei, galaxy clusters. Gamma-ray bursts and cosmic rays. X-ray and gamma-ray background.

ASTRON 308 Data Mining, Machine Learning, and Deep Learning for Astronomy
CourseID: 215413
Faculty:
Next Term Offered:

One of the greatest challenges in modern astronomy is how to extract meaningful and interpretable results from data in a timely and systematic manner as astronomical data becomes extreme in volume, acquisition rate, and complexity. Using Python and R, this seminar course introduces modern data science methods and their applications along with real astronomical data sets. Topics include not only fundamental data mining (DM) and machine learning (ML) techniques (i.e., regression, classification, clustering, and time series analysis) but also select advanced deep learning (DL) and artificial intelligence (AI) algorithms (such as CNN, GAN, and RL). By the semester's end, students emerge with knowledge of and skills in data science that empower them to handle big data, carry out data analysis tasks, and interpret meaning out of it. Although designed for astronomy major students, this course is for any student who wants to learn how modern science works with machine learning.

ASTRON 315 Ethics and Practice in Astronomy
CourseID: 205416
Faculty:
Next Term Offered: 2019 Fall

This seminar course offers a survey in the following topics: the establishment of paradigms in astronomy; ethical behavior in astronomy; the underrepresentation of minorities and women in science; peer review and the scientific proposal process; the
mentor-advisor relationship; professional conduct; careers in and beyond astronomy.
Medical Sciences

BBS 302QC Using Python for Research
CourseID: 215411
Faculty: David Van Vactor
Next Term Offered: 2022 Spring

This intensive Bootcamp is based on HarvardX's course of the same title. In this course, after first going over the basics of Python 3, we learn about tools commonly used in research settings. No prior knowledge of Python and/or programming is required.

Course meetings will be held on Mondays, Wednesdays and Fridays. However students are required to use the intervening days for independent study in order to watch approximately 2-3 hours of Harvard X video content and complete the associated 'check your understanding' questions. This is considered a core component of the course and is not optional.

In-class time will be wholly dependent on the online content. Using a combination of a guided introduction and more independent in-depth exploration, students will practice Python skills with various case studies chosen for their scientific breadth and their coverage of different Python features, including modules for Machine Learning applications in research.

BBS 341DR Graduate Research - Jost Lab
CourseID: 218891
Faculty:
Next Term Offered:

Graduate students register for this course when they permanently join a lab. Students should register under the supervising PI.

BBS 342DR Graduate Research - Farnung Lab
CourseID: 218893
Faculty:
Next Term Offered:

Graduate students register for this course when they permanently join a lab. Students should register under the supervising PI.

BBS 350 Graduate Research
This course is for PhD students who have joined a lab for dissertation research. Students should enroll under their supervising PI.

**BCMP 213 Behavioral Pharmacology**
CourseID: 141859
Faculty: Brian Kangas
Next Term Offered: 2022 Spring

Introduction to behavioral pharmacology of CNS drugs (e.g., psychomotor stimulants, antischizophrenics, opioid analgesics, antianxiety agents); seminar format with emphasis on behavioral methodology (i.e., model and assay development) and pharmacological analysis (i.e., receptor selectivity and efficacy); attention to tolerance, drug dependence/addiction/treatment, and basic behavioral processes.

**BCMP 228 Macromolecular NMR**
CourseID: 136204
Faculty: Gerhard Wagner
Next Term Offered: 2020 Fall

Theory and practice of modern methods of macromolecular structure determination using multi-dimensional NMR.

**BCMP 308QC Cell Fate Decisions in Development and Disease**
CourseID: 108999
Faculty: Alan Cantor
Next Term Offered: 2021 Fall

This quarter course will offer students an in-depth examination of current knowledge regarding mechanisms of cell fate decisions. It will examine these processes in the context of developmental cell plasticity, cellular reprogramming, and cancer. This will primarily be a literature-based course with examination and discussion of key studies in the field. Concepts involving the instructive role of lineage-specific transcription factors, transcription factor cross-antagonism, gene regulatory networks, multilineage priming, progenitor cell heterogeneity, pioneer factors, epigenetics, chromatin accessibility, chromatin remodeling factors, "super enhancers," stem cell bias, lineage identity maintenance, mitotic bookmarking, non-coding RNAs, cell polarity, asymmetric cell division, lateral inhibition, lineage plasticity, and cellular reprogramming will be explored. These ideas will be examined in the context of several different tissue systems and organisms.

**BCMP 350 Graduate Research**
CourseID: 215855
Faculty:
Next Term Offered:

This course is for PhD students who have joined a lab for dissertation research. Students should enroll under their supervising PI.

BMIF 322DR Graduate Research - Pinello Lab
CourseID: 218890
Faculty:
Next Term Offered:

Graduate students register for this course when they permanently join a lab. Students should register under the supervising PI.

BMIF 323DR Graduate Research - Segre Lab
CourseID: 218892
Faculty:
Next Term Offered:

Graduate students register for this course when they permanently join a lab. Students should register under the supervising PI.

BMIF 350 Graduate Research
CourseID: 215857
Faculty:
Next Term Offered:

This course is for PhD students who have joined a lab for dissertation research. Students should enroll under their supervising PI.

CELLBIO 211 Molecular and Systems Level Cancer Cell Biology
CourseID: 116737
Faculty: Peter Sicinski
Next Term Offered: 2020 Spring

Examines the molecular basis of cancer formation including topics such as cancer epigenetic, tumor heterogeneity, systems biology proteomic approaches to study cancer, immune therapies in cancer, and therapeutic development.

CELLBIO 301QC The Epidemiology and Molecular Pathology of Cancer
CourseID: 127478
Faculty: Massimo Loda
Next Term Offered: 2022 Spring

This January course will provide students with an in-depth introduction to the epidemiology and molecular pathology of cancer. We will explore multiple types of cancer, including breast, colon, lung, prostate and brain, through a series of lectures and hands-on practice tutorials. These tutorials will include training in molecular pathology techniques, state of the art image analysis of human biomarkers, tissue processing, immunohistochemistry, and tumor histology. In addition, the epidemiology, genetics, and relevant signal transduction pathways of cancer will be highlighted.

CELLBIO 304QC Introduction to Human Gross Anatomy for Graduate Students and other Researchers
CourseID: 127989
Faculty: Gerald Greenhouse
Next Term Offered: 2022 Spring

Lectures, laboratory dissections, and prosections will provide students an opportunity to explore the gross structure and function of the human body. The course will provide a foundation for the student to acquire practical skills in recognizing, dissecting, and differentiating key anatomical structures. Structure/function relationships will be emphasized and some foundation will be provided for understanding the anatomic basis of diseases. Histological considerations will be discussed where appropriate. Each of the 15 sessions will include a lecture, 3 hours of dissection, and an evening guest lecturer on clinical or research aspects related to the dissections (supper provided).

CELLBIO 307QC Molecular Aspects of Chromatin Dynamics
CourseID: 107455
Faculty: Raul Mostoslavsky
Next Term Offered: 2022 Spring

This course will discuss the role of chromatin dynamics in modulating molecular and cellular processes. The genetic information encoded in our DNA is organized in a defined set of chromosomes, which are condensed about 10,000 fold in order to fit in the cell nucleus. This compaction occurs through packaging of the DNA around histone proteins, a structure known as chromatin. In what was thought to be a rigid structure, today we know that chromatin is an amazingly dynamic folding that plays a crucial role in controlling accessibility of factors to the DNA, and as such, it regulates a vast number of critical biological functions, including gene transcription, DNA replication, DNA repair and cellular identity. In this course we will attempt to cover some of the basic molecular mechanisms that play a role in regulating chromatin dynamics, and in turn how chromatin itself modulate biological processes, including basic mechanisms of inheritance. We will specifically discuss the role of DNA methylation, histone modifications, nucleosome dynamics and novel epigenetic modulators in the context of different biological processes for which chromatin accessibility appears to play a crucial role.
The development of two anti-neurodegeneration drugs against Spinal Muscular Atrophy, Amyotrophic Lateral Sclerosis and Alzheimer’s Disease.

This year, our biotech/drug development course will focus on how a novel therapeutic modality has grown from a scientific curiosity to a promising and indeed proven therapeutic approach. Antisense nucleotides (ASOs) define along with small molecule drugs and biologicals (antibodies) a new therapeutic modality. The efficacy of this modality, the cell biology and chemistry of ASOs as new drug, will be discussed in the context of an ASO that has been shown to be efficacious in addressing two devastating diseases: Spinal Muscular Dystrophy (SMA) and Amyotrophic Lateral Sclerosis (ALS). We will also address the critical issue of clinical trials, including their design, the criteria of success and, using as a paradigm an antibody that in spite of early promise has yet to fulfill the criteria necessary to address Alzheimer’s, a disease that unlike SMA where patient numbers are relatively small, it affects hundreds of thousands if not millions of patients worldwide.

This Course Begins in mid-March, and highlights different topics each week that will illustrate how investigation of basic principles and phenomena in cell and molecular biology open important doorways to understanding of disease mechanisms and how such knowledge can be translated into drug development and avenues to commercialization. A lively in depth discussion is the core objective for students in the course; thus the assessment will be entirely based on in-class participation.

This course is for PhD students who have joined a lab for dissertation research. Students should enroll under their supervising PI.
GENETIC 350 Graduate Research
CourseID: 215860
Faculty:
Next Term Offered:

This course is for PhD students who have joined a lab for dissertation research. Students should enroll under their supervising PI.

GENETIC 390QC Advanced Experimental Methods: Experimental Approaches in Genetic Analysis
CourseID: 125362
Faculty: Fred Winston
Next Term Offered: 2022 Spring

The goal of this course is to provide a survey of major topics and themes in genetics and genetic analysis in conjunction with exposure to a variety of experimental techniques, technologies, and model systems. Building on fundamental principles learned in Genetics 201, students will gain knowledge and hands-on experience in using genetic approaches to address biologically relevant questions in a variety of experimental systems, such as Drosophila, yeast, C. elegans, and humans. The course will combine lectures and hands-on laboratory activities emphasizing experimental methods, hypothesis generation and testing, and data analysis.

Students will be graded on a pass/fail basis. In order to earn a passing grade and receive credit for this course, students must attend and arrive prepared for every course session. Students must also complete daily evaluations of course activities and a final overall course evaluation.

HBTM 201 Tumor Microenvironment and Immuno-Oncology: A Systems Biology Approach
CourseID: 143057
Faculty: Rakesh Jain
Next Term Offered: 2021 Fall

Provides theoretical background to analyze and synthesize the most up-to-date findings from both laboratory and clinical investigations into solid tumor pathophysiology. Covers different topics centered on the critical role that the tumor microenvironment plays in the growth, invasion, metastasis and treatment of solid tumors. Develops a systems-level, quantitative understanding of angiogenesis, extracellular matrix, metastatic process, delivery of drugs and immune cells, and response to conventional and novel therapies, including immunotherapies. Discussions provide critical comments on the challenges and the future opportunities in research on cancer and in establishment of novel therapeutic approaches and biomarkers to guide treatment.
HBTM 303QC Vision: A System and its Assessment  
CourseID: 109226  
Faculty: Russell Woods  
Next Term Offered: 2021 Fall

This course provides an introduction to the visual system and its assessment. In general, we will consider vision as a system rather than its low-level components. Each two-hour session consists of two lectures provided by faculty with expertise in that area. Topics will include basic science and clinical topics, normal vision and abnormal vision, methods of assessment of animals and humans, clinical and laboratory measures.

HBTM 308QC Experimental Design and Analysis of Eye and Vision Studies  
CourseID: 207004  
Faculty: Russell Woods  
Next Term Offered: 2022 Spring

This course will be a series of workshops in which the design and analysis of experiments conducted within vision and eye research will be considered. At each session, a faculty member will provide and introduce data from a real study that they have conducted as an example. Issues around experimental design will be discussed. Then, using the participant’s own software on their computer, we will work through analyses of that data, guided by two faculty members. Thus, participants will handle real data and address real experimental design and data issues.

IMMUN 302QC Clinical Sessions  
CourseID: 146352  
Faculty: Rachael Clark  
Next Term Offered: 2022 Spring

Lectures by physician scientists and clinical exposure to patients with immunologically mediated diseases. The goal is to foster translational research into human immunologic disease.

IMMUN 312QC Applied Statistics and High Throughput Data Analysis for Immunologists  
CourseID: 215744  
Faculty: Meromit Singer  
Next Term Offered: 2022 Spring

This course will provide a friendly, fun, and exciting entry point for students who wish to build confidence in data analysis and the application of statistical tools and packages. Lecture topics will include fundamentals of statistical analysis (e.g., hypothesis testing, inferring the mean, experiment design), modeling, and classification.
IMMUN 315QC Therapeutic Human Antibody Engineering  
CourseID: 208013  
Faculty: Wayne Marasco  
Next Term Offered: 2021 Fall

This quarter course will focus on all aspects of therapeutic antibody (Ab) engineering from bench to bedside with an emphasis on translational research. Short lectures will introduce the topics of the day, reviews and seminal papers will be provided. Ab discovery will include readings on in vitro microbial discovery platforms such as Ab-phagemid and Ab yeast display as well as single B cell cloning strategies. Current state of the art of human Ig locus transgenic mice will be discussed. Engineering strategies will include chimeric, humanized and human Abs, and different formats including single chain Abs (scFvs), domain Abs, BITES and Bi-specific Abs. Human Fc engineering to increase or decrease immune-mediated clearance will be discussed including glycan engineering. Manipulating engineered Ab in vivo clearance through size and FcRn interactions will be discussed. We will also discuss nanobodies, antibody drug conjugates and immunotoxins and chimeric antigen receptors. Classes will start with short didactic lectures followed by discussion of 2-3 published papers.

IMMUN 317QC Strategies to Achieve Durable Anti-Microbial Host Defense  
CourseID: 211216  
Faculty: Wayne Marasco  
Next Term Offered: 2022 Spring

Achieving long term immunity in humans to emerging viral pathogens is an important component of global health for which there are broad socioeconomic and geopolitical implications. Yet this effort has been thwarted because of genetic variability of circulating strains and ease of undergoing antibody neutralization escape. In addition, zoonotic transfer of viruses to humans can lead to emergence of new viruses into the human population that can lead to pandemics in the absence of anti-viral herd immunity. This course will primarily focus on broadly neutralizing and protective anti-viral antibody responses and how critical epitope selection on viral glycoproteins that can help to achieve long-term immunity. We will examine through classical and contemporary readings several principles that can be used to design vaccines and anti-viral antibodies to target the virus’s Achilles heel. Critical teachings in this class will include studying how immunoediting of viruses can drive neutralization escape and zoonotic transfer across species. We will discuss the molecular characteristics of bone marrow derived long-lived plasma cells. We will also discuss how to interrogate the broadly neutralizing antibody response to natural infection and vaccines using modern molecular techniques such as NGS and Ab RepSeq. There is also much effort in the field to engineer broadly neutralizing antibodies for passive immunotherapy as prophylactic, preemptive and therapeutic agents. These treatments include therapeutic antibody gene transfer and bi- and trispecific anti-viral monoclonal antibodies. Numerous viruses will be discussed including HIV and emerging influenza, coronaviruses, flaviviruses, alpha viruses, Ebola and others. We will touch on intracellular microbial pathogens. The course will be structured with 20-30 min didactic lectures by Dr. Marasco and other lecturers followed by discussion of 3-5 published papers on the assigned topic of the day.
IMMUN 377L Study molecular aspects of immune recognition
CourseID: 208294
Faculty: 
Next Term Offered: 2020 Spring

MED-SCI 210 Intro to Matlab, Statistics, and Dynamical Systems for Mathematical Biology in Pharma and Biotech
CourseID: 205991
Faculty: Catherine Dubreuil
Next Term Offered: 2021 Fall

This course provides an introduction to the use of mathematical modeling, continuous differential equations, statistics and analysis and programming in Matlab with a focus on mathematical biology applications in pharmaceutical and biotechnology industries. Biological topics will include dynamic systems math modeling and statistical analysis applied to the drug discovery and development pipeline. Computational tools, model simulations, and statistical analyses will be executed in MATLAB. MATLAB code will be covered in class.

MICROBI 360QC The Human Microbiome: Comprehensive experimental design and methodologies
CourseID: 207117
Faculty: 
Next Term Offered: 2022 Spring

This is a comprehensive introduction to the study of human microbial communities and their functions relevant to human physiology. Topics covered include metagenomics, mechanistic interactions of the microbiome with metabolism, the immune system, and the gut-brain axis. Rather than lectures, this course is primarily a critical discussion of the literature.

NEUROBIO 209 The Neurobiology of Disease
CourseID: 116455
Faculty: Edward Kravitz
Next Term Offered: 2022 Spring

This highly rated course covers a major disease or disorder of the nervous system each week, including Alzheimer's, Huntington's and Parkinson's Diseases, Mood and Autism Spectrum disorder and others. The course is taught at the Harvard Medical School on Monday (6-8:30 PM) and Wednesday (7-9:30 PM) evenings. The Monday sessions involve patient presentations and "core" lectures describing clinical progression, pathology, and basic science underlying a major disease or disorder. On Wednesdays, students present material from original literature sources, and there is general discussion.
NEUROBIO 309QC The Molecular Pathology and Current Therapies for Retinal Diseases
CourseID: 109255
Faculty: Dong Chen
Next Term Offered: 2021 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 311QC Eye, Brain & Vision: Classics in Visual Neuroscience
CourseID: 213233
Faculty: Richard Born
Next Term Offered: 2021 Fall

This course is designed to meet two needs in the visual neuroscience community at Harvard. The first is a necessary didactic component to our training grant from the National Eye Institute ("Research Training in Visual Neuroscience"); the second is for our students to read primary literature that is of foundational importance for our current understanding of the visual system. Thus the course will consist of weekly two-hour meetings during which students engage in intense discussions with training grant faculty centering on papers that the faculty have deemed "classics" in their respective fields.

NEUROBIO 312QC Development of the Central Nervous System
CourseID: 207085
Faculty: Mohini Lutchman
Next Term Offered: 2020 Spring

In this quarter course, students will learn about the genetics and neurodevelopment of the central nervous system. The course format will include lectures on topics on Microcephaly, Epilepsy and Autism. In addition, there will be case studies neuroanatomy laboratories and patient presentations of those affected with neurodevelopmental disease. Students will be assessed in a team-based setting.

NEUROBIO 313QC Cortical Neurodevelopment and Disease
This course considers the production and assembly of the diverse circuits of the cerebral cortex. Topics include: neurogenesis, cell lineage and fate determination, neuronal migration, axon guidance, synapse formation and stabilization, and the human neurodevelopmental disorders that arise when these processes are disrupted.

**NEUROBIO 314QC Mathematical Tools for Neuroscience**

CourseID: 214612  
Faculty: John Assad  
Next Term Offered: 2022 Spring

Numerical data analysis has become a nearly indispensable tool in modern neuroscience. This course aims to equip graduate students with the fundamental mathematical skills in quantitative modeling and data analysis necessary for neuroscience research. The course is aimed at first- or second-year students in the Neuroscience PhD program, and is open to other graduate students in the biosciences. This pilot course serves as a crash course to the basics of linear algebra, differential equations, and basic probability and statistics from a mathematical perspective. Each mathematical concept will be illustrated via applications to neural datasets.

Our goal is to make this fun, approachable, and applicable. We would like to build *mathematical intuition* for these essential topics. You will not need any math experience beyond high school calculus. Some amount of coding is necessary for this class; if you are rusty, this will be a chance to brush up your Matlab skills.

**NEUROBIO 316QC Probabilistic models for neural data: from single neurons to population dynamics**

CourseID: 214540  
Faculty: Jan Drugowitsch  
Next Term Offered: 2022 Spring

Probabilistic models are a powerful approach for gaining an understanding of what drives the activity of individual neurons and neural populations. This course will dissect their modular, plug-and-play structure, from single-neuron models over generalized linear models to state space models for population dynamics. Students will learn their basic building blocks, and how to flexibly assemble them to suit their own data analysis needs.

Upon completion of the course, students should be able to (i) identify the model structure and associated assumptions of common models in the literature; (ii) apply existing probabilistic models to neural datasets; and (iii) flexibly design new models by re-using
existing model components.

NEUROBIO 317QC Comparative Neuroanatomy
CourseID: 207086
Faculty: Wei-Chung Lee
Next Term Offered: 2022 Spring

Neuroscientists employ diverse model systems and experimental approaches to study nervous system structure and function. Through a combination of lectures, hands-on activities and paper discussions, this quarter course will introduce students to principles of nervous system organization and will provide a conceptual understanding of the spatial and functional relationships among components of the nervous system. Modern experimental methods and online resources to study neural circuit structure and function across model organisms will also be highlighted.

NEUROBIO 319QC Neurobiology of Psychiatric Disease: From Bench to Bedside
CourseID: 205053
Faculty: Kerry Ressler
Next Term Offered: 2021 Fall

To provide clinical insight and critical analysis of basic and translational science approaches necessary for students to approach psychiatric disorders as scientific problems, and thus contribute future research work with clinical relevance. Each pair of lectures presents 1) basic neuroscience approaches to the neural circuitry, cell and molecular biology underlying disease, followed by 2) clinical neuroscience, genetics, neuroimaging, etc., including case studies of the disorders.

The lectures will focus on a range of psychiatric disorders, neural systems underlying behavior, and translational approaches to novel interventions, while providing insight on disease characteristics, current, novel and translationally-informed treatments, gene vs. environmental risk factors, animal models, and gaps in knowledge across the field. There will also be laboratory-based sessions (organized visits to McLean Hospital) to demonstrate examples of basic and human laboratory approaches to the study and treatment of psychiatric illness.

NEUROBIO 333QC Careers in Neuroscience
CourseID: 207084
Faculty: David Ginty
Next Term Offered: 2022 Fall

This course is intended to provide PiN PhD candidates with a structured introduction to career skills that enable success after the completion of the PhD, and is directed to
those considering both academic and non-academic paths. There will be ten sessions in total, and each session will feature one or more invited discussion leaders who can relate the merits and challenges of particular career paths and the skills required to be successful.
BE 121 Cellular Engineering
CourseID: 119067
Faculty:
Next Term Offered: 2021 Fall

This is a combined introductory graduate/upper-level undergraduate course that focuses on examining modern techniques for manipulating cellular behavior and the application of these techniques to problems in the biomedical and biotechnological arenas. Applications in drug discovery, regenerative medicine, and cellular agriculture will be discussed. Topics will include controlling behavior of cells through cell-matrix interactions, cytoskeletal architecture, and cell behavior in processes such as angiogenesis and wound healing. Lectures will review fundamental concepts in cell biology before delving into topical examples from current literature. Students will work weekly in the lab learning cell culture techniques, soft lithography, microscopy, and classical in vitro assays measuring cell behavior.
Molecular and Cellular Biology

BIOLOGY 10A Biology of Invertebrates
CourseID: 218567
Faculty:
Next Term Offered:

Course created to support student import.

BIOLOGY 17 General Biochemistry
CourseID: 218568
Faculty:
Next Term Offered:

Course created to support student import.

BIOLOGY 20 Animal Physiology
CourseID: 218549
Faculty:
Next Term Offered:

Course created to support student import.

BIOLOGY 96R Introduction to Research in Biology for Undergraduates
CourseID: 218551
Faculty:
Next Term Offered:

Created to support student import.

BIOLOGY 119 Biophysical Aspects of Cell Function: Bioenergetics
CourseID: 218557
Faculty:
Next Term Offered:

created to support student import

MCB 101 Human Genetics
CourseID: 156009
Faculty:
Genomic information is accelerating the discovery and characterization of the molecular and cellular basis of human health and disease. This new lecture/discussion course will explore how knowledge from new technologies is used to advance our understanding of human biology. Topics will include personal genomics, understanding genome-wide associated studies, epigenetics, gene-environment interactions, and complex traits, the importance of model organisms to investigate molecular mechanisms, and the prospects for cancer genomics and gene/genome therapy. This lecture/discussion course will rely extensively on primary literature and contemporary review articles. Students will actively participate in class discussions and prepare four written summaries of assigned articles and two literature-based research projects (one in the middle of the term and one at the end of the term) that critically assess the scientific basis of popular news articles and consumer-targeted genomics information.

MCB 157 Developmental Genetics and Genomics
CourseID: 108338
Faculty: Craig Hunter
Next Term Offered: 2020 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 195 Foundations of Systems Biology and Biological Engineering
CourseID: 123837
Faculty:
Next Term Offered: 2021 Spring

This course builds an understanding of design principles in biology. We will ask why biological circuits are built the way they are and answer using mathematical models. Topics: elementary circuits in biological networks, robustness, pattern-formation in embryos, error-correction, and evolutionary optimization.

MCB 290A Current Topics in Molecular, Cellular and Organismal Biology
CourseID: 127009
Faculty:
Next Term Offered:

This class teaches students how to publicly present scientific papers to a diverse audience with emphasis on contextualizing the scientific problem under discussion, critically presenting the essential data, and using an engaging presentation style.
MCB 307A Developmental Genetics and Neurobiology
CourseID: 148233
Faculty: 
Next Term Offered:

MCB 307B Developmental Genetics and Neurobiology
CourseID: 159579
Faculty: 
Next Term Offered:

MCB 353 Building Your Own Microscope
CourseID: 160485
Faculty: Venkatesh Murthy
Next Term Offered: 2022 Spring

Microscopes of various sorts are used by most biologists, who typically buy these off the shelf. With a little knowledge, however, most biologists can build their own microscopes to do many of the things that the commercial ones do. In this quarter course, you will learn to build an epifluorescence microscope and to acquire images using a computer.

MCB 354 Introduction to Model Organisms
CourseID: 160493
Faculty: Craig Hunter
Next Term Offered: 2021 Fall

Model organisms are embedded in our scientific culture, from textbooks on the discovery of genetic material, to mod-encode genome projects. This quarter course is a means to formally introduce an enormously successful experimental scientific approach that has revealed uncountable new biological mechanisms for the last 70 years. Students in this class will engage in hands-on learning exercises to become familiar with commonly used model organisms. They will learn about the genesis of each model system and compare and contrast the features and available experimental approaches that govern whether a particular organism is an appropriate model for different biological phenomena.

MCB 356 Practical Introduction to Robotics
CourseID: 160558
Faculty: Benjamin de Bivort
Next Term Offered: 2022 Spring

Automation and robotics have revolutionized molecular biology. Liquid handling robots are already facilitating the "omics" revolution in genome sequencing, proteomics and
high throughput screening. Now, neuroscience and microscopy are adopting robotics for throughput and experiments requiring precision and repeatability, like targeted microelectrode placement. In this nano course, students will learn 1) basic principles of practical robotics including the interaction of software and hardware, 2) the roles of drivers, control cards, microcontrollers and sensor electronics, and 3) practical engineering skills including basic soldering, measurement of voltage, conductivity, polarity and resistance. Students will explore the challenges of translating conceptual operational algorithms into physical implementations.

MCB  357 Bioinformatics  
CourseID: 207472  
Faculty:  
Next Term Offered:  

This week long intensive workshop run by the Harvard FAS Informatics group will introduce students to the tools needed to conduct bioinformatic analysis of high-throughput sequencing data. The first part of the week will introduce universal, foundational tools: the R language and the Unix command line. We will cover a basic introduction to the R programming language, including concepts of tidy data and data pre-processing, data visualization techniques, and extending R using packages and custom functions. We will also cover a basic introduction to the Unix command line and high-performance computing with the Odyssey cluster. The second part of the week will be split into two tracks: a functional genomics track, focusing on methods for expression analysis using RNA-seq and single cell RNA-seq; and population and comparative genomics track, focusing on methods for analyzing population resequencing and phylogenetic data, although in both cases additional topics will be covered as time permits. While some prior experience with the Unix command line and R or another programming language would be useful, it is not required and this course is designed to ensure that everyone regardless of previous experience will gain familiarity and comfort with bioinformatics.

MCB  358 Mass Spectrometry  
CourseID: 212804  
Faculty: Christina Woo  
Next Term Offered: 2023 Spring  

This course will provide an introduction to shotgun proteomics: from sample preparation, the processes within mass spectrometer, and how to analyze the data obtained from this technique.

MCB  399 Business Practicum in Molecules, Cells and Organisms  
CourseID: 214608  
Faculty:  
Next Term Offered:
Biophysics

BIOPHYS 204 Structural Biology From Molecules to Cells
CourseID: 119219
Faculty: Stephen Harrison
Next Term Offered: 2021 Spring

Imaging of molecules and of molecular localization in cells, including x-ray and electron crystallography, electron microscopy of single molecules, and high-resolution light microscopy. Lectures and student presentations of selected papers from the literature.

BIOPHYS 314 Structure of Viruses and Viral Proteins
CourseID: 119788
Faculty:
Next Term Offered: 2020 Fall
Biostatistics

BIOSTAT 233 Methods II
CourseID: 119847
Faculty:
Next Term Offered: 2021 Spring

Intermediate course in the analysis of Gaussian, categorical, and survival data. The generalized linear model, Poisson regression, random effects and mixed models, comparing survival distributions, proportional hazards regression, splines and smoothing, the generalized additive model.

BIOSTAT 254 Topics in Biostatistics
CourseID: 160702
Faculty: Donna Spiegelman
Next Term Offered: 2020 Fall

Offered primarily for students majoring in biostatistics, although qualified students from other departments are welcome. Topics covered vary each year, based on recent developments in biostatistics and the research interests of instructor.

BIOSTAT 290 Advanced Computational Biology and Bioinformatics
CourseID: 126948
Faculty:
Next Term Offered: 2020 Fall

Students will explore current topics in computational biology in a seminar format with a focus on interpretation of ‘omics data. They will develop skills necessary for independent research using computational biology.
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.

Internships are considered an integral part of a student's educational experience and should be viewed as a path toward a student's career development. As such, approved internships can receive academic credit via this course number.

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Celtic Languages and Literatures

CELTIC 101 Irish Heroic Saga
CourseID: 122419
Faculty:
Next Term Offered: 2021 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 105 The Folklore of Gaelic Ireland
CourseID: 160495
Faculty:
Next Term Offered: 2022 Spring

An introduction to the traditional stories, lore, customs, and music of Gaelic Ireland. Since collecting began in the eighteenth and nineteenth centuries, Ireland has amassed one of the most extensive collections of folklore in the world. Prominent tradition bearers and collectors will be introduced, and issues of collecting will be considered. Theoretical approaches will be explored to gain a deeper understanding of the material. All texts will be read in English translation.

CELTIC 111 Shapeshifters and Manbeasts in Celtic Traditions
CourseID: 207727
Faculty:
Next Term Offered: 2020 Fall

In Irish, Welsh, Scottish and Breton narratives, humans turn into other kinds of animal (and animals into humans) for many different reasons?as punishment, as escape, as expression of their inner nature, among others. These stories are written into medieval manuscripts, recorded from oral storytellers in the twentieth century, recounted in contemporary film, and embedded in popular music. Is there a stable boundary between the animal and human worlds? We explore shapeshifting stories in all of these modes and media, reading them against a background of texts about animals and humans from their own times and ours. All of our readings are in English or English translation: no knowledge of a Celtic language is required.

CELTIC 120 Food and Fantasy in Irish Tradition
CourseID: 203245
Many aspects of food—growing, cooking, eating, drinking, and distributing it—have served as powerful cultural symbols in Irish oral and literary tradition from medieval to modern times. A survey of the environmental, historical, and economic background to food and its production in Ireland of the early Middle Ages will lead to the close reading of medieval texts (in translation) such as "News about Mac Dathó's Pig," "The Vision of Mac Conglinne," and "The Battle of Mag Tuired," in each of which the "what," "why," and "how" of eating determine the outcome of the story. In addition, we will examine the lively symbolism of food as perpetuated in Irish legend and folktale, and also in post-medieval Irish literature.

CELTIC 121 The Art of Storytelling in Medieval Ireland
CourseID: 207728
Faculty:
Next Term Offered: 2020 Fall

An exploration of what we know about storytelling and storytellers in Ireland of the Middle Ages. Also to be considered are: notions of narrative genres; the hero as storyteller, the storyteller as hero; the interface among native Irish, Classical, and biblical notions and repertoires of story; the "visuals" of story; stories as linked together in cycles, or as "prequels" and "sequels." Readings will be in English/translation. No previous knowledge of Irish or Celtic tradition required.

CELTIC 137 Celtic Mythology
CourseID: 111202
Faculty:
Next Term Offered: 2021 Fall

Medieval Irish and Welsh texts reflect underlying story patterns, characters, and motifs that are rooted in pre-Christian tradition and in some cases witnessed in the archaeological evidence and in the ethnographic writings of ancient Greek and Roman authors. We will examine these texts in translation and track the reconstruction of the "pagan past" undertaken by medieval Celtic writers, as well as the new mythologies they developed to suit the evolving ideological agenda of their world, from ca 600 to 1500 CE.

IRISH 200 Introduction to Old Irish
CourseID: 123266
Faculty:
Next Term Offered: 2021 Fall

An introduction to the language of the eighth and ninth centuries, with elementary readings in prose texts.
IRISH 201R Continuing Old Irish
CourseID: 117752
Faculty:
Next Term Offered: 2022 Spring

Further grammatical study, with continued reading of saga texts.

WELSH 128 Introduction to Modern Welsh
CourseID: 113699
Faculty:
Next Term Offered: 2021 Fall

Introduction to the Welsh language as spoken and written today, designed for those with little or no prior knowledge of this vibrant Celtic language. Intensive conversation practice is provided, and students learn to write fluently. Internet, audio and video exercises using dialogue, music and film augment a contextualized grammatical survey, and use of authentic literary texts increases as the course progresses.

WELSH 129R Intermediate Modern Welsh
CourseID: 114118
Faculty:
Next Term Offered: 2022 Spring

Direct continuation of Welsh 128, developing and deepening students' knowledge of, and skill in, the modern spoken and written language. By the end of the semester students will be able to converse, read and write in a number of registers of idiomatic Welsh (academic, literary, informal). Various media, featuring dialogue, music and film, augment the advanced grammatical survey. Central cultural and historical issues are discussed.

WELSH 226R Readings in Middle Welsh Prose
CourseID: 111956
Faculty:
Next Term Offered: 2021 Fall

An exploration of the enormous variety of medieval Welsh prose literature: selections from tales and romances, chronicles, laws, and lore.

WELSH 227 Welsh Bardic Poetry
CourseID: 111774
Faculty:
Next Term Offered: 2022 Spring
Readings from the *hengerdd*, the *beirdd y twysogion* and the *beirdd yr uchelwyr*; consideration of the social and political contexts of their poetry, its forms, and its relationship to other medieval European poetic traditions.
Summer School

CHEM  S-20 Organic Chemistry
CourseID: 218566
Faculty:
Next Term Offered:

Created for student import.

CREA  S-124 CREA S-124 Writing for TV
CourseID: 219666
Faculty:
Next Term Offered:

GERM  S-40 Advanced German through Contemporary Media
CourseID: 216740
Faculty:
Next Term Offered:

GOVT  S-1275 Asia in World Affairs
CourseID: 218499
Faculty:
Next Term Offered:

HARC  S-197 Contemporary Photography: War and Conflict
CourseID: 216743
Faculty:
Next Term Offered:

HIST  S-1646 Asian American History and Culture, 1924 to the Present
CourseID: 216744
Faculty:
Next Term Offered:
Chemistry and Chemical Biology

CHEM  60 Foundations of Physical Chemistry
CourseID: 114811
Faculty:
Next Term Offered: 2020 Fall

A compact introduction to major principles of physical chemistry (statistical mechanics, thermodynamics, and chemical kinetics), concurrently providing mathematical and physical foundations for these subjects and preparation for Chemistry 160 and 161.

CHEM  106 Physical-Organic Chemistry
CourseID: 108840
Faculty:
Next Term Offered: 2021 Fall

This course will survey modern organic chemistry from a fundamental perspective. The foundations of structure and bonding, donor-acceptor interactions, and conformational analysis will be considered in the context of pericyclic reactions and cyclic and acyclic stereocontrol. The behavior of reactive intermediates, the basis for enantioselective catalysis, and patterns in functional group reactivity will also be discussed.

CHEM  163 Frontiers in Biophysics
CourseID: 116159
Faculty:
Next Term Offered: 2020 Fall

This interdisciplinary course will explore the physical interactions that underpin life: the interactions of molecules, macromolecular structures, and cells in warm, wet, squishy environments. Topics will include Brownian motion, diffusion in a potential field, continuum mechanics of polymers, rods, and membranes, low Reynolds number flow, interfacial forces, electrostatics in solution. The course will also cover recently developed biophysical tools, including laser tweezers, superresolution microscopies, and optogenetics. Numerical simulations in Matlab will be used extensively.

CHEM  170 Chemical Biology
CourseID: 122175
Faculty:
Next Term Offered: 2021 Fall

Applying chemical approaches to problems in biology. Topics include: protein engineering and directed evolution; genomics, proteomics, and metabolomics; genome
This course will examine synthesis from a biological perspective, focusing on how organisms construct and manipulate metabolites, as well as how biological catalysts and systems can be used for small molecule production. Topics to be covered include mechanistic enzymology, biosynthetic pathways and logic, biocatalysis, protein engineering, and synthetic biology.
This course will provide a survey of major topics, technologies, and themes in Chemical Biology, with hands-on exposure to a variety of experimental approaches.
East Asian Languages and Civilizations

CHNSE 168R Chinese in the Social Sciences
CourseID: 108384
Faculty:
Next Term Offered: 2021 Spring

Advanced language practice through the reading and analysis of authentic academic texts in social science disciplines (e.g., history, politics, sociology, economics). May be offered independently in Chinese, or linked with an English-language content course. Specific content varies by year.

CHNSE 187 Art and Violence in the Cultural Revolution
CourseID: 115034
Faculty: Xiaofei Tian
Next Term Offered: 2022 Spring

Examines the cultural implications of the Cultural Revolution (1966-1976). We will examine how art was violent towards people and how violence was turned into an art. We will also consider the link between violence, trauma, memory and writing. Materials include memoir, fiction, essay, "revolutionary Peking Opera," and film.

CHNSHIS 113 Society and Culture of Late Imperial China
CourseID: 120602
Faculty: Michael Szonyi
Next Term Offered: 2023 Spring

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.

CHNSHIS 225R Topics in Middle Period History: Seminar
CourseID: 115124
Faculty: Peter K. Bol
Next Term Offered: 2022 Spring

Examines various topics in the political, institutional and intellectual history of middle period China (8th-15th c.) with a focus on the literati as local elites participating in national cultural trends.
CHNSHIS 229R Topics in Ming History
CourseID: 119008
Faculty: Michael Szonyi
Next Term Offered: 2022 Fall

Examines various topics in the intellectual and cultural history of Ming China.

CHNSHIS 232R Topics in Han History: Seminar
CourseID: 117082
Faculty: Michael J. Puett
Next Term Offered: 2021 Fall

Examines various topics in the history of the Han Dynasty.

CHNSHIS 233R Sources of Early Chinese History
CourseID: 114370
Faculty: Michael J. Puett
Next Term Offered: 2022 Spring

Chronological survey of recently-discovered paleographic texts and received materials from the late Shang through the early Warring States period, with discussion of problems of contextualization.

CHNSHIS 253 Topics in Late Imperial History
CourseID: 125694
Faculty: Mark Elliott
Next Term Offered: 2021 Fall

Review of historical scholarship on China from roughly 1500 to the early 20th century. This course is designed to aid in preparations for the general examinations and in developing a dissertation topic.

CHNSLIT 115 Gender and Power in Chinese Literature: Seminar
CourseID: 124530
Faculty: Wai-yee Li
Next Term Offered: 2022 Spring

Uses conceptions of gender and representations of women to examine shifting paradigms of virtues and vices, notions of rhetoric and agency, ideas about politics, power and historical explanations, and boundaries of supernatural realms and religious transcendence.

CHNSLIT 140 The Greatest Chinese Novel
The Story of the Stone (also known as The Dream of the Red Chamber) by Cao Xueqin (1715?-1763) is widely recognized as the masterpiece of Chinese fiction. It is also a portal to Chinese civilization. Encyclopedic in scope, this book both sums up Chinese culture and asks of it difficult questions. Its cult status also accounts for modern popular screen and television adaptations. Through a close examination of this text in conjunction with supplementary readings and visual materials, the seminar will explore a series of topics on Chinese culture, including foundational myths, philosophical and religious systems, the status of fiction, conceptions of art and the artist, ideas about love, desire and sexuality, gender roles, garden aesthetics, family and clan structure, and definitions of socio-political order.

CHNSLIT 141 Forbidden Romance and Modern China
CourseID: 218179
Faculty: David Wang
Next Term Offered:

This course introduces students to a unique dimension of literature in modern China: "romance" and the legitimacy of its representation. The word "romance" is taken here to mean multiple things: amorous engagement in fiction and lived experience, its discursive representation, particularly in the form of narrative, and its institutional implementation (gender, marriage, family, law, nation/state, etc.) and disavowal.

It examines how the modern lure of free will and emancipated subjectivity drove writers to redefine terms of affect, such as love, feeling, desire, passion, sexuality, loyalty, dedication, 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 literary manifestations.

The extant paradigm of modern Chinese literary studies highlights the twin subjects of enlightenment and revolution. By contrast, sentiment, particularly in the domain of intimacy, has been downplayed as something trivial and irrelevant to the master narrative. This course intends to contest such a notion, calling attention instead to the "structure of feeling" (in Raymond Williams's terminology) that has given form to Chinese subjectivity. It focuses on the ways modern Chinese constructed and transgressed the conditions of romantic feeling, and wrote in response to emotive, intellectual and political provocations.

A romance most likely becomes "forbidden" when imported temptation clashes with indigenous pursuit. By exploring "forbidden romance" in both Chinese fiction and reality, the course first views China not so much as a rising political entity but as a site of varied literary productions and cultural contestations. With famous examples and constituents
of Chinese forbidden romance as emotive expression, the course offers a range of interpretations of drastic transformations that the Chinese society undergoes. The course treats literature as a useful chronicle of the "dangerous power" of sentimental imagination and affective engagement. With such dangerous power and in the name of love, the modern Chinese entertains (or even repeats) a unique cycle of enlightenment and revolution?disenchantment and enchantment, iconoclasm and mystification?in the pursuit of a modernity with Chinese characteristics.

CHNSLIT 223R Keywords
CourseID: 109524
Faculty: Wai-yee Li
Next Term Offered: 2021 Fall

This course will examine the semantic range of keywords in early Chinese texts (up to Han) by considering their narrative and rhetorical possibilities. What kinds of arguments do they generate? What are the stories told to illustrate their meanings?

CHNSLIT 245R Topics in Sinophone Studies - Modern Chinese Fiction on the Periphery
CourseID: 121041
Faculty: David Wang
Next Term Offered: 2021 Fall

Survey of modern Chinese fiction and narratology from Taiwan, Hong Kong, and the Chinese Diaspora: polemics of the canon, dialogues between national and regional imaginaries, and literary cultures in the Sinophone world.

CHNSLIT 268R Topics in Song and Yuan Literature
CourseID: 115522
Faculty: Xiaofei Tian
Next Term Offered: 2022 Spring

Survey of Song literature.

CHNSLIT 280 Shanghai and Beijing: A Tale of Two Cities: Seminar
CourseID: 109512
Faculty: Jie Li
Next Term Offered: 2023 Spring

This course aims to excavate the cultural and historical memories of China's two most important cities. We will discuss literary and cinematic representations, visual and material transformations of the cityscape, cities as sites of cultural production, and the
lives of their inhabitants in modern times.

EAFM 151 Documenting China on Film
CourseID: 204991
Faculty: Jie Li
Next Term Offered: 2022 Fall

What defines a film as "documentary"? How do documentary films inform, persuade, provoke, or move us? Of whom, by whom, and for whom are documentaries made? Can documentary also be "propaganda" or "art"? What rhetorical devices and aesthetic strategies do documentaries use to construct visions of reality and proclaim them as authentic, credible and authoritative? What might documentary films as opposed to written text teach us about modern Chinese history and contemporary society? Above all, how would you go about making a documentary film, in China or elsewhere?

In this course, we will examine documentary films made in or about China from the early 20th century to the present day, through the lenses of both Chinese and foreign filmmakers. We will interrogate the visual "evidence" that camera images can offer, look into their production and reception histories, as well as discuss the ethics, aesthetics, and politics of documentation, representation, and exhibition. Weekly topics are roughly grouped into three parts: (1) "Witnessing History" (2) "Social Reportage" and (3) "Art, Experimentation, and Fiction." The first part will cover the cinematic history and memory of World War II, the Cultural Revolution, and the 1989 Tiananmen protests. The second part will explore documentary engagements with contemporary issues ranging from social inequality, migrant labor, forced demolitions, and environmental degradation. The third part will consider the art of observation, the potentials of experimentation, and the porous boundaries between documentary and fiction. Viewings of documentary films will be complemented by theoretical and contextual readings, as well as short assignments to engage critically and creatively with the films we watch. The final project for the course will be to make a documentary film in a small group.

EAFM 202 Rip and Tear--The Body as Moving and Moved Image in Japanese Film: Seminar
CourseID: 108472
Faculty: Alexander Zahlten
Next Term Offered: 2023 Spring

This course traces the role of the body as a discursive anchor in moving image culture in Japan. The focus will lie on the period after WW II, although the mapping of historical contexts will entail investigations into earlier histories as well.

EAFM 220 Topics in Chinese Film and Media Studies: Seminar
CourseID: 109511
This graduate seminar surveys the current field of Chinese cinema studies with a focus on film culture and historiography from the end of the 19th century to the start of the 21st century. We will be asking three questions preoccupying film and media studies—What is cinema? When is cinema? Where is cinema?—in Chinese and Sinophone contexts. Beyond the interpretation of film texts, we will also examine film production and exhibition, stars and audiences, genres and movements, technologies and infrastructures, propaganda and censorship, industries and markets, experiences and memories, transnational and transmedial connections. Situating films within broader media ecologies, we will discuss some of the most innovative scholarship published in recent years as well as delve into untapped primary sources to explore future research projects that can make new contributions to this emerging field. The organization of the syllabus is roughly chronological, while many weekly themes will resonate throughout the semester.

EASTD 129 The World of the Three Kingdoms: Seminar
CourseID: 130238
Faculty: Xiaofei Tian
Next Term Offered: 2021 Fall

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.

EASTD 143B Digital Tools and Methods in East Asian Humanities (Advanced)
CourseID: 218283
Faculty:
Next Term Offered:

This course is designed for students in East Asian Humanities who are interested in adopting digital methods in their research with basic Python coding. It will introduce fundamental programming concepts, SQL and relational databases, popular Python libraries in data cleaning, text analysis, and supervised and unsupervised machine learning. Students completing the course will be able to integrate and apply the Python libraries taught in class into their research and to explore the rapidly growing newcomers without hurdles.
EASTD 152 Tea in Japan / America  
CourseID: 212645  
Faculty: Melissa M. McCormick  
Next Term Offered: 2022 Fall

This undergraduate seminar examines the history, culture, and practice of the Japanese tea ceremony (*chanoyu*) and its reception in the United States. What began as a ritualized preparation of tea, by the medieval period had developed into a wide-ranging cultural practice the study of which opens onto issues of Japanese aesthetics, political history, and philosophy. Common perceptions of *chanoyu* today, however, are often filtered through the lens of its first systematic presentation in the United States, Okakura Tenshin's *Book of Tea* (1906). With this in mind, the course takes advantage of the rich resources in the Boston area that pertain directly to this early phase of "teaism" in America, while exploring later twentieth-century and contemporary examples of art and architecture related to tea.

Enrollment limited to 12.

EASTD 170 Medicine and the Body in East Asia and in Europe  
CourseID: 144070  
Faculty: Shigehisa Kuriyama  
Next Term Offered: 2021 Fall

Comparative historical exploration of the striking differences and unexpected similarities between traditional conceptions of the body in East Asian and European medicine; the evolution of beliefs within medical traditions; the relationship between traditional medicine and contemporary experience.

EASTD 196 Political Geography of China  
CourseID: 212563  
Faculty: Daniel Koss  
Next Term Offered: 2022 Spring

Putting Chinese politics on the map, this course asks how the government deals with the enormous challenges of ruling over a vast terrain with a diverse population, encompassing super-rich urban metropolises as well as poor rural peripheries. We begin with statecraft traditions from the late imperial era; and end with China's place on the future global maps of the 21st century. Topics include: macro-regions; priority zones of governance; Special Economic
Zones; the Chinese equivalent of "blue states and red states;" rising inequality; ethnic minorities and borderlands; economic development models; urbanization and city planning; collective action in digital space; domestic and international migration; environmental politics; and the geo-politics of the "One Belt One Road" initiative. We will set aside class time for a hands-on introduction to producing and interpreting maps of China.

EASTD  201 East Asia History of Curiosity  
CourseID: 218170  
Faculty: Shigehisa Kuriyama  
Next Term Offered:  

Curiosity is, and has long been, the object of a curious ambivalence. At times, it is touted as an essential virtue—the very lifeblood of intellectual life, whose nurturing is one of the chief aims of education. Without curiosity, many believe, science and culture would wither. At other times, curiosity has been dismissed as a form of distraction and denigrated as idle prying. Indulging in curiosities, moralists have warned, turns the mind away from contemplation of the grand principles and serious truths that truly matter. The central question that we will explore in this seminar is: What might a history of curiosity in East Asia look like? How and when have attitudes toward curiosity and curiosities changed and for what reasons? What factors shaped the different objects of curiosity at different times and in different places? Our considerations will include works relating to natural history, ghosts and monsters, travel, pornography, and the collecting of exotica. While the main focus of the course will be the history of curiosity in East Asia, we will also give some consideration to how this history eventually became entwined with the history of curiosity about East Asia.

EASTD  211 Historical Theory and Methods  
CourseID: 142676  
Faculty: Shigehisa Kuriyama  
Next Term Offered: 2022 Spring  

Theories and methods for research in East Asian history. Covers approaches to social, cultural, intellectual, and political history, analyzing significant works in each field and applications to Chinese, Japanese, and Korean materials.

EASTD  260 The Lotus Sutra: Texts, Narratives, and Translations  
CourseID: 212644  
Faculty:  
Next Term Offered: 2021 Fall
This is a seminar aimed at a small number of advanced graduate students. The *Lotus Sutra* is arguably the most popular sutra in the history of Buddhism in *East Asia*. Its richness in metaphors and parables makes the sutra extremely important in understanding the influence of Buddhist scriptural texts on the development of East Asian literary traditions. Responding to its significance in East Asia, a large number of translations are produced in Western languages. Yet even undergraduate students at Harvard College typically find the most readable English translation, such as the one by Leon Hurvitz and Burton Watson, beyond the reach of their understanding. A large part of the problem in English versions of the sutra is that they fail to bring to the fore the most seminal strands for the development of the sutra’s narratives that run throughout the sutra’s chapters. Unfortunately, existing secondary scholarly writings on the sutra do not help students much because they more often than not uncritically rely on Hurvitz’ and Watson’s translations and repeat the errors there.

This seminar aims at illustrating such essential strands of sutra’s narrative by reading the original Chinese text side by side with the foundational sutra commentaries written by the patriarchs of Chinese Buddhist doctrinal schools—such as Zhiyi and Jicang. The goal of the seminar is threefold: first, it strives to help students improve their ability to interpret and translate Buddhist scriptural texts written in Buddhist literary Chinese; second, it aims at helping students learn how to use the axial commentarial texts in Chinese Buddhist doctrinal traditions; three, it will help students hone their pedagogical skill in teaching undergraduate student how to study Buddhist sutras through their English translation.

Prerequisite: Literary Chinese and instructor’s permission. Enrollment limited to 12.

**EASTD 261 Advanced Readings in East Asian Art**
CourseID: 212646
Faculty: Melissa M. McCormick
Next Term Offered: 2022 Spring

This is a seminar for advanced graduate students in East Asian art (and adjacent fields) focusing on reading secondary and primary sources in Japanese, as well as recent scholarship and theoretical texts in English. The topic will change each semester to accommodate the research projects, general exam fields, and interests of the participants. In addition to examining the state of the field of East Asian art history, the goal is to provide instruction in practical areas such as deciphering calligraphic texts (*kuzushiji*), improving bibliographic skills, and mastering specialized terminology.

**JAPAN 210A Reading Scholarly Japanese for Students of Chinese and Korean**
Development of skills in reading and translating academic genres of Japanese, with special attention to Japanese scholarship on Chinese and Korean studies. Introduction to old kana usage and classical forms commonly used in scholarly writing.

**JAPNHIST 214R Major Issues in the Study of Japanese Religions**

CourseID: 159553  
Faculty: Helen Hardacre  
Next Term Offered: 2021 Fall

This seminar addresses Japanese coronation ritual, which is among the oldest in the world, based on readings and media observation of the enthronement of 2019. On May 1 the 126th emperor of Japan will accede to the throne when he receives the regalia. He will proclaim his enthronement in October before a large audience of officials and foreign guests. The ceremonies conclude in November in a rite called the Daij?saï, in which the new emperor symbolically shares a meal with the ancestral gods of his lineage. Our seminar begins with a consideration of methods for the study of ritual. We examine texts from the ancient period that are understood to provide a prototype, turning to medieval and early modern enthronements incorporating Buddhist ideals for the monarch. Modern enthronements of the Meiji, Taish?, Sh?wa, Heisei, and the new era are examined in social and political context, including contemporary debates regarding the compatibility of constitutionalism and monarchy, and separation of religion from state.

**JAPNLIT 133 Gender and Japanese Art**

CourseID: 121842  
Faculty: Melissa M. McCormick  
Next Term Offered: 2021 Fall

Examines the role of gender in the production, reception, and interpretation of visual images in Japan from the twelfth through the twenty-first centuries. Topics include Buddhist conceptions of the feminine and Buddhist painting; sexual identity and illustrated narratives of gender reversals; the dynamics of voyeurism in Ukiyo-e woodblock prints; modernization of images of "modern girls" in the 1920s; and the gender dynamics of girl culture in manga and anime.

**JAPNLIT 162 Girl Culture, Media, and Japan**

CourseID: 125615  
Faculty: Tomiko Yoda  
Next Term Offered: 2023 Spring

In contemporary Japan, girls and girl culture are considered to be
among the most significant sources of popular cultural trends. For instance, the girly aesthetics of "cute" (kawaii) has animated broad areas of Japanese culture since the 1980s and has become a global cultural idiom through the dissemination of Japanese entertainment medias and fashion products abroad. The course will explore a number of key questions about Japanese (and global) girl culture. How did the conceptualization of girlhood, girl culture, girl bodies, and girl affect transform in Japan from the early twentieth century to the present? How did various medias and media consumption help shape these trends? What can the exploration of "girls' question" tell us, not only about Japanese socio-cultural history, but also about the general conditions of youth, gender, and media culture in the world today (e.g., the sea of pink at Women's March, 2016)? We will begin the semester by unpacking key terms such as "girl," "girlhood," and "girl culture" in relations to the modern and contemporary notions of gender, maturity, and majority. The course materials include fiction, fashion magazines, teen films, manga, and animation. No prior knowledge of Japanese language or history is expected.

JAPNLIT 170 Traditional Japanese Literature: From the Dawn of Writing to the Dawn of Modernity
CourseID: 204985
Faculty: David Atherton
Next Term Offered: 2021 March

Poetry written by gods, incestuous aristocratic romances, exorcist theater, samurai fantasy novels, fart literature: traditional Japanese literature has something for everyone, and invites us to rethink our assumptions about what literature is and how creativity works. From the most ancient myths up to the 19th century arrival of Western style modernity, we will explore together the relationships between high art and pulp fiction, the stage and the page, words and illustrations, manuscript and print, language and the sacred. We will probe the literary imagination of beauty, nature, desire, and heroism, and ask what Japanese literature can tell us about what it is to be human.

JAPNLIT 271 Topics in Gender and Culture in Japan: Seminar
CourseID: 126924
Faculty: Tomiko Yoda
Next Term Offered: 2023 Spring

This semester, Spring 2019, the seminar will examine theories and practices of feminism
in Japan and elsewhere. In particular, we will study several forms of "radical feminism," including women's liberation movement or *ribu* in early 1970s Japan. We will explore "radicality" in feminism, articulated against the grain of discourses on women's rights and equality. Topics treated in the course include, radical feminism and the New Left, feminist genealogies, feminism and violence, the politics of feminist manifestos, feminism and futurity, and the feminist politics of organization. Some of the reading materials are in Japanese.

**KORHIST 253 Topics in Modern Korean History: Proseminar**
CourseID: 121045  
Faculty: Carter Eckert  
Next Term Offered: 2021 Fall

Readings of secondary works on selected topics in modern Korean history.

**KORHIST 257 Modern Korean History: Special Seminar**
CourseID: 156717  
Faculty: Carter Eckert  
Next Term Offered: 2022 Spring

Readings and research in modern Korean history. Students are required to write a seminar paper based largely on primary materials.

**KORLIT 214 Korean Writers and Their Books**
CourseID: 204997  
Faculty: Si Nae Park  
Next Term Offered: 2022 Fall

This graduate seminar introduces students to Korean literature within an intricate transcultural and translingual matrix of other preexisting literary texts by focusing on writers and the books that served as their creative inspiration. Each week—with the exception of the first week focused on pre-20th-century Korea?students will read the whole or part of one recent monograph on Korean literature in the English language and a pair of literary works (one by a Korean writer in the original language, with the aid of a modern Korean rendition, and the other that was his or her "muse" in English translation) to conduct close reading, familiarize oneself with debates and research questions in current Korean literature scholarship, and contextualize the authors and their works in relevant ecology and culture of books. Students should have advanced knowledge of Korean.

**MONGOLN A Elementary Written Mongolian**
CourseID: 112097  
Faculty: Mark Elliott
Next Term Offered: 2021 Fall

Study of classical Mongolian grammar, with introduction to pre-classical and classical Mongolian texts.

MONGOLN B Elementary Written Mongolian
CourseID: 123855
Faculty: Mark Elliott
Next Term Offered: 2022 Spring

Continuation of Mongolian A.

MONGOLN 120A Intermediate Written Mongolian
CourseID: 117090
Faculty:
Next Term Offered: 2022 Fall

Readings in classical and modern Mongolian texts.

MONGOLN 120B Advanced Written Mongolian
CourseID: 117091
Faculty:
Next Term Offered: 2023 Spring

Continuation of Mongolian 120a.

UYGHUR 120A Intermediate/Advanced Uyghur
CourseID: 124525
Faculty: Mark Elliott
Next Term Offered: 2021 Fall

Additional training in modern Uyghur, with attention to improvement of spoken fluency and comprehension. Extensive readings in a range of genres, including historical writing and academic prose as well as religious texts.

UYGHUR 120B Intermediate/Advanced Uyghur
CourseID: 124526
Faculty: Aizezi Gulina
Next Term Offered: 2022 Spring

Continuation of Uyghur 120A.
CLASPHIL 239 Intertextuality and Reception from Alexandria to Rome and Beyond
CourseID: 212664
Faculty:
Next Term Offered:

Exploration of the pragmatics of the intertextual relationship of Hellenistic poetry to the prior Greek tradition, and of republican, Augustan, and imperial Roman poets’ further complicating of and building on this practice. Particular attention to the effect of intertextuality on genre and genre formation. How is intertextuality to be situated within the field of reception studies or the classical tradition? What, if any, are or should be the limitations of reception studies within the field of classical philology?

CLS-STDY 118 Ancient Greek Warfare
CourseID: 212910
Faculty:
Next Term Offered:

This course will introduce students to the history and myths of ancient Greek warfare. At its center will be the hoplite phalanx: its transformations through time, its relationship to wider social organization, its rules and rituals, and its lethal potential. We will also explore other modes of fighting, such as naval warfare, cavalry battle, sieges, ambushes, and feints, as well as the employment of mercenary troops and the participation of women and non-Greeks. We will examine many different kinds of ancient evidence, from epic poetry and vase painting (using the collections in the Harvard Art Museums) to historical writings and archaeological finds of arms and armor, and question how these sources can be combined or contrasted to yield radically different interpretations of ancient practices and ideologies.

CLS-STDY 136 Dreams in the Ancient World
CourseID: 212902
Faculty:
Next Term Offered:

In the ancient world, dreams linked the mortal and divine realms, portended disasters, healed the sick, and revealed the structure of the cosmos. They could also deceive and be misinterpreted or parodied. This course begins with an overview of Near Eastern materials, and then introduces students to the cultural significance of dreams in the ancient Greek and Roman worlds. We will read famous literary dreams, selected passages from ancient treatises on the nature of dreams, guides to dream interpretation, and personal accounts of dream experiences. Our examination of ancient dreaming will
open the way to thinking about Greek and Roman conceptualizations of perception, vision, and meaning.

**CLS-STDY 152 The Construction of Gender and Sexuality in Ancient Greece**  
CourseID: 156310  
Faculty: Naomi Weiss  
Next Term Offered: 2019 Fall

This course will explore ancient Greek ideologies of gender difference and sexuality, including the mythical "origins" of gender, legal definitions of marriage and adultery, the gendering of space, the portrayal of women on the tragic stage, gender-bending and cross-dressing in comedy, medical models of sex and childbirth, and the links between pederasty and pedagogy. With the help of some important modern discussions about the construction of gender, sexuality, and identity, we will try to assess the ways in which sexual practices and male and female identities were imagined, formed, reinforced, and institutionalized during the archaic and classical periods (roughly 800-300 BCE).

**CLS-STDY 165 Medicine in the Greco-Roman World**  
CourseID: 124969  
Faculty: Mark Schiefsky  
Next Term Offered: 2020 Spring

Theories and practices of health and healing in the ancient Greco-Roman world, with special emphasis on the relationship of learned medicine to philosophy and other healing traditions.

**GREEK 134 The Language of Homer**  
CourseID: 115238  
Faculty: Jeremy Rau  
Next Term Offered: 2019 Fall

Essentials of Greek comparative and historical grammar, and a close reading of *Iliad* 1 and 3. Diachronic aspects of Homeric grammar and diction.

**LATIN K Advanced Latin Prose Composition: Seminar**  
CourseID: 114908  
Faculty:  
Next Term Offered: 2020 Spring

Exercise in the prose style of different authors and periods, working within various subject areas and genres. As a guide to composition, we will read and analyze
illustrious passages from authors including Cato, Cicero, Sallust, Livy, Seneca, Tacitus, and Apuleius. Weekly assignments will include both reading and composition. Instead of a final exam, there will be a final composition project.

LATIN 102 Catullus
CourseID: 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.
Comparative Literature

COMPLIT 103 Grounds for Comparison
CourseID: 128115
Faculty: David Damrosch
Next Term Offered: 2020 Fall

This seminar provides an introduction to literary studies in a global age. How do writers refract and transform the world around them, and the world beyond their borders? How do they celebrate or challenge their society’s values and rethink their literary heritage? Writers in every culture have mobilized the resources of poetic language and literary form to delight and instruct their readers, while critics and theorists have sought to understand how writers achieve their effects. Through close reading of a range of compelling works, accompanied by major critical and theoretical statements, we will explore the relations of literature to society and theory to literature, focusing on a set of interconnected themes: travel and self-discovery, empires and their aftermath, and the politics of language and of cultural memory.

COMPLIT 104 On Theory
CourseID: 122350
Faculty:
Next Term Offered: 2020 Fall

What is theory? What is the difference between literary, critical and cultural theory? What is the relation between theory and reading? This course introduces students to various concepts of theory (Derrida, Deleuze, Foucault, Balibar, Adorno, Benjamin, Freud, Saussure, Cixous, Kristeva, Butler and others). Focuses on theoretical texts and will bring in literary texts where necessary.

COMPLIT 106 The Yiddish Short Story: Folk Tales, Monologues, and Post-Apocalyptic Parables
CourseID: 212720
Faculty:
Next Term Offered:

Who are the storytellers of Yiddish literature? Where did their stories come from? Why did the short story become the central genre of modern Jewish literary culture? This course explores the genealogy of the Yiddish short story from the hasidic folk tale to the modernist sketch, from the monologues of Sholem Aleichem and Isaac Bashevis Singer to the haunting narratives of David Bergelson and Der Nister. Stretching from the nineteenth century to the present, we follow the short story in its comparative contexts from Eastern Europe to Western Europe, Palestine/Israel, and the US. Note: All texts will be taught in translation; optional reading section for those with Yiddish knowledge.
COMPLIT 114 Mysticism and Literature  
CourseID: 203092  
Faculty:  
Next Term Offered: 2020 Fall  
  
Examines trends, issues and debates in the comparative study of mystical literature. Close readings of primary works by Jewish, Christian and Muslim authors from the Middle Ages through the 16th century. Topics include poetry and mysticism; allegory, symbolism and Scripture; body and gender; apophasis vs cataphasis; exemplarity and autobiographism; language and experience. Also examines creative engagement of pre-modern mystical literature in selected works by modern authors (Borges, T.S. Eliot) and literary theorists (DeCerteau).

COMPLIT 117 Literature, Gender, and Revolution  
CourseID: 109677  
Faculty: Karen Thornber  
Next Term Offered: 2020 Fall  
  
Explores relationships among literature, gender, and revolution in China, Cuba, Iran, Japan, Korea, and Russia from the late 19th century to the present. Readings by Butler, Chukovskaya, Danishvar, de Beauvoir, Foucault, Mikiso Hane, Kim Ilyop, Loynaz, Marruz, Pleck, Qiu Jin, Scott, Tamura Toshiko among others.

COMPLIT 121 From the 1001 Nights to the Arabian Nights: Adaptation, Transformation, Translation  
CourseID: 123897  
Faculty: Sandra Naddaff  
Next Term Offered: 2020 Fall  
  
Examines how the 1001 Nights, popularly known in the West as the Arabian Nights, is transformed and adapted for different media and genres. Focuses on a variety of films, (e.g., The Thief of Baghdad, Chu Chin Chow, Aladdin), illustrations/images (e.g., Doré, Chagall, Matisse), musical and balletic renditions (e.g., Rimsky-Korsakov, Fokine), translations (e.g., Galland, Lane, Burton, Haddawy), and re-tellings of stories (e.g., Poe, Bar, Barth, Mahfouz, Sebbar, Zimmerman). Also considers the role of the 1001 Nights in contemporary popular culture.

COMPLIT 122 Soviet Theory and the West  
CourseID: 214549  
Faculty:  
Next Term Offered:  
  
This course treats important Soviet theoretical contributions in philosophy, psychology,
literature, film, and culture in dialogue with comparable movements in the West. In particular, we will look at the key role of language and semiotics, as well as its rejection, in various theoretical models. Reading will focus on major works by Vygotsky, Bakhtin, Lukacs, Shklovsky, Jakobson, Lotman, and others. All readings will be in English translation.

COMPLIT 123 Island Literature
CourseID: 160882
Faculty: Marc Shell
Next Term Offered: 2020 Fall

All the world's a planetary stage. Islands, both a part of and apart from the main, offer ready-made laboratories for linguistic, narratological, and political investigation. Islandness encourages political and economic philosophy, geography, psychology, and vacation. This course focuses on island literature, with special attention to works by Homer, More, Shakespeare, Defoe, and Wagner, as well as works by cinematographers like Bergman and painters like Böcklin.

COMPLIT 127 Comparative Modernisms
CourseID: 203090
Faculty: David Damrosch
Next Term Offered: 2020 Fall

The modernist movements have lost none of their exhilarating power since they burst into prominence during the first decades of the twentieth century. Characterized by experimental groups as well as remarkable individual writers, modernist writing presents a challenge to traditional modes of reading. The course will focus on debates about modernity, modernism, and the avant-garde; the implications of radical new uses of language; the connections between literature and the other arts; the surprising presence of mystical elements in a world of machines and factories; the emergence of short texts that have recently been described as "modernist miniatures"; and the geographical reach of the movements and their relation to new conceptions of territoriality.

COMPLIT 128 Modernism in Theory and Practice
CourseID: 212773
Faculty: David Damrosch
Next Term Offered:

Modernism was an exceptionally critically self-aware movement, marked by manifestoes, arguments with friends and against enemies, and theoretical reflections woven into literary works. This course explores the interplay of theory and practice in the work of three major European modernists, Marcel Proust, Virginia Woolf, and Franz Kafka, from diaries and letters to programmatic essays to major novels, looking particularly at formal experiment and social concern, the construction of political,
religious, and sexual identity, and transformations of narrative time and novelistic space.

COMPLIT 132 Disability Studies  
CourseID: 109664  
Faculty: Marc Shell  
Next Term Offered: 2020 Fall

From stumbling Oedipus to stammering Moses and stuttering Edward the Sixth, we consider how bodily and verbal paralysis informs literary and philosophical texts. Attention to cinema, sign language, visual arts, and the rise of disability studies in the arts.

COMPLIT 133 Shakespeare and the Globe  
CourseID: 109665  
Faculty: Marc Shell  
Next Term Offered: 2020 Fall

This course examines literary, theatrical, and cinematic adaptations of Shakespeare's plays in Africa, the Americas, Asia, Europe and the Middle East. Students learn how artists, including Shakespeare, have used creative production of the past to understand and address concrete issues and problems of the present, including political scandal and persecution, imperial domination, and racial and ethnic biases and oppression. We also explore the continued vitality worldwide of theater and the arts, as well as their constant transformations throughout time and space.

COMPLIT 136 The historical novel after modernism  
CourseID: 107835  
Faculty:  
Next Term Offered: 2020 Fall

Modernism emphasized ruptures with the past and the uncertainty of historical knowledge; one consequence of this emphasis was a general turning away from the historical novel, seen as the most deluded form of nineteenth-century realism. This situation began to change around the time of World War II, when a growing number of novelists schooled in modernism began to write serious historical fiction. This course will explore the motives for such writing and the strategies of research, structure, style, dialogue, and characterization that once again made historical fiction a compelling enterprise, on the far side of the modernist critique of history. Readings in Borges, Yourcenar, Tolkien, Rhys, Endo, Mishima, Morrison, Calvino, Pamuk, and the Tibetan postmodernist Jamyang Norbu.

COMPLIT 139 Fictions of Kin and Kind  
CourseID: 156474  
Faculty: Marc Shell
The literature and rhetoric of kinship. Special attention to the incest taboo, orphanhood, the human-animal distinction, and social fictions of nationhood. Readings include texts by modern theorists of language as well as by Sophocles, Marguerite of Navarre, Elizabeth Tudor, Cervantes, Shakespeare, Racine, Schiller, Goethe, Melville, and Nabokov.

COMPLIT 140 Catastrophe and Continuity in Jewish Literature from the Bible to Today
CourseID: 160527
Faculty: David Stern
Next Term Offered: 2020 Fall

From the Bible until today, the theme of catastrophe has loomed large in Jewish literature. Why has God's chosen people been made to undergo so many terrible ordeals and sufferings? This question has posed challenges in multiple dimensions -- theological, historiographical, literary -- and in this course we will consider the many different, often surprising (and overlooked) responses that have been given to these challenges in Jewish literature from the Biblical period through the Holocaust (and beyond). We will also consider the literary problem of the representation of catastrophe, the origins and development of martyrdom, and the history of Jewish responses to catastrophe as a tradition worthy of study in its own right. All readings will be in English translation, and will include Biblical and post-Biblical texts, Rabbinic sources, medieval chronicles, laments, and legal texts, and modern poetry, fiction, and theological writings. No previous experience in catastrophe required.

COMPLIT 142 Narrative Theories of Prose and Film
CourseID: 109676
Faculty: Justin Weir
Next Term Offered: 2020 Fall

An introduction to foundational narrative theories of fiction and cinema focuses on how those theories evolved from the 20th to the 21st century. Topics include the boundary between narrative and non-narrative, film adaptation, and the rise and fall of semiotics in narrative theory.

COMPLIT 143 The Jewish Library: Four Jewish Classics
CourseID: 214504
Faculty:
Next Term Offered:

Judaism is a famously text-centric religious culture, founded not only on a single book, the Hebrew Bible, but profoundly involved in the study and ritual use of other classic texts like the Babylonian Talmud, the Prayerbook, Biblical commentaries like that of
Rashi, and the Passover Haggadah. This course will study the development of these four books and their transformation from texts into books with distinct physical and material features. In the case of each book, the text will be studied historically—"excavated" for its sources and roots, and its subsequent development over the centuries—and holistically, as a canonical document in Jewish tradition. Class time will be devoted primarily to learning to read the primary sources in translation; supplementary secondary readings will provide historical and cultural context. The seminar will also include regular visits to Houghton Library to look at manuscripts, early printed editions, and facsimiles of these books in order to study the changing shapes these books have taken as a key to understanding how they were studied and used, and to consider the relationship of materiality to textuality. While each book will raise its own set of issues, we will repeatedly deal with three basic questions: What makes a "Jewish" text? How do these books represent different aspects of Jewish identity? What can these books tell us about the canonical books of other religious traditions?

No previous background in either Judaism or Jewish history is required. All readings in English translation. While this course is not a formal introduction to Judaism, it does aim to introduce students to Judaism and Jewish culture from inside its classic texts.

COMPLIT 146 Space and Place: The Environment in Film
CourseID: 124822
Faculty: Verena Conley
Next Term Offered: 2020 Fall

Focuses on the effect of the environment in film. Reads films grouped according to environmental themes (humans, nature and animals, water, consumption, pollution, climate change) side by side with critical articles. Pays special attention to the relation between space, place and the planet, ecology and technology, globalization and urbanization, postcolonialism, race, gender and class.

COMPLIT 151 Science Fiction
CourseID: 214536
Faculty:
Next Term Offered:

Considers science fiction's development and shifting emphases in both of its major traditions, in Russia and in the English-speaking world. Touches on perennial themes of the genre including: our relationship to the future and the hypothetical; the technological mediation of human existence; the limits of space and time and the consequences of surpassing them; non-human and non-organic consciousness; radically different forms of human togetherness; and various apocalyptic scenarios. Reading list might include: H.G. Wells, Alexander Bogdanov, Eugene Zamiatin, Ursula K. LeGuin, Philip K. Dick, the Strugatsky Brothers, Octavia Butler, and China Miéville, as well as select films.
This course on the major fiction of Vladimir Nabokov begins with his major Russian novels in English translation, including *The Defense*, *Laughter in the Dark* (*Camera Obscura*), *Invitation to a Beheading*, and *Despair*, and concludes with classic English works, *Speak*, *Memory*, *Lolita*, and *Pnin*. Topics in the course include emigration and cross-cultural translation, literary modernism, metafiction, nostalgia and stories of childhood, as well as the literary representations of tyranny, violence, and abuse. We will pay additional attention to Nabokov’s interest in film and film aesthetics, and we will consider four screen versions of his novels (*Luzhin’s Defense*, *Laughter in the Dark*, *Despair*, and *Lolita*).

A comparative examination of literary, philosophical and theoretical works that deal with music and the phenomenon of the voice. Topics include: the role of the voice in myth; verbal and musical form; musical meaning and expression; reading, hearing and listening; music and psychoanalysis; evanescence and silence; narrative voice and responsibility.

Considers the classical conception of mania as a divine source of prophecy, ecstasy, poetic creation, and erotic desire; and traces how this madness unfolds in ancient tragedy and modern literature, philosophy and psychoanalysis.

A re-examination of "Lyric" as *occasion* as well as *genre*. Central questions to be explored will include: how do the "lyrics" of composed song come alive in performance? For example, how do the two librettists of Puccini’s opera *La Bohème* contribute to the making of a masterpiece in song? Shared readings include *The Lyric Theory Reader: A Critical Anthology*, edited by Virginia Jackson and Yopie Prins. Students are free to
select as their focus of research any particular "lyric" traditions, composed in whatever language. No previous knowledge of literary theory is presumed.

COMPLIT 162 Homer and Beyond: Theory and Comparative Methods in Studying Oral Traditions
CourseID: 148222
Faculty: Gregory Nagy
Next Term Offered: 2020 Fall

Genres, forms, and themes of oral traditions in poetry and prose. Theories of performance and composition. Comparative metrical and formulaic analysis. Students are free to select non-Greek traditions as their focus of research, such as medieval French lays, Indic fables, Gregorian Chant, early Italian opera, Apache female initiation songs, Latin prosimetrum narratives, etc.

COMPLIT 163 Jewish Languages and Literature
CourseID: 125260
Faculty: Marc Shell
Next Term Offered: 2020 Fall

What is a Jewish language? What is Jewish literature? General topics are alphabetization, translation, oral tradition and diaspora. Languages worldwide include Hebrew as well as Judeo-Spanish, -Aramaic, -Arabic, -French, -Greek, -Italian, -Persian, -Spanish, -Malayalam, Yiddish, and other secular Jewish languages. Readings usually include love stories, medical and philosophic texts, and writings on science, travel, and music. Guest scholars visit most weeks. No language requirement.

COMPLIT 167 Prayer and Prayerbook (Tefillah and Siddur)
CourseID: 215117
Faculty:
Next Term Offered:

The institution of organized prayer?Tefillah be-Tzibbur?is one of the most complex phenomena in Judaism because it has served historically not only as a medium for worshipping God but also for expressing communal religious identity. In the first half of this course, we will study the development of prayer from the Bible until the medieval period through reading primary sources--select passages from the Bible, Talmud and midrash, Geonic literature and other rabbinic texts?as well as secondary works for historical and literary background. We will also trace the development of piyyut, Hebrew liturgical poetry, and what it can tell us about the character of Jewish prayer. In the second part of the course, we will study the history of the prayerbook as a physical, material object from the early medieval period into the modern. Special attention will be paid to the great illustrated Ashkenazi and Italian mahzorim (holiday prayerbooks) and siddurim, and to the place of the visual imagination in Jewish religious culture. One
class will also be devoted to the development of the synagogue and sacred space. The course will also include visits to Houghton Library to view original editions and rare facsimiles of manuscripts.

While the class itself will be conducted in English, all primary sources will be read in Hebrew. Students should be able to read unpointed Hebrew texts.

COMPLIT 172 Comparative Literatures of the Indian Ocean
CourseID: 212712
Faculty:
Next Term Offered:

The maritime counterpart to ancient trade routes that brought silk and cannon-fire to Europe, the Indian Ocean was a space re-imagined through successive tides of trade, conquest, and exploration, historically mediating between the diverse cultures of three continents. This course introduces students to the literatures of this cosmopolitan space and to its historic lines of influence and exchange, through a comparative reading of literary texts drawn from its perimeter and from travel accounts both fictional and historical/semi-biographical. Readings will include Indic, Arabic, and Persian classics, Sufi poetry from across Asia and Africa, travel narratives in Portuguese and English, and twentieth century writing and film.

COMPLIT 173 Carmen and the Art of Seduction
CourseID: 205135
Faculty: John T. Hamilton
Next Term Offered: 2021 Spring

The seminar centers on Bizet's Carmen, the opera that shocked 19th-century Europe for its bold expression of seduction and sexuality. Further consideration is given to historical precedents and consequences, from Mozart's Don Giovanni to Strauss's Salomé, including Wagner's Tristan und Isolde and Parsifal as counter-examples of non-seduction. Discussions of literary, historical, and theoretical materials (e.g., Kierkegaard, Nietzsche, Freud, Th. Mann, Bloch) complement musical analyses and rehearsals of selected pieces, with a public performance at the end of the semester.

Open to performers and non-performers.

COMPLIT 174 Realism, Fantasy, and the Grotesque: Hoffmann and Balzac
CourseID: 125539
Faculty: John T. Hamilton
Next Term Offered: 2021 Spring

A close reading of select works by E.T.A. Hoffmann and his reception in the work of Balzac focuses on Realism's indebtedness to the imaginative realms of the fantastic and the grotesque. Topics: music and inspiration; societal decadence and caricature; magic
The course spans over two thousand years of varying interpretations, settings, and appropriations of the Orpheus myth. The power of music and the fatality of passion, the expropriating effects of language and the regenerating promise of poetry, individual uniqueness and the conditions of knowledge, are but a few of the themes addressed and elaborated within the myth's threefold configuration of harmony, descent, and dismemberment. In addition to investigating the rich literary tradition, the course also turns to significant versions in opera, film, and the visual arts. Emphasis will be placed throughout on close reading, with attention to philosophical, aesthetic and theoretical ramifications.

This course takes ideas of the "ghostwriter" and the "ventriloquist" as a lens through which to read postwar Jewish American culture. In the wake of the Holocaust, Jewish American writers and cultural producers began to feel a responsibility to a lost civilization that seemed to haunt their every creative act. Even as they achieved worldwide fame, these artists felt both burdened and inspired by old world ghosts. Often the very success of a given work was attributed to the ways in which it reanimated and revoiced ghosts in order to alternately dazzle and comfort audiences. This course asks: How do strategies of ghostwriting and ventriloquy compensate for trauma and loss? In what ways do such reenactments modify an original text? Through analysis of postwar texts and films in English and Yiddish (in translation), this course studies how specters of the past function both as arbiters of cultural value and as reminders of the discontinuities and traumas of the Jewish American present. Films include Tevya, Fiddler on the Roof, The Diary of Anne Frank, and the TV series Transparent. We will read texts by Sholem Aleichem, Isaac Bashevis Singer, Philip Roth, Cynthia Ozick, Grace Paley, and others.

A close reading of the major fictional, dramatic, and essayistic works of Kleist focuses on
questions of grace, order, and stability in relation to the antithetical forces of falling and failing, chance and inscrutability, destabilization, uncertainty, and self-consciousness. In addition to developing methods for literary analysis and interpretation, the course further explores issues of Kleist's historical context and his varied reception across the centuries.

COMPLIT 194 Literary Criticism: Major Approaches and Methods
CourseID: 203216
Faculty: James Engell
Next Term Offered: 2020 Fall

Significant critical orientations: modernism, classicism, romanticism, the New Criticism, structuralism and post-structuralism, as well as feminism, formalism, and other -isms. Theoretical formulations yet also practical criticism, history of criticism, and critical writings oriented toward psychology, language, and cultural contexts. Aristotle, Horace, Johnson, Coleridge, Schiller, Arnold, Wilde, Eliot, Shklovsky, Freud, Foucault, Barthes, Showalter, Derrida, Sontag, Frye, Cixous, and others.

COMPLIT 204 Public Humanities Workshop
CourseID: 212800
Faculty:
Next Term Offered:

Public humanities are becoming increasingly central for careers both inside and outside of academia. This workshop, which is open to beginning and advanced graduate students, introduces participants to the tools they need to address audiences other than specialists in their own field. These tools range from writing op-eds based on dissertation research to writing general interest books, and also include book reviews, podcasts, social media strategies and more. While we will discuss some historical context, the emphasis is on practice and skills. Our work will be supplemented by visits from editors and literary agents.

COMPLIT 211 Mysticism and Literature
CourseID: 114368
Faculty: Luis Giron Negron
Next Term Offered: 2021 Spring

Examines trends, issues and debates in the comparative study of mystical literature. Close readings of primary works by Jewish, Christian and Muslim authors from the Middle Ages through the 16th century. Premodern authors include Saint John of the Cross, Saint Theresa of Ávila, Mechtild of Magdeburg, Hadewijch, Pseudo-Dionysius, Dante Alighieri, Bernard of Clairvaux, Margery Kempe, Bahya ibn Paquda, Solomon ibn Gabirol, Yehudah Halevi, Moses de León (Sefer ha-Zohar), Maulana Rumi, al-Hallaj, Ibn Farid, Ibn al-'Arabi, and Fariduddin Attar. Topics include poetry and mysticism; allegory,
symbolism and Scripture; body and gender; apophasis vs cataphasis; exemplarity and autobiographism; language and experience. Also examines creative engagement of pre-modern mystical literature in selected works by modern authors (Borges, T.S. Eliot, Rilke), scholars of religion (Bernard McGinn, Moshe Idel, Annemarie Schimmel) and literary / cultural theorists (Michel de Certeau, Michael Sells).

COMPLIT 212 Literature on Trial: Kafka in Paris
CourseID: 212942
Faculty:
Next Term Offered:

The seminar engages in a close study of Kafka's major stories and novels, diaries and correspondence; and how this body of work was received, explicated and interpreted by key figures in post-war France: Maurice Blanchot, Jacques Lacan, Deleuze & Guattari, Jacques Derrida, and others.

COMPLIT 214 The Literature of the Islands
CourseID: 107411
Faculty: Marc Shell
Next Term Offered: 2020 Fall

Islands, both a part of and apart from the main, offer ready-made laboratories for linguistic, biological and political investigation; islandness as such encourages national literature, philosophy, and vacation. Our seminar focuses on fictional islands as well as Canadian ice floes, Hormuz (Persia), Maine islets, and urban Venice. Aristotle, Plato, Darwin, Melville, Hesiod, Homer, Rabelais, More, Shakespeare, and Flaherty (director).

COMPLIT 217 14 Things (A Secret History of Italian Design)
CourseID: 207623
Faculty: Jeffrey Schnapp
Next Term Offered: 2021 Spring

*Fourteen Things* explores intertwinings between design, science, technology, society, art, and culture by means of the "excavation" of fifteen objects from different periods in the history of modern Italian design, from the turn of the 20th century to the present. Combining micro- and macro-perspectives, it approaches design history from a broad aesthetic, historical, and socio-anthropological standpoint. The seminar combines readings from contemporary Thing Theory, material culture studies, and design history, with materials from literature, popular culture, and media. It is built around a chronologically ordered sequence of case studies of exemplary things: artifacts designed for purposes of sitting, drinking, lighting, walking, moving about, cooling down, cooking and cleaning, writing and calculating, or media viewing.

COMPLIT 227 Comparative Modernism
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 228 Comparative Romanticism: Practice and Theory
CourseID: 212716
Faculty: 
Next Term Offered:

Selected texts in three national traditions: Coleridge, Wordsworth, Hazlitt, and Keats in English; Kant, Schiller, and Goethe in German; Emerson, Thoreau, and Whitman in American Literature. Additional writers may include Robert Lowth, the Schlegels, Novalis, Schleiermacher, and Margaret Fuller. Attention to exchange among these literatures. Additional current scholarship and criticism.

COMPLIT 230 The Poetics of Empire: Colonization, Translation, and Literary Rewriting
CourseID: 123859
Faculty: Karen Thornber
Next Term Offered: 2020 Fall

Explores how (post)colonial writers from Asia, Africa, Latin America and the Middle East and writers from (former) imperial powers have reconfigured one another's literatures. Rethinks concepts of world literature and cultural negotiation.

COMPLIT 231 Living the Lives of Others: Reading Beyond the Hermeneutics of Suspicion (Grad Seminar in Gen Ed)
CourseID: 207624
Faculty: Diana Sorensen
Next Term Offered: 2021 Spring

A Graduate Seminar in General Education focused on creating a Gen Ed course that will show that literary reading has the power to transform our understanding of alterity, to experience the lives of others, entering the minds of characters and often transforming our assumptions. The driving question is how to construct a course that would lead undergraduates to enter the civic sphere equipped to read differently, led by a hermeneutics of hope and recognition. We will begin with a critical assessment of the hermeneutics of suspicion, and then consider emerging reading criticism such as surface reading, reparative reading, enchanted reading, materialist reading and
COMPLIT 238 After Orientalism: Writing across Arabic-Islamic Contact Zones
CourseID: 212726
Faculty:  
Next Term Offered: 2020 Fall

How might the transregional presence of scriptural Arabic have impacted the formation of (post)-colonial, national literatures in ways that contrast with vernacular, European counterparts evolving from a Latin imperial or ecumenical context? How did the differential politics of empire impact the trajectories of Arabophone and Arabographic writing across regional and colonial lines, and foreground enduring debates on (post)-colonial forms of cultural literacy? Across a diversity of (post)-colonial contexts, to what extent did the historical coexistence of scriptural Arabic and nominally vernacular languages give rise to creative tensions and literary innovations irreducible to unilateral, European influences or Eurocentric paradigms of progressive vernacularization? To what extent could the shared historical presence of scriptural Arabic across a diversity of former colonial territories give rise to revisionist approaches to late colonial and (post)-colonial cultural histories? Exploring these questions, this course will engage with texts that illuminate the following dynamics across regional differences and former colonial lines: monoglossic and heteroglossic ideologies of language and their comparative implications within historically Arabophone regions; the status of Arabic as a historically inter-ethnic, culturally polycentric, and progressively interconfessional medium; the colonial politicization of nominally "scriptural" and "vernacular" literacies; the politics of orthography; and the vitality of concepts unique to Arabic contact zones ('ammiyya and 'ajamiyya) as the basis of underexamined cultural comparisons across a regional dispersion. In addition to literary texts, primary materials will include colonial era archival documents and journalistic writing, with broader contextual readings drawn from the fields of sociolinguistics and historical scholarship. Materials will be presented or made available in bilingual editions or in English translation.

COMPLIT 242 Germany and the Greeks: Philhellenism from Winckelmann to Heidegger
CourseID: 203231
Faculty:  John T. Hamilton
Next Term Offered: 2020 Fall

Topics include the relation of epic to German national identity; originality; genius and
What is the impact of space, geography, and mapping not only on the study of literature, but also on the writing process itself? By bringing cartography and the spatial turn in dialogue with comparative literature this seminar asks: what can be gained when literary texts are read "cartographically," with an emphasis on the tension between narrative and spatial imaginary? How does the question of border, place, and territory articulate itself in literary texts and emerge as one of literature's principal challenges? How does the spatial turn not only reevaluate modes of visualization and strategies of mapping, but also redirect comparative literature? This seminar does not take maps and keywords such as place, space, and location as fixed categories, but as malleable and ever-changing processes to understand, create, and challenge the world. We will discuss maps alongside texts from Antiquity to the 21st century and focus, among others, on questions such as exile, contested territories, the environment, insularity, underwater optics, poetics, style, utopia, (post-)apocalyptic spaces, and heterotopia. Texts and authors include Homer, Plato, the Bible, Ptolemy, Macrobius, Ibn Khurrad?dhbih, an anonymous 11th-century Egyptian Book of Curiosities, Christopher Columbus, Thomas More, Francis Bacon, Aphra Behn, Kamau Brathwaite, Édouard Glissant, Jamaica Kincaid, Wis?awa Szymborska, Charles Olson, Mia Couto, and Claire Coleman. Visits to Harvard's Houghton and Pusey (Map) Libraries are an intrinsic part of the course.

This course explores the intimate relationship between literature, maps, diagrams, and related visual material in the early modern period. It asks about the emergence of new cartographies, maps, and itineraries in a period of increased interest in world travels, "discoveries," philology, and translation. How does the production of European maps relate to non-European cartographies? How can the "spatial turn" and the visualization of knowledge, key to digital humanities today, help deepen our understanding of early modernity? We will discuss European, Arab, and Chinese maps and texts such as Columbus's Voyages, Aztec poems, Waldseemüller's and Ringmann's Universalis Cosmographia, Fracastoro's Syphilis, Ibn Battuta's Travels, Garcilaso's Royal Commentaries and Florida, Marguerite de Navarre's Heptameron, Montaigne's selected Essays, and Sor Juana's Divino Narcisco.
COMPLIT 251 Literary Criticism and Theory: Antiquity to the Renaissance
CourseID: 125841
Faculty: John T. Hamilton
Next Term Offered: 2020 Fall

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
CourseID: 125848
Faculty: Luis Giron Negron
Next Term Offered: 2020 Fall

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 255 Dysfunctional Family as National Allegory in the Middle Eastern Novel
CourseID: 109673
Faculty: William Granara
Next Term Offered: 2020 Fall

The radical changes following the emergence of the modern nation state in the Middle East have been most graphically illustrated in the novel. This course examines the trope of the family in flux in narrating the destabilization of traditional social structures, shifting loyalties, and conflicting articulations of identity. The course interrogates the F. Jameson and A. Ahmad debates on `thirdworld' and `national allegory' in reading selected novels of the post WWII period to the present, from Turkey, Iran, Israel, and the Arab World. Authors include Naguib Mahfuz, Mohamed Shukri, Hanan Shaykh, Sahar Khalifa, Amos Oz, Elif Shafak, and Mahmoud Dowlatabadi.

COMPLIT 258 Ancient Interpretation of the Bible
CourseID: 160526
Faculty: David Stern
Next Term Offered: 2021 Spring

This is a course about READING; specifically about the different ways in which a single book, the Bible, has been read through the centuries, particularly in the ancient and early medieval periods by Jews and Christians. No book in the history of Western culture has
been read more intensively than the Bible, and the main emphasis of the course will fall on close readings of major ancient Jewish and Christian interpreters of the Bible, with a view to considering their exegetical approaches historically as well as through the lens of contemporary critical and hermeneutical theory. We will also consider how the respective religious and theological beliefs of these interpreters shaped and were shaped by the ways they read Scripture. As a consequence, this will also be a course about the early development of Judaism and Christianity although the focus will always be on the interpretation of the Bible. All readings will be in English translation, and will include Dead Sea Scrolls selections, Philo, Rabbinic Midrash and Medieval Jewish Commentaries, the New Testament, Origen and other early Christian commentators, Augustine, Luther, and as a concluding coda, Spinoza. The course is open to both undergraduates and graduate students; there will be extra sessions for the graduate students.

COMPLIT 259 The Bible as a Book (Graduate Seminar in General Education)
CourseID: 203275
Faculty: David Stern
Next Term Offered: 2020 Fall

This interdisciplinary seminar will focus upon the intersection of two distinct subjects--the Bible, on the one hand, and the history of the book as a material text, on the other--in order to show how the varying physical features that the Bible has taken in Jewish, Christian, and modern secular culture over the last two millennia have shaped the different meanings that the book has held (and continues to hold) for its readers. The seminar will deal with both the content of the course and ways to communicate and teach that content imaginatively and effectively to students.

COMPLIT 260 Literary Translation: A Workshop
CourseID: 214533
Faculty: 
Next Term Offered: 

A graduate workshop in literary translation. Students' work-in-progress on a semester-long translation project will be presented, discussed, and critiqued each week with the aim of publication. Readings on strategies and methodologies will complement participants' work in the seminar's shared enterprise of exploring the pleasures and risks that the translation of literature entails. Working as scholars and practitioners, we will challenge the division between theory and practice in the field of translation studies today. Guest translator-scholars will visit the workshop. Requirements: All source languages are welcome; translations into English. Enrollment limited to twelve (graduate and advanced undergraduates); course application due the first week of the term.
COMPLIT 261 Fragments of a Material History of Literature
CourseID: 120029
Faculty: Jeffrey Schnapp
Next Term Offered: 2020 Fall

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 263 Journey, Exile, and Displacement in Arabic Literature
CourseID: 122408
Faculty: William Granara
Next Term Offered: 2020 Fall

The course examines narratives of journey, exile, and displacement in modern Arabic literature that trespass geographical, political and linguistic boundaries, and create new literary spaces that define and reshape modern Arab identities. Theoretical readings will include Pratt, Said, Rushdie and Kaplan.

COMPLIT 266 Irony
CourseID: 118731
Faculty: Panagiotis Roilos
Next Term Offered: 2020 Fall

Explores major European philosophical and aesthetic discourses on irony as well as literary manipulations of the trope from Greek antiquity to postmodernism.

COMPLIT 278 Hyperreality
CourseID: 216046
Faculty:
Next Term Offered:

The crisis of mimesis and representation in postmodernity—closely connected with social and existential alienation and technological development—often manifests itself in terms of "hyperreality," where any distinction between "the real" and "the simulacrum" is blurred. The boundaries between "reality" and "non-reality" and relevant concepts (e.g. originality, authenticity, mimesis, simulacrum) have been explored and challenged from different but comparable perspectives in philosophy, art, and literature since classical antiquity. This seminar will investigate discourses on, or inspired by "hyperreality" and its epistemological, ontological, and political implications, from antiquity to postmodernity. Authors and thinkers to be discussed include Plato, Descartes, Schopenhauer, Jean

COMPLIT 279 What should or could (scholarly) knowledge look like in the 21st Century? A Knowledge Design seminar  
CourseID: 203049  
Faculty: Jeffrey Schnapp  
Next Term Offered: 2020 Fall

This seminar will be run by the metaLAB (at) Harvard team. It will explore the shapes and forms that experimental scholarship is assuming in an array of arts and humanities disciplines, from media studies to digital humanities to cultural analytics. It will also explore emergent models of knowledge production and publication within and across media.

COMPLIT 281 Rhetoric, Imitation, Translation: Comparative Literature from Antiquity to Early Modernity  
CourseID: 109674  
Faculty:  
Next Term Offered: 2020 Fall

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, Hélisenne de Crenne, Joachim Du Bellay, Gaspara Stampa, Jan Kochanowski.

COMPLIT 283 Language Differences  
CourseID: 108760  
Faculty: Marc Shell  
Next Term Offered: 2020 Fall

Considers language difference both as a literary theme and as a potent cause of war in the political arena. Historical foci include Europe, the Middle East, North America, and Africa. Literary issues include translation, heteroglossia, cinematography, and
multilingualism. Works of literature include Sophocles, Shakespeare, Goethe, and Dove.

COMPLIT 287R Selected Topics in Poetics and Rhetoric: Seminar
CourseID: 122889
Faculty: Gregory Nagy
Next Term Offered: 2020 Fall

Examines literature and drama, as originally composed in a wide variety of languages, by developing comparative approaches. All readings for this course will be in English translations. Special arrangements for those who opt to read in the original languages. Selected texts include Aristotle’s Poetics and Rhetoric, in translation. Undergraduates encouraged to enroll.

COMPLIT 290 Translation, Metaphor, and Exchange
CourseID: 134075
Faculty: Marc Shell
Next Term Offered: 2020 Fall

What difference does language make? This seminar begins with Goethe's Faust, a work that translates the Bible (“In the beginning was the Word”) and teases out the idealist philosophical theorization of translation (Helen of Troy speaking German words in Greek syntax). Seminar participants will then engage collaboratively in comparative readings: the particular language expertise of every one of us will benefit the group as a whole. Thus a study of American immigrant works, for example, will include items written in a host of languages. Likewise, a study of modern poetry and rhythm will include translations into several languages. Our purview involves non-literary work as well as literary: ensuring "adequate" translations of basic Constitutional documents in officially bilingual nation states or international unions, for example, along with providing comprehensible road signage for highways and simultaneous translation for conferences and parliaments. The last meetings of the seminars focus on the relationships of language translation to economic transfer and to literary metaphor and considers the roles of inter-linguistic translation in various arts and media. Visitors to the seminar will include distinguished scholars and writers from across the disciplines.

COMPLIT 293 The Aftermath of Theory
CourseID: 212725
Faculty:
Next Term Offered:

The seminar investigates various tensions and trends in literary and socio-cultural theory in the wake of Critical Theory, from the turmoil of 1968 to the present day. Readings include: Adorno, Habermas, Sloterdijk, Theweleit, Kittler, Agamben, Latour, and others.

COMPLIT 294 Debating World Literature
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
CourseID: 108787
Faculty: John T. Hamilton
Next Term Offered: 2020 Fall

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
CourseID: 108896
Faculty: Panagiotis Roilos
Next Term Offered: 2020 Fall

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).
Introduction to applications of computer science (including web technologies, visualization, and database design) to domains in the arts and humanities. Emphasis on principles of software engineering and best practices, including code reviews, source control, and testing. Languages include JavaScript and SQL. Students work in teams to design and implement solutions to problems proposed by faculty from departments across campus. Offered jointly with Yale University.

This course explores the use of artificial intelligence to tackle difficult social problems, and considers how to address ethical challenges that arise through appropriate design techniques. Drawing on work by computer scientists, philosophers, and social scientists, we will analyze several real-world case studies featuring the application of AI methods to problems in public health, conservation and public safety, including HIV prevention, tuberculosis prevention, predictive policing, and wildlife conservation. The course will also feature guest lectures from experts in social work, anthropology, criminology, and public health.

Cryptography is as old as human communication itself, but has undergone a revolution in the last few decades. It is now about much more than "secret writing" and includes seemingly paradoxical notions such as communicating securely without a shared secret, and computing on encrypted data. In this challenging but rewarding course we will start from the basics of private and public key cryptography and go all the way up to advanced notions such as fully homomorphic encryption and software obfuscation. This is a proof-based course that will be best appreciated by mathematically mature students.
Networks of social relationships, economic interdependencies, and digital interactions are critical in shaping our lives. This course introduces models and algorithms that help us understand networks. Fundamental concepts from applied mathematics, microeconomics, and computer science will be presented through the lens of network science, in order to equip students to usefully analyze the "big data" generated by online networks. Applications discussed include the viral spread of ideas, maximizing influence, and the contagion of economic downturns. Concepts and tools covered include game theory, graph theory, data mining, and machine learning.

COMPSCI 136 Economics and Computation
CourseID: 128164
Faculty:
Next Term Offered: 2022 Fall

The interplay between economic thinking and computational thinking as it relates to electronic commerce, social networks, collective intelligence and networked systems. Topics covered include: game theory, peer production, reputation and recommender systems, prediction markets, crowd sourcing, network influence and dynamics, auctions and mechanisms, privacy and security, matching and allocation problems, computational social choice and behavioral game theory. Emphasis will be given to core methodologies, with students engaged in theoretical, computational and empirical exercises.

COMPSCI 144R Networks Design Projects
CourseID: 112630
Faculty:
Next Term Offered: 2023 Spring

Deep neural networks (DNNs) are becoming a popular tool in data-driven applications. One of the next frontiers is distributed DNNs over computer networks for improved scaling (e.g., for scaling training as in federated learning) and parallel DNNs over processor arrays for low-latency inference in real-time applications. To this end, there is a need to understand issues such as communication, computation, and accuracy trade-offs. This research-oriented course will address this relatively new, yet rapidly advancing, topic. We will survey the main approaches, with a unique focus on the interplay between deep learning models, parallel and distributed computing architectures, and the hardware structures of end devices. The class will be organized into the following eight modules:

Motivations for parallel and distributed deep learning; Parallelism available in deep neural networks; Review of background concepts in deep learning, computer networks, computer architectures, and FPGA/ASIC hardware accelerators; Deep dive case studies
in parallel and distributed training and inference (e.g., distributed federated learning and quantized low-latency and energy-efficient inference); Full-stack design optimization for inference in which deep learning models, computing architectures, and hardware circuits are simultaneously optimized; Collaborative deep learning inference between the cloud, edge, and client machines; Privacy and security protocols, and the novel use of blockchains in support of parallel and distributed deep learning; and Emerging technologies in deep learning such as automated neural architecture search and neuromorphic computing. Students working in 2- or 3-person teams will do a substantial project in these and other related areas.

COMPSCI 148 Design of VLSI Circuits and Systems
CourseID: 110990
Faculty: 
Next Term Offered: 2023 Spring

Presentation of concepts and techniques for the design and fabrication of VLSI systems and digital MOS integrated circuits. Topics include: basic semiconductor theory; MOS transistors and digital MOS circuits design; synchronous machines, clocking, and timing issues; high-level description and modeling of VLSI systems; synthesis and place and route design flows; and testing of VLSI circuits and systems. Various CAD tools for design, simulation, and verification are extensively used.

COMPSCI 153 Compilers
CourseID: 131493
Faculty: 
Next Term Offered: 2021 Fall

Implementation of efficient interpreters and compilers for programming languages. Associated algorithms and pragmatic issues. Emphasizes practical applications including those outside of programming languages proper. Also shows relationships to programming-language theory and design. Participants build a working compiler including lexical analysis, parsing, type checking, code generation, and register allocation. Exposure to run-time issues and optimization.

COMPSCI 165 Data Systems
CourseID: 119249
Faculty: 
Next Term Offered: 2023 Fall

We are in the big data era and data systems sit in the critical path of everything we do. We are going through major transformations in businesses, sciences, as well as everyday life - collecting and analyzing data changes everything and data systems provide the means to store and analyze a massive amount of data. This course is a comprehensive introduction to modern data systems. The primary focus of the course is
on the modern trends that are shaping the data management industry right now: column-
store and hybrid systems, shared nothing architectures, cache conscious algorithms,
hardware/software co-design, main-memory systems, adaptive indexing, stream
processing, scientific data management, and key-value stores. We also study the history
of data systems, traditional and seminal concepts and ideas such as the relational
model, row-store database systems, optimization, indexing, concurrency control,
recovery and SQL. In this way, we discuss both how and why data systems evolved over
the years, as well as how these concepts apply today and how data systems might
evolve in the future. We focus on understanding concepts and trends rather than specific
techniques that will soon be outdated - as such the class relies largely on recent
research material and on a semi-flipped class model with a lot of hands-on interaction in
each class.

COMPSCI 183 Foundations of Machine Learning
CourseID: 215691
Faculty: 
Next Term Offered: 2022 Spring

The course provides an extensive account of the fundamental ideas underlying machine
learning and the basic algorithms used in practice. The course first formalizes basic
concepts used to establish the theory and language of machine learning. These
concepts include PAC learnability, sample complexity, and the VC dimension. The
course then covers the concepts of convexity, regularization, and stability as well as
important algorithmic paradigms including stochastic gradient descent, boosting, support

COMPSCI 189 Autonomous Robot Systems
CourseID: 127551
Faculty: 
Next Term Offered: 2022 Spring

Building autonomous robotic systems requires understanding how to make robots that
observe, reason, and act. Each component uses many engineering principles: how to
fuse, multiple, noisy sensors; how to balance short-term versus long-term goals; how to
control one's actions and how to coordinate with others. This year theme will be "Robots
Roam the Halls", where we will focus on kinect-based robots that move in the SEAS
buildings, to do applications like navigating, map building, and interacting with people.
The class format will have a mixed lecture and lab format, and have a final project
component.

COMPSCI 208 Applied Privacy for Data Science
CourseID: 211395
Faculty: 
Next Term Offered: 2022 Spring
The risks to privacy when making human subjects data available for research and how to protect against these risks using the formal framework of differential privacy. Methods for attacking statistical data releases, the mathematics of and software implementations of differential privacy, deployed solutions in industry and government. Assignments will include implementation and experimentation on data science tasks.

COMPSCI 223 Probabilistic Analysis and Algorithms
CourseID: 114806
Faculty:
Next Term Offered: 2022 Fall

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
CourseID: 156211
Faculty:
Next Term Offered: 2024 Spring

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

COMPSCI 225 Pseudorandomness
CourseID: 115692
Faculty:
Next Term Offered: 2023 Fall

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 226 Sketching Algorithms for Big Data
CourseID: 205311
Faculty:
Next Term Offered: 2020 Fall

Big data is data so large that it does not fit in the main memory of a single machine. The need to process big data by space-efficient algorithms arises in Internet search, machine learning, network traffic monitoring, scientific computing, signal processing, and other areas. This course will cover mathematically rigorous models for developing such algorithms, as well as some provable limitations of algorithms operating in those models.
Some topics covered include streaming algorithms, dimensionality reduction and sketching, randomized algorithms for numerical linear algebra, sparse recovery and the sparse Fourier transform. The course will also cover some applications of these methods.

COMPSCI 226R Topics in Theory for Society: Fairness and Validity
CourseID: 214483
Faculty:
Next Term Offered: 2024 Spring

Topics from the literature on theoretical computer science addressing technical problems of societal concern. Focus for 2019-2020: Algorithmic Fairness and Statistical Validity in Adaptive (Exploratory) Data Analysis.

COMPSCI 227 Cryptography
CourseID: 213331
Faculty:
Next Term Offered:

Cryptography is as old as human communication itself, but has undergone a revolution in the last few decades. It is now about much more than "secret writing" and includes seemingly paradoxical notions such as communicating securely without a shared secret, and computing on encrypted data. In this challenging but rewarding course we will start from the basics of private and public key cryptography and go all the way up to advanced notions such as fully homomorphic encryption and software obfuscation. This is a proof-based course that will be best appreciated by mathematically mature students.

COMPSCI 228 Computational Learning Theory
CourseID: 113296
Faculty:
Next Term Offered: 2022 Spring

Possibilities of and limitations to performing learning by a computational process. Computationally feasible generalization and its limits. Topics include computational models of learning, polynomial time learnability, learning from examples and from queries to oracles. Applications to Boolean functions, languages and geometric functions. Darwinian evolution as learning.

COMPSCI 243 Advanced Computer Networks
CourseID: 212686
Faculty:
Next Term Offered: 2021 Fall
This is a graduate-level course on computer networks. It provides a comprehensive overview of advanced topics in network protocols and networked systems. The course will cover both classic papers on computer networks and recent research results. It will examine a wide range of topics including routing, congestion control, network architectures, network management, data center networks, software-defined networking, and programmable networks, with an emphasis on core networking concepts and principles and their usage in practice. The course will include lectures, in-class presentations, paper discussions, and a research project.

More information can be found at http://minlanyu.seas.harvard.edu/teach/cs243-fall19/.

COMPSCI 244R Networks Design Projects
CourseID: 112631
Faculty:
Next Term Offered: 2023 Spring

The contents and course requirements are similar to those of Computer Science 144r, with the exception that students enrolled in Computer Science 244r are expected to do substantial system implementation and perform graduate-level work.

Deep neural networks (DNNs) are becoming a popular tool in data-driven applications. One of the next frontiers is distributed DNNs over computer networks for improved scaling (e.g., for scaling training as in federated learning) and parallel DNNs over processor arrays for low-latency inference in real-time applications. To this end, there is a need to understand issues such as communication, computation, and accuracy trade-offs. This research-oriented course will address this relatively new, yet rapidly advancing, topic. We will survey the main approaches, with a unique focus on the interplay between deep learning models, parallel and distributed computing architectures, and the hardware structures of end devices. The class will be organized into the following eight modules:

Motivations for parallel and distributed deep learning; Parallelism available in deep neural networks; Review of background concepts in deep learning, computer networks, computer architectures, and FPGA/ASIC hardware accelerators; Deep dive case studies in parallel and distributed training and inference (e.g., distributed federated learning and quantized low-latency and energy-efficient inference); Full-stack design optimization for inference in which deep learning models, computing architectures, and hardware circuits are simultaneously optimized; Collaborative deep learning inference between the cloud, edge, and client machines; Privacy and security protocols, and the novel use of blockchains in support of parallel and distributed deep learning; and Emerging technologies in deep learning such as automated neural architecture search and neuromorphic computing. Students working in 2- or 3-person teams will do a substantial project in these and other related areas.
COMPSCI 245 Networking at Scale  
CourseID: 208351  
Faculty:  
Next Term Offered: 

The contents and course requirements are similar to those of Computer Science 145, with the exception that students enrolled in Computer Science 245 are expected to do substantial system implementation and perform graduate-level work. Clouds have become critical infrastructures for many applications in business and society (e.g., social media, public health, and entertainment). In this course, we will take a look inside the cloud infrastructure and learn critical technology trends and challenges in the networking and computing layers. We will discuss the design choices of performance, scalability, manageability, and cost in various cloud companies such as Amazon, Google, Microsoft, and Facebook. This course includes lectures and system programming projects.

COMPSCI 247R Advanced Topics in Computer Architecture  
CourseID: 128149  
Faculty:  
Next Term Offered: 2023 Fall  

Seminar course exploring recent research in computer architecture. Topics vary from year to year and will include subjects such as multi-core architectures, energy-efficient computing, reliable computing, and the interactions of these issues with system software. Students read and present research papers, undertake a research project.

COMPSCI 248 Advanced Design of VLSI Circuits and Systems  
CourseID: 121984  
Faculty:  
Next Term Offered: 2023 Spring  

The contents and course requirements are similar to those of Computer Science 148, with the exception that students enrolled in Computer Science 248 are expected to do a substantial design project and paper discussions on advanced topics.

COMPSCI 250 Software Foundations  
CourseID: 156204  
Faculty:  
Next Term Offered: 2023 Fall  

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
CourseID: 110276
Faculty:
Next Term Offered: 2022 Spring

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 265 Big Data Systems
CourseID: 113660
Faculty:
Next Term Offered: 2024 Spring

Big data is everywhere. A fundamental goal across numerous modern businesses and sciences is to be able to utilize as many machines as possible, to consume as much information as possible and as fast as possible. The big challenge is how to turn data into useful knowledge. This is a moving target as both the underlying hardware and our ability to collect data evolve. In this class, we discuss how to design data systems, data structures, and algorithms for key data-driven areas, including relational systems, distributed systems, graph systems, noSQL, newSQL, machine learning, and neural networks. We see how they all rely on the same set of very basic concepts and we learn how to synthesize efficient solutions for any problem across these areas using those basic concepts.

COMPSCI 277 Geometric Modeling in Computer Graphics
CourseID: 116855
Faculty:
Next Term Offered: 2024 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 278 Rendering and Image Processing in Computer Graphics
CourseID: 116856
Faculty:
Next Term Offered: 2024 Spring
Advanced course in computer graphics focusing on image rendering and processing. Topics include: light transport, efficient rendering, image based rendering, texture processing, interactive image processing.

COMPSCI 280R Curricular Design for Computer Science: Computational Linguistics and Natural-language Processing
CourseID: 109283
Faculty:
Next Term Offered: 2023 Fall

This graduate seminar focuses on the design of a curriculum and pedagogical infrastructure for a new computer science course. This term, the target course will be an undergraduate course in computational linguistics, the study of human language using the tools and techniques of computer science, and the technological applications thereof. The class will investigate appropriate subject matter for the target course, canvas existing and novel pedagogical methods for teaching the subject, and construct a curriculum and course materials and infrastructure for a new course on the subject, to be taught in the fall of 2020.

COMPSCI 281 Advanced Machine Learning
CourseID: 107677
Faculty:
Next Term Offered: 2021 Fall

Advanced statistical machine learning and probabilistic data analysis. Covers discrete and continuous probabilistic modeling and computational inference. Topics include: Bayesian modeling, probabilistic graphical models, latent variables and unsupervised learning, deep learning, time series models, variational inference, and sampling. Requires a final project.

COMPSCI 282R Topics in Machine Learning: Batch Reinforcement Learning
CourseID: 156936
Faculty:
Next Term Offered: 2022 Fall

This course will take a deep dive into batch reinforcement learning, with a focus on healthcare applications. Sequential decision making is at the core of many healthcare problems: a clinician observes a patient, determines a treatment, and based on the response and the patient's previous history, determines what to try next. Reinforcement learning is a formal framework for thinking about such problems. Batch reinforcement learning aims to extract as much as possible from previously-observed trajectories: given a large batch of previous clinician-patient interactions, what inferences can we
make about good courses of action? What inferences are not possible?

We will first review the fundamentals through lectures, readings, and coding assignments; they will also engage in a semester-long project applying and extending these ideas to problems related to healthcare (including the opportunity to work with clinical decision-making in intensive care units).

COMPSCI 283 Advanced Computer Vision  
CourseID: 113944  
Faculty:  
Next Term Offered: 2021 Fall

Vision as an ill-posed inverse problem: image formation, two-dimensional signal processing; feature analysis; image segmentation; color, texture, and shading; multiple-view geometry; object and scene recognition; and applications.

COMPSCI 289 Biologically-inspired Multi-agent Systems  
CourseID: 120238  
Faculty:  
Next Term Offered:

Surveys biologically-inspired approaches to designing distributed systems. Focus is on biological models, algorithms, and programming paradigms for self-organization. Topics vary year to year, and usually include: (1) swarm intelligence: social insects and animal groups, with applications to networking and robotics, (2) cellular computing: including cellular automata/amorphous computing, and applications like self-assembling robots and programmable materials, (3) evolutionary computation and its application to optimization and design.
Earth and Planetary Sciences

E-PSCI 120 Introduction to Planetary Sciences
CourseID: 205193
Faculty: Roger Fu
Next Term Offered: 2022 Spring

An overview of the key physical and chemical processes that occur on planetary bodies of the solar system and a survey of current topics of research.

E-PSCI 122 Designing Satellite Missions: Research Methods through the Lens of Earth Observing Systems
CourseID: 215715
Faculty: 
Next Term Offered: 2022 Spring

Satellites provide a vast and powerful suite of global observations of Earth system processes. In this course, students will learn research methods and work with satellite data, including those targeted at: land use, ocean biochemistry, climate change, and air pollution. We will emphasize skills for designing and proposing projects, such as: project planning, reading scientific papers, writing research proposals, and exploratory data analysis. This course will provide the framework and understanding for the students to design future missions to address environmental, scientific, and societal challenges. By the end of the course, students will have learned to work with big data both to address existing scientific questions and to pose new ones.

E-PSCI 130 Biogeochemistry of Carbon Dioxide and Methane
CourseID: 205244
Faculty: Steven Wofsy
Next Term Offered: 2022 Spring

A comprehensive study of the major carbon-containing gases in the atmosphere (CO2 and CH4), emphasizing biogeochemical processes in the oceans, land and atmosphere that regulate their global abundances, plus the human-controlled processes and multiple feedbacks that perturb them. Roles in energy balance, air chemistry and pollution, and stratospheric chemistry will be studied. The course emphasizes active learning, including hands on data analysis of global, regional, and ecosystem observations and creation of models for understanding the cycles and their responses to a changing environment. Students develop research projects throughout the course, and present them publicly in lieu of a final exam.

E-PSCI 131 Introduction to Physical Oceanography and Climate
CourseID: 111361  
Faculty: Eli Tziperman  
Next Term Offered: 2022 Spring

Observations and fundamentals of ocean dynamics, from the role of the oceans in global climate and climate change to beach waves. Topics include the greenhouse effect, oceans and global warming; El Nino events in the equatorial Pacific Ocean; currents: the wind driven ocean circulation and the Gulf stream; coastal upwelling and fisheries; temperature, salinity, the overturning circulation and its effect on global climate stability and variability; wave motions: surface ocean waves, internal waves, tsunamis and tides; ocean observations by ships, satellites, moorings, floats and more.

A field trip to the Woods Hole Oceanographic Institution on Cape Cod will be held during the course, which will be an opportunity to learn about sea-going oceanography.

Software for scientific computation and graphics will be introduced (students may choose either Matlab or python), which will be used for some homework assignments.

E-PSCI 134 Climate Change Debates: The Reading Course  
CourseID: 126141  
Faculty: Eli Tziperman  
Next Term Offered: 2022 Spring

The atmospheric carbon dioxide concentration is now the highest it has been in at least 800,000 years, raising concerns regarding possible future climate changes. This reading course will survey the science of global change from the perspective of scientific debates within the climate community. Specifically, the course will involve guided reading and discussion of papers that present contentious view points on the science of global change, with the goal of students learning how to scientifically evaluate such points of view. Students are given weekly writing assignments and need to prepare presentations and lead some of the weekly discussions.

E-PSCI 136 Climate and Climate Engineering  
CourseID: 216214  
Faculty:  
Next Term Offered: 2021 Fall

An introduction to the physics that determine our planet's climate motivated by concerns about human-driven climate change. From highly-simplified models of radiation and convection in a column to state-of-the art models of the general circulation, the course provides a hands-on introduction to modeling tools as a basis for understanding predictions of climate change and assessing their uncertainty. Solar geoengineering, the possibility of deliberate large-scale intervention in the climate, is covered as a potentially important new application of atmospheric science and as a tool to motivate analysis of aerosol radiative forcing, feedbacks, and uncertainty.
Recommended Prep: One freshman-level math or applied math course, one freshman-level science course, and physics at either the freshman or high-school level; or, permission of instructor.

E-PSCI 138 Mysteries of Climate Dynamics
CourseID: 204007
Faculty: Brian Farrell
Next Term Offered: 2022 Fall

We will study the evidence in the climate record for dramatic changes in the climate system and delve into how these challenge our understanding of climate dynamics. Case studies will include the dim early sun paradox, the Snowball Earth, Equable Climates, Glacial/Interglacial and Stadial/Interstadial transitions and ENSO.

E-PSCI 141 Isotope and Trace Element Geochemistry and Geochronology
CourseID: 122074
Faculty: Stein Jacobsen
Next Term Offered: 2022 Spring


E-PSCI 142 Mineralogy
CourseID: 205567
Faculty: Rebecca Fischer
Next Term Offered: 2023 Spring

This course provides a comprehensive foundation of mineralogy for students of Earth and planetary sciences, materials science, or related fields. Topics include: bonding, symmetry, crystallography, high pressure mineralogy, and the bonding, structures, and significance of a variety of mineral types. Weekly lab sections will cover crystal structures, symmetry, and the identification of a variety of minerals in hand samples.

E-PSCI 145 Introduction to Igneous Petrology and Petrogenesis
CourseID: 121458
Faculty: Charles Langmuir
Next Term Offered: 2022 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
CourseID: 108000
Faculty: Charles Langmuir
Next Term Offered: 2021 Fall

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 161 Applied Environmental Toxicology
CourseID: 216018
Faculty: Elsie Sunderland
Next Term Offered: 2022 Spring

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.

E-PSCI 165 Introduction to Seismology
CourseID: 110819
Faculty: Miaki Ishii
Next Term Offered: 2022 Spring
Introduction to seismology with a focus on conceptual understanding of seismic phenomena. Emphasis will be on earthquakes, e.g., detection, mechanism, characteristics, statistics, hazard, and relationship to dynamics. Broader topics such as the types of seismological data and inferences of the Earth's internal structure also will be covered.

E-PSCI 166 State-of-the-art Instrumentation in Environmental Sciences
CourseID: 216017
Faculty: Frank Keutsch
Next Term Offered: 2021 Fall

This course will showcase how novel technologies have allowed fascinating new insights into key aspects of our environment that are of high societal importance. Students will gain both an understanding of topics such as climate change and air pollution as well as detailed knowledge of the design and underlying principles of environmental instrumentation, especially via the hands-on laboratory sessions.

The development of novel instrumentation, driven by technological advances, is transforming observations and revolutionizing the environmental sciences. For example, they introduce new observables and extend the spatial and temporal coverage and resolution of (Earth) observations. This course will highlight how state-of-the-art instrument design has enabled these fascinating advances by focusing on the engineering as well as physics and chemistry principles that are central to this success. A central component of the course consists of laboratory sessions that provide hands-on experience on important aspects of instrumentation, ranging from data acquisition, instrument control software, basic electronic filtering all the way to learning design concepts and operation of spectroscopic, mass-spectrometric and separations instrumentation. There will also be a tour of some of the laboratories using state-of-the-art environmental instrumentation at Harvard. The course and especially the laboratory experiments contain aspects from various engineering disciplines including environmental, electronic and mechanical engineering.

E-PSCI 171 Structural Geology and Tectonics
CourseID: 112745
Faculty: John Shaw
Next Term Offered: 2022 Spring

An introduction to the deformation of Earth materials, including the processes of mountain building and plate tectonics, faulting and earthquakes, folding, and ductile deformation. Structures are examined using geologic maps, balanced cross sections, seismic reflection data, satellite imagery, microscopic analysis, analog experiments, and numerical methods. Labs emphasize the applications of structural geology in the energy and environmental industries, and for assessing earthquake hazards.
E-PSCI 187 Biogeochemistry  
CourseID: 117399  
Faculty: Ann Pearson  
Next Term Offered: 2021 Fall  

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  
CourseID: 126669  
Faculty: David Johnston  
Next Term Offered: 2022 Spring  

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 203 Earthquakes and Faulting  
CourseID: 121615  
Faculty: Brendan Meade  
Next Term Offered: 2022 Spring  


E-PSCI 206 Solid Earth Geochemistry and Cosmochemistry: A Primer  
CourseID: 156399  
Faculty: Stein Jacobsen  
Next Term Offered: 2021 Fall  

The course emphasizes the principles of geochemistry and cosmochemistry and their application to important problems in Earth and Planetary Sciences. Problems to be addressed include planet formation and differentiation and the evolution of planetary mantles and crusts. Topics include: the Earth's composition; laboratory studies of rocks and minerals including laboratory exercises in high precision mass spectrometry; isotope and trace element geochemistry; application of chemical thermodynamics to problems in earth and planetary sciences.
E-PSCI 207 Geochemical Oceanography
CourseID: 112198
Faculty: Daniel Schrag
Next Term Offered: 2022 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 228 Topics in Hydrometeorology and Hydroclimatology: Causes and consequences of drought
CourseID: 211357
Faculty: Kaighin McColl
Next Term Offered: 2022 Spring

This seminar course will focus on recent advances in understanding hydrometeorological and hydroclimatological processes, with implications for weather forecasting, climate modelling, agriculture, human health and water resources management. Students will read and present journal articles on relevant topics, and will rotate responsibility for leading discussions. Specific topics will vary each year offered.

E-PSCI 232 Dynamic Meteorology
CourseID: 115633
Faculty: Brian Farrell
Next Term Offered: 2022 Spring

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 234 Topics in Generalized Stability Theory
CourseID: 109302
Faculty: Brian Farrell
Next Term Offered: 2022 Fall

An introduction to the ideas and approaches to dynamics of generalized stability theory. Topics include autonomous and non-autonomous operator stability, stochastic turbulence models and linear inverse models. Students will learn the concepts behind non-normal thinking and how to apply these ideas in geophysical fluid dynamics and climate problems.

E-PSCI 237 Planetary Radiation and Climate
CourseID: 205144
Faculty: Robin Wordsworth
Atmospheric radiative transfer is at the heart of understanding the climate of Earth and other planets. This course covers basic stellar and planetary physics, quantum spectroscopy, molecular and aerosol scattering, satellite retrieval theory, cloud, CO2 and H2O climate feedbacks, and extreme climate phenomena such as the runaway greenhouse, Nuclear Winter and Titan’s methane cycle. As a final course outcome, you will learn to construct a line-by-line radiative-convective climate model from first principles.

E-PSCI 239 The Consequences of Energy Systems
CourseID: 126403
Faculty: Daniel Schrag
Next Term Offered: 2021 Fall

This course provides an introduction to the physical and chemical impacts of energy choices on human society and natural ecosystems. Topics will include the carbon cycle, climate, air and water pollution, impacts of energy systems on health, land use consequences of energy technologies, and nuclear waste and proliferation.

E-PSCI 240 Isotope and Trace Element Geochemistry and Geochronology
CourseID: 111063
Faculty: Stein Jacobsen
Next Term Offered: 2022 Spring


E-PSCI 242 Low-Temperature Geochemistry and Biogeochemical Cycles
CourseID: 145148
Faculty: Daniel Schrag
Next Term Offered: 2022 Spring

This course provides an introduction to low temperature geochemistry and biogeochemical cycles for graduate students. In addition to attending the lectures, students are required to write a term paper on a topic chosen in consultation with the instructor, and to prepare a series of presentations done in class.

E-PSCI 245 Petrological Approaches to Understanding the Earth's System
CourseID: 125469
Faculty: Charles Langmuir  
Next Term Offered: 2022 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  
CourseID: 110509  
Faculty: Charles Langmuir  
Next Term Offered: 2021 Fall

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 258A Planetary Dynamics: Gravitational Fields  
CourseID: 215880  
Faculty: Jeremy Bloxham  
Next Term Offered: 2023 Spring

The giant planets account for over 99% of the mass of our Solar System, excluding the Sun. First, we consider what we can learn about these planets from Earth-based observations, such as their orbits, mean radius and shape. How do such observations constrain their density, and hence composition and formation? Additionally, Earth-based observations reveal atmospheric zonal flows and the presence of magnetic fields, which provide additional insight. Second, we consider the role of observations from spacecraft, which provide spatial detail of the planets' gravitational and magnetic fields. Finally, we consider what additional observations are needed to more completely understand these planets.

E-PSCI 259 Dimensional Analysis and Scaling  
CourseID: 207638  
Faculty: Miaki Ishii  
Next Term Offered: 2022 Spring

Dimensional analysis and scaling relations have wide applications in science and engineering and provide a simple, quantitative framework for understanding complex physical processes and interpreting results obtained by numerical calculations. It is often used to reduce a large number of independent parameters
to a smaller number of dimensionless groups, providing opportunities ranging from the ability to learn about jet airplanes from models the size of children's toys, to estimating the maximum height of trees using simple assumptions. This course provides an introductory survey of the topic and a practical tutorial of its application to understanding physical processes. Hands-on exercises and projects will prepare these topics to be implemented in the understanding of physical systems and advancement of research endeavors.

E-PSCI 261 Sea Level Change
CourseID: 126477
Faculty: Jerry Mitrovica
Next Term Offered: 2022 Spring

The physical processes responsible for sea level changes over time scales extending from hours to hundreds of millions of years. Long-term sea-level trends: geological observations, physical mechanisms and eustasy, dynamic topography. Sea-level change on an ice age Earth (glacial isostatic adjustment, GIA): observations, viscoelastic loading, mantle viscosity, the Last Glacial Maximum (LGM), interglacial sea-level change, ongoing GIA. Ocean tides: equilibrium and non-equilibrium effects, tidal dissipation. Modern global sea level change: tide gauge and geodetic observations, ice melting and thermal expansion, closing the sea-level budget, sea-level fingerprinting.

E-PSCI 263 Reading in Global Seismology
CourseID: 205460
Faculty: Miaki Ishii
Next Term Offered: 2021 Fall

This seminar will meet to read materials (including textbooks and journal articles) that are relevant to global seismology but may not be covered in a typical seismology class.

E-PSCI 266 Computational Tools in Seismology
CourseID: 109414
Faculty: Miaki Ishii
Next Term Offered: 2022 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 281 Great Papers in Earth Sciences
CourseID: 111685
Faculty: Peter Huybers
Next Term Offered: 2022 Spring
A survey and discussion of groundbreaking papers from across the Earth sciences. Students will read and discuss a classic paper per week and will have an opportunity to practice and improve their presentation skills.

E-PSCI 287 Biogeochemistry
CourseID: 119062
Faculty: Ann Pearson
Next Term Offered: 2021 Fall

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.
Economics

ECON  50 Using Big Data to Solve Economic and Social Problems
CourseID: 208364
Faculty:
Next Term Offered:

This course will show how "big data" can be used to understand and address some of the most important social and economic problems of our time. The course will give students an introduction to frontier research and policy applications in economics and social science in a non-technical manner that does not require prior coursework in Economics or Statistics, making it suitable both for students exploring Economics for the first time and more advanced students. Topics include equality of opportunity, education, innovation and entrepreneurship, health care, climate change, and crime. In the context of these topics, the course will also provide an introduction to basic methods in data science, including regression, causal inference, and machine learning. The course will include discussions with leading practitioners who use big data in real-world applications.

ECON  980BB Behavioral Economics
CourseID: 156369
Faculty:
Next Term Offered: 2021 Fall

The seminar will focus on theoretical and experimental issues in behavioral economics. We will study the relationships between the mathematical models of individual behavior (both utility maximization and psychologically motivated models) and the kinds of behavior we can observe in the lab. We will design experiments to test various theories and also study the types of behavior for which we don't have good models yet and try to understand what a good model would look like. This is a junior tutorial.

ECON  980CC Readings on Market Imperfections and Implications for Government Intervention
CourseID: 156370
Faculty:
Next Term Offered: 2021 Fall

This course focuses on rationales for and methods of government interventions in private markets. We cover various rationales, such as environmental externalities, fiscal externalities, and asymmetric information. And, we focus on various methods of intervention, such as taxes, regulation, direct government provision, mandates. We motivate our discussions using a combination of classic economics papers and more recent work focused on topical issues such as health insurance regulation and climate
change. This is a junior tutorial.

ECON 980DD Globalization and Inequality (Junior Tutorial)
CourseID: 203556
Faculty:
Next Term Offered: 2021 Fall

This course will overview recent trends in the distribution of income within and across countries and will discuss economic research aimed at understanding the role of globalization (trade integration, multinational activity, etc) in shaping these trends. The course will focus on analytical and statistical methods and therefore requires knowledge of calculus and econometrics.

ECON 980GG Inequality, Leverage, and Crises
CourseID: 212647
Faculty:
Next Term Offered: 2022 Spring

This course provides students with a unique perspective connecting three global macroeconomic phenomena: the rise in income and wealth inequality, the surge in household leverage, and credit boom-bust cycles. We will attempt to answer questions such as: What is behind the recent increases in income and wealth inequality? Does income inequality have a role to play in explaining credit booms? How are credit booms linked to global capital flows? What happens if credit booms go bust, and which credit booms end worse than others? Which policies can be used to prevent the next crisis? Should monetary policy lean against a credit boom?

The course is entirely based on current research and familiarizes students with the ideas on these topics that are shaping current debates among macroeconomists and finance economists in academia, policymaking and industry. Along the way, the course will expose students to important sources for macroeconomic data and the necessary tools to analyze it, such as regression analysis in cross-sectional and panel data in Stata. The ultimate goal of the class is to endow students with the ability to critically digest and conduct research on current topics in global macroeconomics and finance.

ECON 980JJ Political Economy Junior Seminar
CourseID: 219743
Faculty:
Next Term Offered:

ECON 980P International Trade Policy
CourseID: 110067
Faculty:
Next Term Offered: 2020 Fall
Provides a discussion of the economic impacts of international trade policies and the political economy of trade policy formation. The course will focus on analytical methods and therefore requires knowledge of calculus. This is a Junior Tutorial.

ECON 985EB Research in Behavioral Economics, Inequality, Culture, and History
CourseID: 214568
Faculty:
Next Term Offered:
Workshop for seniors writing theses. Especially for topics in behavioral economics, inequality, culture, and history, but open to all fields. Emphasis on choice of research topics, methodology, and data sources. Part one of a two-part series; students must complete both terms of this course (parts A and B) within the same academic year in order to receive credit.

ECON 985LA Research in Applied Microeconomics, Development, and Health Economics
CourseID: 109235
Faculty:
Next Term Offered: 2020 Fall
Workshop for seniors writing theses. Especially for topics in development or health economics, but open to all fields. Emphasis on choice of research topics, methodology, and data sources. Part one of a two-part series; students must complete both terms of this course (parts A and B) within the same academic year in order to receive credit.

ECON 985LB Research in Applied Microeconomics, Development, and Health Economics
CourseID: 159910
Faculty:
Next Term Offered: 2021 Spring
Workshop for seniors writing theses. Especially for topics in applied microeconomics, development, or health economics, but open to all fields. Emphasis on choice of research topics, methodology, and data sources. Part two of a two-part series; students must complete both terms of this course (parts A and B) within the same academic year in order to receive credit.

ECON 985MA Research in International Trade, Education, and Public Economics
CourseID: 109236
Faculty:
Next Term Offered: 2020 Fall

Workshop for seniors writing theses. Especially for topics in international trade, education, or public economics, but open to all fields. Emphasis on choice of research topics, methodology, and data sources. Part one of a two part series.

ECON 985RA Research in Public Economics, Health, and Education
CourseID: 160584
Faculty:
Next Term Offered: 2020 Fall

Workshop for seniors writing theses. Especially for work in public economics, health, or education, but open to all fields. Emphasis on choice of research topics, methodology, and data sources. Part one of a two-part series; students must complete both terms of this course (parts A and B) within the same academic year in order to receive credit.

ECON 1000 Growth, Technology, Inequality, and Education
CourseID: 110371
Faculty:
Next Term Offered: 2022 Spring

An economist and a humanist, together with other professors from the natural and social sciences, analyze conceptual and policy-relevant issues from viewpoints of their respective disciplines. For example, how do we measure inequality, and at what point does it become problematic (and how do we know)? How then should it be addressed (e.g., tax code, minimum wage)? What role does, and can, education play? What are the best policies to confront job losses from technology? What does "sustainable growth" mean? The goal is not merely to examine four intertwined issues - growth, technology, inequality, and education - but also to understand the distinct concerns and methods of the humanities, social sciences, and natural sciences.

ECON 1030 Psychology and Economics
CourseID: 114133
Faculty:
Next Term Offered: 2022 Spring

Psychological concepts include bounded rationality, loss-aversion, overconfidence, confirmation bias, and motivated reasoning. Economic concepts include rational choice, utility maximization, Bayesian beliefs, and game theory. The second part covers applications, including intertemporal choice, financial markets, news media, and advertising.

ECON 1080 Great Theorems of Microeconomic Theory
CourseID: 160362
This course surveys the most important results in microeconomics that have shaped the field in the years since WWII. It has two objectives: (i) To understand how the questions were posed, who the innovative researchers were, and what external influences drove them to approach the subject as they did. This ¼ of the course is the modern history of micro-economic thought. (ii) The major results themselves. This ¾ of the course is quite technical. The lectures will explain and introduce these results in their historical context, and provide the mathematical background. Class participants will present proofs of the results in section.

The major theorems covered come from choice theory under certainty and uncertainty, general equilibrium theory, non-cooperative game theory, cooperative game theory, social choice, and the economics of incentives and mechanism design.

Course requirements comprise three papers and one end-of-term take home exam. Section presentations will also be a component of the grade.

ECON 1083 Growth, Inequality, and the Income of Households
CourseID: 205607
Faculty:
Next Term Offered: 2021 Spring

Since the 1970s households in the United States and other advanced economies have seen their income growth slow as a result of slower overall economic growth and rising inequality?compounded in many countries by men withdrawing from the workforce. In China and many emerging economies, households have seen substantial income gains?as fast overall economic growth has outweighed the rise in inequality. This course will analyze the ways in which growth, inequality and labor force participation shape the incomes of typical households, focusing on the United States, other advanced economies, and to a lesser degree developing economies. The course will consider the causes of the changes in growth and inequality a well as their relationship?asking questions like whether higher growth inevitably entails higher inequality and whether inequality can be bad for growth. In addition, we will consider the positive and normative evaluation of policies that entail tradeoffs between growth and inequality.

This course forms a unified sequence with SUP-206 "The Causes and Consequences of Inequality" taught in the spring which provides a more microeconomic and focused perspective on inequality. While either course can be taken separately, taking them together as a sequence is recommended for students wanting to pursue a more in depth study of household incomes and inequality.

ECON 1342 The History of Economic Growth
CourseID: 160351
Faculty:
Next Term Offered: 2022 Fall

This course examines the history of economic growth, beginning with the divergence between human ancestors and other primates and continuing through the end of the 20th century. Topics covered include the Neolithic Revolution; economic growth in ancient societies; the origins of modern economic growth; theories and evidence about the institutional, geographic, and cultural determinants of growth; the East Asian Miracle; the middle income trap; the political economy of growth; growth and inequality; and theories and evidence about the persistence of poverty in the world’s poorest regions.

Prerequisite: Economics 1010a (1011a)

ECON 1393 Poverty and Development
CourseID: 118764
Faculty:
Next Term Offered:

We will consider a number of important questions in the field of development economics: Why are some countries so rich and others so poor? What factors have determined which countries prosper? Which are the root causes and which are the proximate causes of economic underdevelopment? Can these factors be changed with specific economic policies? If so, what are they and how are they best implemented? Are there country-specific characteristics that determine economic fate? Or, is prosperity just the result of luck? Does the enjoyment of the rich somehow depend on the continuing suffering of the poor? We will consider these questions and more. The course is intended to not only provide a general overview of the dominant views about economic development and policy, but to also provide students a sense of the most recent research in the field. For this reason, the course will go beyond the usual textbook summary of the field. Students will also examine recent journal articles that have made important contributions to the field of development economics. In the course, a particular effort is made to link the theories and empirical evidence to the real world.

ECON 1425 Political Economics
CourseID: 125716
Faculty:
Next Term Offered: 2022 Spring

Discusses several research areas in political economy, including the origins of the state, comparative political systems, theories of economic reform, fiscal problems in democracies, rule of law, privatization, and regulation.
Questions related to morality pervade the economic and political discourse. However, traditionally, economists have paid little attention to the structure and consequences of people's moral concerns. This course introduces students to research in an emerging field that studies the determinants and consequences of heterogeneity in moral reasoning through the lens of economics. The main objective of the class is to highlight (i) how moral reasoning matters for economic and political outcomes, and (ii) how economic needs in turn generate particular moral systems. To understand the bidirectional relationship between economics and morality, we will study empirical research papers that consider questions such as: What is the difference between universalizing and relational approaches to moral reasoning, and how do these matter for economics? How do Americans' moral intuitions vary across space and over time? What is the role of moral values in U.S. presidential elections, or for policy preferences related to redistribution? Why do Republicans and Democrats give to different types of charities? What are the functional economic origins of morality? How and why are moral systems culturally variable? From a methodological viewpoint, the class uses standard empirical economics techniques to study morality-related concepts and ideas from psychology and anthropology.

The world economy is gradually recovering from the financial and economic crisis that originated in the United States in 2007-2009. Despite the slow recovery of Europe and the U.S., world economic growth has continued at an accelerated pace since the mid-1990s. This is due to very rapid growth of Asian economies, especially China and, increasingly, India. China overtook the U.S. as the world's largest economy in 2014, while India surpassed Japan in 2012, becoming the world's third largest economy. The growth of the two Asian economic giants is rapidly transforming the world economy. The ultimate objective of Economics 1490 is to assess the prospects for sustainable growth of the world economy in the future. Will slower growth of the U.S., Japan, and the leading economies of Europe lead to worldwide stagnation or will the accelerated growth of the world economy continue?

This is an intermediate level international finance and macroeconomics course that uses a mix of theoretical, empirical, and policy frameworks to analyze topical problems in international finance. The core objective of the course is to develop simple macroeconomic models of open economies that can be usefully applied to international
economic phenomena. We will examine the balance of payments, the determination of exchange rates, the effect of fiscal and monetary policies under fixed and floating exchange rate regimes, balance of payment crisis, international macroeconomic dependence, financial globalization, and the challenges facing developing economies. Recent issues such as the crisis in the Euro area and the sustainability of the Euro, the global transmission of the financial crisis, global imbalances, China's exchange rate policy, among others, will receive attention. Note: May not be taken for credit with Economics 1530 or 1435.

ECON 1642 Firms, Markets and Competition
CourseID: 124646
Faculty:
Next Term Offered: 2022 Spring

This course studies firms, markets and competition. We will study the theory of industrial organization, focusing on analyzing the way firms make decisions, as well as the impact of those decisions on market outcomes such as market prices, quantities, the type of products offered and social welfare. The fundamental questions addressed in this course include: Why are markets organized the way they are? How does market organization affect firm behavior, such as firm production or pricing? How does the behavior of firms in turn affect the market structure, such as the number of firms or the range of products offered? We will use formal models in order to address these questions. The goals of the course include the development of intuition for firm strategic behavior, such as pricing, as well as the development of skills for the analysis of formal models. The textbook will provide background and introduction to a variety of topics, many of which will be covered in class in greater depth. Lectures (along with problem sets) will be the core of the course.

ECON 1776 Religion and the Rise of Capitalism
CourseID: 125944
Faculty:
Next Term Offered: 2021 Fall

Examines the influence of religious thinking on the intellectual revolution, associated with Adam Smith and others, that created economics as we know it as an independent discipline; also examines how the lasting resonances from these early religious influences continue to shape discussion of economic issues and debates about economic policy down to our own day.

ECON 2030 Psychology and Economics
CourseID: 119960
Faculty:
Next Term Offered: 2022 Spring
Explores economic and psychological models of human behavior. Topics include bounded rationality, intertemporal choice, decision making under uncertainty, inference, choice heuristics, and social preferences. Economic applications include asset pricing, corporate finance, macroeconomics, labor, development, and industrial organization.

ECON 2034 Networks
CourseID: 204015
Faculty:
Next Term Offered: 2022 Spring

This course prepares students for pure and applied research in the economic theory of networks. Topics covered include the macroeconomic network of production and trade; games of investment with social spillovers (education, criminal activity); financial contagion and other externalities; diffusion of beliefs and behaviors; segregation and homophily; and networked markets. The course emphasizes portable methods, including the linear algebra behind centrality measures; random graph theory; branching processes; power laws and Pareto tails. Prerequisites: basic microeconomic theory at the level of Econ 2010a,b; probability at the level of an advanced undergraduate course.

ECON 2059 Decision Theory
CourseID: 121331
Faculty:
Next Term Offered:

This course prepares students for pure and applied research in axiomatic decision theory. We start with a rigorous treatment of the classical topics that are at the heart of all of economics (utility maximization, expected utility, discounted utility, Bayesian updating, dynamic consistency, option value). We then delve into a number of modern topics inspired by the observed violations of the classical models (”exotic preferences” used in macro-finance, ambiguity aversion, temptation and self-control). The last part of the course explores the recently flourishing literature on stochastic choice (which is related to, but distinct from, discrete choice econometrics). Prerequisites: basic microeconomic theory at the level of Mas Colell, Whinston, Green; being comfortable with abstract models.

ECON 2071 Simplicity and Complexity in Economics
CourseID: 212938
Faculty:
Next Term Offered: 2021 Fall

Technology has enabled the emergence of economic systems of formerly inconceivable complexity. Nevertheless, some technology-related economic problems are so complex that either supercomputers cannot solve them in a reasonable time, or they are too complex for humans to comprehend. Thus, modern economic designs must still be
simple enough for humans to understand, and must address computationally complex problems in an efficient fashion. This topics course explores simplicity and complexity in economics, primarily via theoretical models. We will focus on recent advances. Key topics include (but are not limited to) resource allocation in complex environments, communication complexity and information aggregation in markets, robust mechanisms, dynamic matching theory, influence maximization in networks, and the design of simple (user-friendly) mechanisms. Some applications include paired kidney exchange, auctions for electricity and for radio spectrum, ride-sharing platforms, and the diffusion of information.

ECON 2099 Market Design
CourseID: 110312
Faculty:
Next Term Offered:

This course explores the theory and practice of market design. Key topics include auctions, labor market matching, school choice programs, online markets, organ exchange systems, financial market design, and matching with contracts. The first half of the course will introduce market design and its technology; subsequent weeks will discuss recent papers alongside their classical antecedents.

ECON 2149 Computational Economics
CourseID: 119962
Faculty:
Next Term Offered: 2019 Fall

Graduate introduction to computational approaches for solving economic models. Formulate economic problems in computationally tractable form and use techniques from numerical analysis to solve them. Computational techniques in the current economics literature will be examined. Topics include solving dynamic optimization problems, computing equilibria of games and estimating structural models.

ECON 2245 Empirical Methods in Microeconomics
CourseID: 218138
Faculty:
Next Term Offered:

ECON 2380 Historical Economic Growth
CourseID: 218227
Faculty:
Next Term Offered:

This course examines the historical process of economic growth with an eye toward understanding both the massive rise in the standard of living that occurred in much of
the world over the last 250 years and the large differences in average income levels that are observed among countries. Topics addressed include technological change, technology transfer, and appropriate technology; accumulation of human capital in the forms of education and health; institutional persistence and change; demographic transition; changing gender roles; spatial agglomeration and variation in both income and population density; and the link between geographic characteristics and economic outcomes. The approach taken will be mostly empirical and quantitative, with theoretical models introduced as appropriate.

ECON 2392 The Political Economy of Economic Development
CourseID: 156554
Faculty:
Next Term Offered: 2021 Spring

ECON 2411 Advanced Topics in Macroeconomics
CourseID: 207820
Faculty:
Next Term Offered: 2020 Fall

ECON 2612 Advanced Topics in Industrial Organization
CourseID: 110341
Faculty:
Next Term Offered: 2022 Spring

This course will cover both theoretical and econometric tools that are being used to explore more appropriate ways of analyzing market outcomes. Examples of theoretical topics may include: consumer search, advertising, dynamic models of collusion and pricing, and bargaining in vertical markets. Examples of econometric topics may include: simulation, semi-parametric, and moment inequalities in relation to problems that arise in industrial organization applications (e.g., entry, product repositioning, transition dynamics, and decision making with computational constraints).

ECON 2811 Social Economics
CourseID: 122104
Faculty:
Next Term Offered: 2021 Spring

Applies the tools of economics to explore social issues including crime, discrimination, racial and gender differences, poverty, family structure, urban problems, social interactions and peer effects, and intergenerational mobility.

ECON 2918 Early Stage Research and Discussions on International
Finance and Macroeconomics
CourseID: 218351
Faculty:
Next Term Offered:

ECON 3101 Seminar in Behavioral and Experimental Economics
CourseID: 109297
Faculty:
Next Term Offered:

   For students with an interest in behavioral and experimental economics. Faculty presentations by Harvard economists and invited guests.

ECON 3102 Seminar in Economic Theory
CourseID: 127199
Faculty:
Next Term Offered:

   For students with an interest in economic theory. Faculty presentations by Harvard and MIT economists and invited guests. The location alternates between Harvard and MIT.

ECON 3103 Seminar in Econometrics
CourseID: 113884
Faculty:
Next Term Offered:

   Outside speakers and faculty present current research topics in theory and applications of econometrics.

ECON 3104 Seminar in Economic History
CourseID: 118257
Faculty:
Next Term Offered:

   Intended for students writing dissertations related to economic history themes and/or methodology and for others with interests in economic history. Discusses research papers presented by scholars at Harvard and elsewhere.

ECON 3105 Seminar in Economic Development
CourseID: 111733
Faculty:
Next Term Offered:
Fall speakers cover issues in growth and development. Spring speakers alternate between "growth and institutions," focusing on the macro aspects of growth and development, and "labor and development," focusing on the micro aspects.

**ECON 3106 Seminar in Monetary and Fiscal Policy**  
CourseID: 111270  
Faculty:  
Next Term Offered:

Seminar speakers present papers on macroeconomic topics, including issues relating to monetary and fiscal policies, economic growth, the role of institutions, and other research issues in the field.

**ECON 3107 Seminar in Public Economics and Fiscal Policy**  
CourseID: 132616  
Faculty:  
Next Term Offered:

Invited speakers present theoretical and empirical research on a broad range of topics related to the design of government policy.

**ECON 3108 Seminar in International Economics**  
CourseID: 116757  
Faculty:  
Next Term Offered:

Outside speakers and faculty present research papers in all aspects of international economics, including theory, econometrics, and policy.

**ECON 3109 Seminar in Industrial Organization**  
CourseID: 112877  
Faculty:  
Next Term Offered:

Invited scholars from other institutions present current research in the field in a seminar setting.

**ECON 3110 Seminar in Political Economy**  
CourseID: 207915  
Faculty:  
Next Term Offered:
The Program on Positive Political Economy (PPE) supports research-related activities that integrate the study of economics and politics, whether by studying economic behavior in the political process or political behavior in the marketplace. In general, positive political economy is concerned with showing how observed differences among institutions affect political and economic outcomes in various social, economic, and political systems and how the institutions themselves change and develop in response to individual and collective beliefs, preferences, and strategies.

ECON 3111 Seminar in Financial Economics
CourseID: 113663
Faculty:
Next Term Offered:

Outside speakers present current research in the field in a seminar setting.

ECON 3112 Seminar in Labor Economics
CourseID: 113625
Faculty:
Next Term Offered:

Outside speakers present research concerning the operation of labor markets.

ECON 3114 Seminar in Law, Economics, and Organizations
CourseID: 113830
Faculty:
Next Term Offered:

The presentation of work in progress in the field of law, economics, and organizations. Presentations by members of the various Harvard faculties, outside speakers, and graduate students.

ECON 3115 Seminar on Macroeconomic Policy
CourseID: 156659
Faculty:
Next Term Offered:

This seminar will feature presentations on current macroeconomic policy issues by Economics Department faculty and invited outsider speakers. Specific topics will include (among others) tax reform, fiscal policy, monetary policy in the U.S. and in other advanced economies, international imbalances, labor market policies, raising the U.S. economic growth rate, Europe's economic problems, housing and the mortgage market. Students not taking the course for credit are welcome to participate in each week's discussion.
ECON 3118 Seminar in Economics of Science and Engineering
CourseID: 122105
Faculty: 
Next Term Offered:

Focus on work force and career issues. Topics include: Effects of globalization on work force and innovation, growth of networks in work; impact of career incentives on productivity; university policies; mobility between academe and industry; link between ideas and outputs.

ECON 3119 Religion and Political Economy Seminar Series
CourseID: 207640
Faculty: 
Next Term Offered:

Current research on religion and political economy will be presented by outside speakers and Harvard faculty and students.

ECON 3121 China Economy Seminar
CourseID: 110240
Faculty: 
Next Term Offered: 2019 Spring

This seminar provides a forum for faculty, graduate students, and research fellows in economics and other fields to present and discuss research and scholarship on the economic and social transformation of China. The seminar will give special attention to the environmental, technological, and social changes that are accompanying China's extraordinary economic development and to the links between Chinese and US economies.
Ethnicity, Migration, Rights

EMR 122 Caribbean Postcolonial Thought
CourseID: 160753
Faculty: Mayra Rivera
Next Term Offered: 2020 Fall

This course examines influential works of "Caribbean Poetics" from a literary, philosophical, and political perspective. It explores the distinctiveness of this literary tradition and its contributions to thinking about race, colonialism, language and the sacred. Readings will include Édouard Glissant, Derek Walcott, and Edwidge Danticat, among others. Jointly offered in Harvard Divinity School as HDS 2430.

EMR 126 American History Before Columbus
CourseID: 203969
Faculty: Matt Liebmann
Next Term Offered: 2020 Fall

What happened in America before 1492? What were the major turning points in Native American history? Why don't we know more about the ancient history of North America? Anthropology 1080 answers these questions by introducing you to the discipline of North American archaeology. This lecture course will help you to understand how Native American societies developed in the millennia before the European invasion, why American Indian peoples live where they do today, and how their dynamic populations have changed over the course of the past 15,000 years. In the process you'll have the opportunity to examine a truly world-class collection of artifacts from the Peabody Museum, allowing you to hold the remains of American history in your own hands and investigate the past with your own eyes.

EMR 129 Education in Armed Conflict
CourseID: 205500
Faculty:
Next Term Offered:

This course examines the multidimensional and multidirectional relationships between armed conflict and education. How can education contribute to the work of building "lasting peace" in settings of armed conflict globally? How does education reflect inequalities and reinforce social tensions? How does it contribute to stability and reconciliation? What role does it play in shaping individual and collective imaginings of a post-conflict future? Through critical reading of theoretical texts and case studies, engagement with guest speakers, simulations, and other learning tools, we will adopt an action-oriented approach to investigation of these and other questions. We will look beyond the provision of schooling to the learning and teaching that takes place in
schools and community settings, and examine the relationships that are at the core of these educational interactions. Central to discussions will be connections between public policy, daily experiences, and social justice. The course includes a semester-long project through which students will deepen their research, writing, and policy analysis skills, and explore the intellectual and practical dimensions of connecting research, policy, and practice.

Open to all students with an interest in settings of armed conflict or comparative education generally.

**EMR 131 Love's Labors Found: Uncovering Histories of Emotional Labor**
CourseID: 207804
Faculty: Caroline Light
Next Term Offered: 2021 Fall

How do love, care, and desire influence the value of work, and why is emotional labor? which is vital to child or elder care, domestic labor, nursing, teaching, and sex work? often considered to be something other than work? How and why do the racial and gender identities of workers affect the economic, social, and emotional value of their labor? How do political and social arrangements of labor help produce and reinforce racial categories while solidifying the boundaries separating masculinity and femininity? Through a mix of primary and secondary sources, this seminar explores histories of emotional labor and the power structures that give meaning to often taken-for-granted categories of work. These sometimes hidden histories are key to untangling the gender, sexual, and racial implications of the "intimate industries" that populate today's transnational labor economies.

**EMR 135 Climate Migration: Histories, Borders, and Activism**
CourseID: 213390
Faculty:
Next Term Offered:

The International Organization for Migration (IOM) predicts that by the year 2050, between 125 million and 1 billion people will be displaced by the far-reaching impacts of climate change. However, the status of "climate refugees" is hard to define and there are no legal protections for such a category of refugee in international law. Furthermore, powerful countries like the United States are strengthening militarization and border enforcement in an era of growing humanitarian need. This writing and discussion-intensive seminar explores the historical relationship between climate change and migration, as well as the rise of border enforcement and artistic and activist responses to these crises.
Students will also have the opportunity to contribute collaboratively to the digital humanities project "Climate Refugee Stories." Some questions we will address are: How do histories of colonialism and racial capitalism help us understand a growing global refugee crisis? What does it mean to be a "climate refugee" or "environmental migrant" in the era of anthropogenic climate change? What are the experiences of those most directly impacted? And how are these displacements creating new opportunities for collective responses to addressing climate change that are rooted in migrant, indigenous, land, and human rights?

EMR 138 African American and Latin American Intersections: Race, Religion & Revolution
CourseID: 213405
Faculty:
Next Term Offered:

This course explores African American and Latin American links before 1959. It examines the ties between African Americans and various Latin American countries: Haiti/DR, Cuba, the Anglophone Caribbean, Argentina, and Mexico. The thematic scope covers: slavery, race theory, migration, diplomacy & politics, religion, war, and tourism.

EMR 142 Introduction to Latinx Studies
CourseID: 216465
Faculty:
Next Term Offered:
Engineering Sciences

ENG-SCI 21 The Innovator’s Practice: Finding, Building and Leading Good Ideas with Others
CourseID: 128317
Faculty: 
Next Term Offered: 2022 Fall

Students gain experience overcoming many under-represented challenges of becoming an innovator, including: identifying your intrinsic motivations, finding related good ideas, working effectively with others to develop them, and leading innovative professional projects to implementation. Students apply human-centered design processes (observing, interpreting, ideating, testing, refining, planning) to stimulate innovation, negotiate, strategize, and build and lead cooperative teams. Features guest speakers from industry, academia, and involves collaborating with cutting-edge companies.

ENG-SCI 23 The Art & Science of Making
CourseID: 211326
Faculty: 
Next Term Offered: 2024 Spring

Introduces students to the making processes of some of the leading creators working today from engineering and design, to art, science, food, entertainment and more. Students develop six projects over the course of the semester and a semester-long collaborative project that engage the students in art & science maker processes of visiting creators and encourage skills of collaboration, expression, communication, and aesthetic appreciation. Students learn to use basic engineering and design tools including some or all of the following: CAD/CAM rapid prototyping, machine shops tools, and environmental engineering and tissue engineering lab tools and methodologies.

ENG-SCI 28 Science Technology and Society
CourseID: 207608
Faculty: 
Next Term Offered: 2024 Spring

In an era of unprecedented technological change, informed citizens will need to make sense of rapidly evolving societal challenges. In this course, students will examine real-life cases in areas like genetic engineering, artificial intelligence, environmental justice, and climate change. Readings, lectures, and discussions will explore issues such as how technology should be regulated, how individual and societal values should be weighed against each other, and how risk-benefit analysis should be applied. The course will aim to give students of any concentration the conceptual tools and structure to grapple with the diverse responsibilities, rights, and privileges of the 21st century citizen.
ENG-SCI  54 Electronics for Engineers  
CourseID: 208134  
Faculty:  
Next Term Offered: 2022 Spring  

This course is a practical introduction to analog and digital electronics for engineers. Topics will include aspects of analog circuit theory, discrete digital circuits, and embedded systems that utilize microcontrollers to process inputs from sensors and act on the world accordingly, for instance through motor control. There will be extensive hands-on laboratories to put into practice the topics covered in lecture. This course meets the electronics course requirement for mechanical engineers and bioengineers (i.e., for those bioengineering tracks that require electronics/circuits). Current or potential EE concentrators should consult with the ADUS for Electrical Engineering before enrolling.

ENG-SCI  111 Introduction to Scientific Computing  
CourseID: 156287  
Faculty:  
Next Term Offered: 2022 Spring  

Many complex physical problems defy simple analytical solutions or even accurate analytical approximations. Scientific computing can address certain of these problems successfully, providing unique insight. This course introduces some of the widely used techniques in scientific computing through examples chosen from physics, chemistry, and biology. The purpose of the course is to introduce methods that are useful in applications and research and to give the students hands-on experience with these methods.

ENG-SCI  151 Applied Electromagnetism  
CourseID: 143005  
Faculty:  
Next Term Offered: 2022 Spring  

Electromagnetism and its applications in science and technology. Topics: Maxwell's equations; electromagnetic waves (e.g., light, microwaves, etc.); wave propagation through media discontinuity; transmission lines, waveguides, and microwave circuits; radiation and antennae; interactions between electromagnetic fields and matters; optics of solids; optical devices; origin of colors; interference and diffraction; lasers and masers; nuclear magnetic resonance and MRI; radio astronomy; wireless networking; plasmonic wave (charge density wave).

ENG-SCI  153 Laboratory Electronics  
CourseID: 156518  
Faculty:  
Next Term Offered:
A lab-intensive introduction to electronic circuit design. Develops circuit intuition and debugging skills through daily hands-on lab exercises, each preceded by class discussion, with minimal use of mathematics and physics. Moves quickly from passive circuits, to discrete transistors, then concentrates on operational amplifiers, used to make a variety of circuits including integrators, oscillators, regulators, and filters. The digital half of the course treats analog-digital interfacing, emphasizes the use of microcontrollers and programmable logic devices (PLDs).

ENG-SCI 154 Electronic Devices and Circuits
CourseID: 143433
Faculty:
Next Term Offered: 2022 Fall

Design of electronic analog circuits using semiconductor transistors. Topics include: operational amplifiers and op-amp circuits; time and frequency domain analysis of electric circuits (RC, RL, and RLC); basic semiconductor physics; PN junctions and diodes; bipolar junction transistors (BJT); Field-effect transistors (MOSFETs); bias circuits and current sources; single-ended, differential, single- and multi-stage MOSFET amplifiers; amplifier gain and bandwidth; frequency response, feedback, noise, and stability.

ENG-SCI 159 Introduction to Robotics
CourseID: 131554
Faculty:
Next Term Offered: 2022 March

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 170 Engineering Quantum Mechanics
CourseID: 207088
Faculty:
Next Term Offered: 2023 Spring

As a first course in quantum mechanics, tailored for engineering, applied mathematics and computer science students, this course will teach concepts needed to engineer a quantum world, to understand quantum mechanical properties of materials and build an intuition for quantum information science. The course will be a hybrid of lectures on theory, state-of-the-art computational methods (‘theory-lab’) in quantum simulations and we will use IBM Q Experience, an open access quantum computer. Topics will include
periodic potentials and the tight-binding approach, quantizing vibrations in solids, spin matrices and an introduction to qubits. Assignments will teach the basics of the Python programming language, introduce students to open source scientific software and electronic structure methods.

ENG-SCI 175 Photovoltaic Devices
CourseID: 110019
Faculty:
Next Term Offered: 2022 Fall

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 176 Introduction to MicroElectroMechanical System
CourseID: 127589
Faculty:
Next Term Offered: 2022 Fall

This course introduces student to the rapidly emerging, multi-disciplinary and exciting field of MicroElectroMechanical Systems (MEMS). It teaches fundamentals of micro machining and Micro fabrication techniques, including planar thin-film process technologies, photolithography and soft-lithography techniques, deposition and etching techniques, and surface, bulk, and electroplating micro machining technologies.

ENG-SCI 177 Microfabrication Laboratory
CourseID: 109356
Faculty:
Next Term Offered: 2023 Spring

Introduction to micro- and nanofabrication processes used for photonic and electronic devices. Students use both an instructional lab as well as a state-of-the-art cleanroom in the Center for Nanoscale Systems. Several electronic and photonic devices will be fabricated, such as transistors, light-emitting diodes (LEDs) and lasers. Lectures will focus on fabrication processes, including lithography, deposition of metals and dielectrics, etching, oxidation, implantation and diffusion of dopants, and device characterization.

ENG-SCI 202 Learning, Estimation, and Control of Dynamical Systems
CourseID: 142254
Faculty:
Next Term Offered: 2022 Spring
This graduate level course studies dynamic systems in time domain with inputs and outputs. Students will learn how to design estimator and controller for a system to ensure desirable properties (e.g., stability, performance, robustness) of the dynamical system. In particular, the course will focus on systems that can be modeled by linear ordinary differential equations (ODEs) and that satisfy time-invariance conditions. The course will introduces the fundamental mathematics of linear spaces, linear operator theory, and then proceeds with the analysis of the response of linear time-variant systems. Advanced topics such as robust control, model predictive control, linear quadratic games and distributed control will be presented based on allowable time and interest from the class. The material learned in this course will form a valuable foundation for further work in systems, control, estimation, identification, detection, signal processing, and communications.

ENG-SCI 203 Stochastic Control  
CourseID: 143872  
Faculty:  
Next Term Offered: 2024 Spring


ENG-SCI 209 Nonlinear Control Systems  
CourseID: 131191  
Faculty:  
Next Term Offered: 2020 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 Special Topics in Engineering Physiology  
CourseID: 110220  
Faculty:  
Next Term Offered: 2023 Spring

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
CourseID: 126332
Faculty:
Next Term Offered: 2020 Fall

Cell biology from foundations to current research topics. Intended for students without cell/molecular biology training. Cell architecture, molecular and phenomenological aspects, signaling, organelle form/function, trafficking, quantitative experimental techniques, models of cellular organization and dynamics.

ENG-SCI 222 Advanced Cellular Engineering
CourseID: 114808
Faculty:
Next Term Offered: 2021 Fall

This is a combined introductory graduate/upper-level undergraduate course that focuses on examining modern techniques for manipulating cellular behavior and the application of these techniques to problems in the biomedical and biotechnological arenas. Applications in drug discovery, regenerative medicine, and cellular agriculture will be discussed. Topics will include controlling behavior of cells through cell-matrix interactions, cytoskeletal architecture, and cell behavior in processes such as angiogenesis and wound healing. Lectures will review fundamental concepts in cell biology before delving into topical examples from current literature. Students will work weekly in the lab learning cell culture techniques, soft lithography, microscopy, and classical in vitro assays measuring cell behavior.

ENG-SCI 226R Special Topics in Neural Engineering: Learning and Memory in Neural Systems
CourseID: 124391
Faculty:
Next Term Offered: 2022 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 227 Medical Device Design
CourseID: 127639
Faculty:
Next Term Offered: 2021 Spring
Project-based course on the design of medical devices to address needs identified by hospital-based clinicians. Students work in teams with physicians to develop a novel device. The design process includes: needs finding; problem identification; prior art searches; strategy and concept generation; estimation; sketching; sketch modeling; machine elements, ergonomics and prototyping.

ENG-SCI 233 Water, Weather and Climate
CourseID: 212719
Faculty:
Next Term Offered:

This course provides a graduate-level introduction to the global hydrologic cycle and relevant terrestrial and atmospheric processes. It covers the concepts of water and energy balance; atmospheric radiation, composition and circulation; precipitation formation; evaporation and vegetation transpiration; dynamics of the atmospheric boundary layer (ABL), and its coupling with the land surface; boundary layer clouds; atmospheric chemistry within the ABL; and groundwater flow and unsaturated zone processes.

ENG-SCI 236A Integrative Frameworks for Technology, Environment, and Society I
CourseID: 203600
Faculty:
Next Term Offered: 2021 Fall

Developing and implementing good solutions to real problems facing human society requires a broad understanding of the relationships between technology innovation, science, manufacturing, design thinking, environment, sustainability, culture, aesthetics, business, public policy, and government. Various frameworks for understanding these complex relationships within the context of real-world problems will be explored and discussed. Coursework will be based on assigned readings, case studies, research assignments, exercises, and class discussions.

ENG-SCI 236B Integrative Frameworks for Technology, Environment, and Society II
CourseID: 203601
Faculty:
Next Term Offered: 2022 Spring

Developing and implementing good solutions to real problems facing human society requires a broad understanding of the relationships between technology innovation, science, manufacturing, design thinking, environment, sustainability, culture, aesthetics, business, public policy, and government. Various frameworks for understanding these
complex relationships within the context of real-world problems will be explored and discussed. Coursework will be based on assigned readings, case studies, research assignments, exercises, and class discussions.

ENG-SCI 237 Planetary Radiation and Climate
CourseID: 156547
Faculty:
Next Term Offered: 2020 Fall

Atmospheric radiative transfer is at the heart of understanding the climate of Earth and other planets. This course covers basic stellar and planetary physics, quantum spectroscopy, molecular and aerosol scattering, satellite retrieval theory, cloud, CO2 and H2O climate feedbacks, and extreme climate phenomena such as the runaway greenhouse, Nuclear Winter and Titan's methane cycle. As a final course outcome, you will learn to construct a line-by-line radiative-convective climate model from first principles.

ENG-SCI 238 Introduction to Innovation and Entrepreneurship
CourseID: 110345
Faculty:
Next Term Offered: 2021 Fall

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
CourseID: 148181
Faculty:
Next Term Offered: 2020 Fall

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

ENG-SCI 246 Plasticity
CourseID: 138370
Faculty:
Next Term Offered: 2023 Fall

ENG-SCI 250 Information Theory
CourseID: 119057
Faculty:
Next Term Offered: 2021 Fall

Fundamental concepts of information theory, Entropy, Kullback-Leibler divergence, Mutual information; typical sequences and their applications, Loss-less data compression, Huffman codes, Elias Codes, Arithmetic Codes, Discrete Memory-less Channels, Channel Coding and Capacity, Differential Entropy, Gaussian Channels, rate distortion theory, Multi-user Information Theory, Connections between information theory and statistics.

ENG-SCI 253 Bioelectromagnetics
CourseID: 156946
Faculty:
Next Term Offered: 2021 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 254 Information Processing and Statistical Physics
CourseID: 160448
Faculty:
Next Term Offered: 2022 Fall

This course introduces students to several fundamental notions and methods in statistical physics that have been successfully applied to the analysis of various problems in signal processing, information theory, and theoretical computer science. Discussions will be focused on studying such information processing systems in the infinite-size limit, on analyzing the emergence of phase transitions, and on understanding the behaviors of efficient algorithms. This course seeks to start from basics, assuming just undergraduate probability and analysis, and in particular assuming no knowledge of statistical physics. Students will take an active role by applying what
they learn from the course to their preferred applications.

**ENG-SCI 255 Statistical Inference with Engineering Applications**  
CourseID: 117628  
Faculty:  
Next Term Offered: 2021 Fall

Statistical signal processing; detection and estimation; 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; high-dimensional probability theory; 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**  
CourseID: 134052  
Faculty:  
Next Term Offered: 2023 Spring

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 263 Chemical Reactions and Mechanisms in the Environment**  
CourseID: 123682  
Faculty:  
Next Term Offered: 2022 Fall

In this course a framework of tropospheric chemistry will be generated that requires no previous knowledge of this topic. The goal is to develop an understanding of chemical and physical processes in the troposphere. Focus is on the main processes transforming emissions into the secondary pollutants that affect the environment, human health, and climate, in particular with respect to the role of anthropogenic influence. This will provide a foundation for the evaluation of the impact the newest scientific studies have on our understanding of processes that are important for the part of the atmosphere we live in.

**ENG-SCI 267 Aerosol Science and Technology**  
CourseID: 124746  
Faculty:  
Next Term Offered: 2022 Fall

Fundamental physics and chemistry underlying the science and technology of aerosols. Taught by reference to topical problems in atmospheric chemistry, planetary climates,
human health, and technologies of nanofabrication.

**ENG-SCI 276 Introduction to MicroElectroMechanical System**  
CourseID: 127590  
Faculty:  
Next Term Offered: 2022 Fall

In this course, the student is introduced to micro-fabrication techniques through the filter of the rapidly emerging, multi-disciplinary and exciting field of MicroElectroMechanical Systems (MEMS.) It is a lab based course complemented by mandatory weekly lectures. It teaches fundamentals of micro machining and fabrication techniques, including planar thin-film process technologies, photolithography and soft-lithography techniques, deposition and etching techniques as well as limited inspection and characterization technologies. Students, in teams, will build and characterize fully functional: surface acoustic wave (SAW) resonators, micro polymerized chain reaction (uPCR) amplifiers, micro pressure sensors and final projects of their own choosing. In doing so, they will be exposed to the basic principles of tools in an advanced cleanroom.

**ENG-SCI 277 Microfabrication Laboratory**  
CourseID: 109357  
Faculty:  
Next Term Offered: 2023 Spring

Content and requirements are similar to Engineering Sciences 177, with the addition that students enrolled in Engineering Sciences 277 are given an additional project.

**ENG-SCI 293 Cryo-Electron Microscopy for Biological and Soft Materials Lecture/Lab**  
CourseID: 205078  
Faculty:  
Next Term Offered: 2023 Fall

This class covers the fundamental principles underlying cryo-electron microscopy applied to Biological and SoftMaterials starting with the basic anatomy of electron microscopes, an introduction to Fourier transforms, and the principles of image formation. Building upon that foundation, the class then covers the sample preparation issues, data collection strategies, and basic image processing workflows.

**ENG-SCI 298CR Methodologies in Design Engineering**  
CourseID: 214441  
Faculty:  
Next Term Offered:
This is an SAT/UNSAT course focused on providing leaders and change makers with methodologies and practices that can be deployed in real-life situations. Weekly meetings will discuss pre-assigned readings and apply learning through in-class exercises and workshops. The course will focus on four broad areas:

1. Strategic decision support tools including the design of resilient planning; rapid business model analysis, and design of sustainable business models.
2. Qualitative research methods including observations, interviewing techniques, and survey design; organization and evaluation of qualitative data using IT systems.
3. Fundamentals of science and engineering including: materials properties and characterization; Reynolds number applications for identifying flow type (laminar, molecular, turbulent); PCR (Polymerase Chain Reaction) fundamentals of molecular biology and its applications.
4. Key methodologies for prototyping (physical; virtual; tangible futures; large-scale interventions).
ENGLISH  CDWR Writing the Documentary: Workshop  
CourseID: 207634  
Faculty:  
Next Term Offered:  

This course will focus on non-fiction writing for film, with a primary focus on the documentary treatment. We will discuss various aspects of the craft, including interviewing techniques, research, varying formal approaches, and story structure, as well as ethical concerns in documentary filmmaking. We will examine produced treatments and screen a wide array of documentaries. Students will be expected to perform research, primarily in the field, and identify their own documentary subjects, about whom they will develop a film treatment as a final project.

ENGLISH  CFS Writing the Feature Screenplay: Workshop  
CourseID: 215735  
Faculty:  
Next Term Offered:  

The feature-length screenplay is an opportunity to tell a story on a larger scale, and, therefore, requires additional preparation. In this class, we will move from writing a pitch, to a synopsis, to a treatment/outline, to the first 10 pages, to the first act of a feature screenplay. We will analyze produced scripts and discuss various elements of craft, including research, writing layered dialogue, world-building, creating an engaging cast of characters. Students will end the semester with a first act (20-30 pages) of their feature, an outline, and strategy to complete the full script.

ENGLISH  CFW Character and Consciousness: Advanced Narrative Techniques Fiction Workshop  
CourseID: 215753  
Faculty:  
Next Term Offered:  

This course focuses on how artful characterization works to create complex psychological portraits in fiction. We will read fiction and criticism to understand how character informs nearly every element of storytelling craft, and we will incorporate what we’ve gleaned from our readings into our own writing. After review of fundamental craft elements such as imagery, dialogue and scene, we will examine more advanced narrative techniques such as psychonarration, interiority and focalization, and seek to understand how they contribute to the voice, consciousness and subjectivity of a character. The core of our practice will be comprised of short weekly assignments, in-class exercises, and character studies, culminating in one complete
The supernatural has long been fertile terrain for writers, canonical and contemporary alike. The supernatural is a means to explore the material that cannot be contained by corporal life: the unsayable secrets, the unexamined truths, the unreconciled historical traumas. Through the study of "haunted" fiction, experiments in craft and imagination, and workshop critique, this course will investigate the vital dimensions the supernatural can bring to the page and what your own "haunted" material might look like. The initial weeks will concentrate on craft study and creating new work; later in the term, your fiction will serve as the primary text as the focus shifts to workshop critique. The syllabus will likely include work from Edith Wharton, Julio Cortázar, Carmen Maria Machado, Steven Millhauser, Parul Sehgal, Claire Vaye Watkins, and Viet Thanh Nguyen among others.

This course will introduce you to the fundamental elements of fiction writing. We will read a variety of work, including pieces by Alice Munro, Edward P. Jones, Joy Williams, James Baldwin, Bohumil Hrabal, Grace Paley and Ben Okri, using each text as a template for examining such aspects in fiction as tension, dialogue, point of view, arc and character. Through class discussions and a series of writing exercises, we will also pay close attention to the ways in which conventions of craft are applied and understood and sometimes re-interpreted or subverted. As the semester progresses, the focus of the class will shift to your own work, which we will critique and discuss as a group in a workshop setting, with an eye toward drawing connections between craft principles and your own writing practice. You will later significantly revise your piece.

The course will consist of two halves. In the first hour of each class, we will be doing
close readings of an assigned text (TBA), with the aim of isolating some aspect of the craft of writing in order to take bearings for your own. In the second half of the class, divided into two equal segments of an hour each, we will be workshopping the writing of two students. Our goal is for each of you to have two turns, and approximately 5-10,000 words of your work critiqued, by the time semester ends. The final project involves significant redrafting of a story or a portion of a novel.

ENGLISH CNTF Character and Consciousness: Advanced Narrative Techniques Fiction Workshop
CourseID: 215738
Faculty:
Next Term Offered:

This course focuses on how artful characterization works to create complex psychological portraits in fiction. We will read fiction and criticism to understand how character informs nearly every element of storytelling craft, and we will incorporate what we’ve gleaned from our readings into our own writing. After review of fundamental craft elements such as imagery, dialogue and scene, we will examine more advanced narrative techniques such as psychonarration, interiority and focalization, and seek to understand how they contribute to the voice, consciousness and subjectivity of a character. The core of our practice will be comprised of short weekly assignments, in-class exercises, and character studies, culminating in one complete story and revision to be workshopped by peers.

ENGLISH CPJR Politics & Journalism: Workshop
CourseID: 203362
Faculty:
Next Term Offered:

An advanced journalism seminar for those with some writing experience and an interest in political news coverage. Students will learn how to write about U.S. politics in all the major genres, including long form narratives, profiles, commentary and opinion. There will be extensive reading from political books, including chapters from the novel All The King's Men and non-fiction classics by T.H. White, Richard Ben Cramer, Garry Wills, and Hunter S. Thompson. Additional readings come from a wide array of reporters and columnists covering the 2020 election including Jane Mayer, Maureen Dowd, Mark Leibovich Peggy Noonan and other political pieces from magazines, newspaper, on-line sites and blogs. The class will focus on the structure of political writing, how to incorporate interviews in narrative writing, the quality and fairness of 2020 election coverage. There will be weekly writing assignments and one in-depth final, magazine-length piece.

ENGLISH CPWR Poetry: Workshop
CourseID: 146247
Faculty:
Next Term Offered:

Open by application to both undergraduates and graduates. Class includes the discussion of literary texts as well as work written by students.

ENGLISH CSS Introduction to Screenwriting: Workshop
CourseID: 215734
Faculty:
Next Term Offered:

This workshop will introduce students to the fundamentals of dramatic screenwriting, including narrative theory and structure, character design, dialogue, genre, and tone. We will focus on story development exercises, reading produced scripts, and watching short films at the beginning of the semester. We will then transition to workshopping student work in class. Each student will write two short screenplays, one of which they will revise for a final project.

ENGLISH 58R Poets: Wyatt to the Romantics
CourseID: 212759
Faculty:
Next Term Offered:

Description TBA

ENGLISH 60 Migrations: Fictions of America
CourseID: 145797
Faculty:
Next Term Offered:

This course will treat America as it was imagined and re-imagined between the 16th-21st centuries by successive waves of Europeans, Africans and their descendants. The course explores how evolving fictions of America's purpose, changing notions of America's geography and conflicting ideas of American character inform an emerging literary tradition. Readings list likely to include non-fiction by Harriot, Rowlandson, Mather, Franklin, Jacobs; shorter fiction by Irving, Hawthorne, Melville and Stein; novels by Cather, Norris and Morrison.

ENGLISH 63G Migrations: Gilded Ages
CourseID: 208099
Faculty:
Next Term Offered:

Originally from the title of an 1873 novel by Mark Twain and Charles Dudley Warner, the phrase "The Gilded Age" quickly passed into popular parlance as the name of the period
following the Civil War in America: a time when immense fortunes and superficial appearances of growth and prosperity co-existed with growing poverty and unrest. As a number of economists have argued, income disparities in the United States are currently at their highest levels since the end of the 1920s, when the arrival of the Great Depression produced a consensus in favor of the more equitable distribution of wealth. In other words, we are now living in America's new Gilded Age. In this class we will explore this premise by first examining how representative novels of the classic Gilded Age (approximately 1870 through 1930) represented social structures?how authors tried to comprehend and depict "the way the world works" and the individual's life in it?and then comparing and contrasting these with novels of a new gilded age, including the way depictions of globalization and economic empire as central to American national identity develop over time and across national boundaries (England, India). We will study the novel as a genre and literary realism as a strategy of representation and how these emerge from social and political history. We will also read brief accounts of the economic culture of each historical moment. Authors may include: F. Scott Fitzgerald, Theodore Dreiser, Edith Wharton, Frank Norris, William Dean Howells, Aravind Adiga, Zadie Smith, Jeffrey Eugenides, Jonathan Franzen.

ENGLISH 66 Migrations: Narrative Setting
CourseID: 130636
Faculty:
Next Term Offered:

This course is designed for the "Literary Migrations" portion of the Common Ground curriculum. Although plot, character, and theme are the elements of narrative fiction that typically receive the most attention from readers, this course invites students to examine setting. It is likely to feature works by Defoe, Flaubert, Dickens, Melville, Poe, Fitzgerald, Faulkner, Cather, and Pynchon. In addition, some relevant secondary material will be assigned, such as portions of Watt's Rise of the Novel, Auerbach's Mimesis, and recent works of environmental criticism.

ENGLISH 90AT The Art of the Real
CourseID: 213540
Faculty:
Next Term Offered:

This class will examine literature from the eighteenth century to contemporary era in order understand what makes a work of art or story 'real.' Is there really such a thing as truth, transparency, or evidence in fiction? Why do we want ? or do we want ? art to appear real? How does one go about representing reality? Why would we study fiction in order to understand real-world political, economic, and social problems? The first half of the class will primarily investigate formal and social realism in the eighteenth- and nineteenth-century novel, with some attention to art. In the second half of the course we will consider modern and contemporary varieties of realism such as cinéma vérité, direct cinema, affectless or hysterical realism, and autofiction.
Primary texts may include Jane Austen's Pride and Prejudice, Daniel Defoe's Robinson Crusoe, George Samuel Richardson's Pamela, and Zadie Smith's NW (as well as William Greaves' film symbiotaxiplasm). We will also read critical essays and shorter excerpts by Erich Auerbach, Roland Barthes, Teju Cole, Catherine Gallagher, Karl Ove Knausgård, Tao Lin, György Lukács, David Shields, Ian Watt, and Alex Woloch.

ENGLISH 90FD The Rhetoric of Frederick Douglass and Abraham Lincoln
CourseID: 130670
Faculty:
Next Term Offered:

A critical examination of Douglass' and Lincoln's speeches and other exemplary writings from Lincoln's 1838 Lyceum Address to Douglass's 1894 "Lessons of the Hour." We explore Douglass' and Lincoln's respective rhetorical practices in relation to their politics.

ENGLISH 90FL Fantasy Literature and the Imagined Middle Ages
CourseID: 212791
Faculty:
Next Term Offered:

Why does the Middle Ages ? or a version of it ? offer such fertile ground for 20th and 21st-century Fantasy Literature? What ideas and assumptions about the 'medieval' are embedded in the genre, and why? This course explores critical questions for 'medieval' Fantasy, including narrative modes, the nature of genre itself, racial & cultural nostalgia, national history, moral and ethical shaping of the reader, bildungsroman, and the genre's complicated relationship to Children's & YA literature. We will be sampling from some foundational and less well-known texts of 20th century Fantasy, exploring Fantasy's roots in medieval sagas and romance, and encountering contemporary authors who are reimagining the genre.

ENGLISH 90GS Global Shakespeare
CourseID: 214626
Faculty:
Next Term Offered:

William Shakespeare drew on texts from around the world when he wrote plays for the London theater he named "The Globe." Since they were first performed in early modern England, Shakespeare's plays have become global texts, adapted and re-fashioned for diverse international audiences. In this course, we will study key plays by Shakespeare in relation to their multi-cultural sources and their global adaptations. Students will explore how the plays dramatize distinctly early modern approaches to ethnicity, diversity, and cross-culturalism, locating Shakespeare's works in their own moment of cultural transition. At the same time, they will study how the plays have been re-interpreted and transformed by contemporary writers, playwrights, actors, and directors.
from Europe, the Middle East, Africa, Asia and Asia/Pacific, Latin America, Russia, Australia, New Zealand, and far-reaching corners of the world. How do these contemporary performances negotiate between old and new, local and global, canonicity and cultural plurality? What can the story of Shakespeare's worldwide reach tell us about how we conceive "global" literature today?

**ENGLISH  90GW Genre Trouble: Twentieth-Century Women's Writing**
CourseID: 212792
Faculty: 
Next Term Offered:

This seminar studies a diverse set of literatures from twentieth- and twenty-first century British women writers, with particular attention given to the novel. As its title suggests, our conversations will revolve around the relationship between gender and genre, focusing on the ways women's writing negotiates the very structures and expectations of the novel, as well as on novelistic subgenres associated with women. Our readings will range widely, from domestic fiction, comedies of manners, biographies, the bildungsroman, historical novel, romance, and crime fiction. Authors to be considered include Rebecca West, Sylvia Townsend Warner, Virginia Woolf, Radclyffe Hall, Jean Rhys, Muriel Spark, Buchi Emecheta, Jeanette Winterson, Hilary Mantel, Helen Fielding, Sarah Waters, and Zadie Smith. These primary works will be supplemented by secondary readings such as court transcripts, diaries, and letters; wartime propaganda and welfare state reports; Mass Observation studies on postwar birthrates and families; key works in literature, sociology, and readership; theories of kinship, race, sexuality, and gender identities; and debates around first- and third-world feminisms.

**ENGLISH  90HN The Harvard Novel**
CourseID: 212790
Faculty: 
Next Term Offered:

This course addresses the genre of the "Harvard novel," from Faulkner's Absalom, Absalom! to Elif Batuman's The Idiot and Zadie Smith's On Beauty, in order to examine Harvard's status and signification within the cultural imaginary. It brings together novels (and some films) where Harvard offers the narrative setting, supplies a character's backstory, or even serves as a character in its own right. We will address themes of tradition, access, privilege, race, anxiety, competition, and canonicity.

In addition to serving as an introduction to 20th-21st century Anglo-American literature, this seminar is designed to offer students an opportunity to slow down and engage more
reflectively with the meaning and substance of their time on campus. Lectures will explore narrative depictions of how Harvard experiences extend into broader society, and also the larger trajectory of the individual's post-collegiate life.

ENGLISH 90KA The Brontës
CourseID: 109348
Faculty:
Next Term Offered:

Writings by Emily, Anne, and Charlotte Brontë, as well as the later novels and films their work inspired.

ENGLISH 90LR Love and Consent in the Renaissance
CourseID: 218161
Faculty:
Next Term Offered:

The Renaissance developed a powerful language for describing love in poetry, visual art, drama, and music that continues to shape familiar romantic tropes today. As a master discourse for the period, "love is not love," but politics, sexuality, philosophy, race, and religion as well. We will study how political theorists used love as a language for hierarchy and community, the ways women writers contested male languages of desire, the possibilities for expressing queer feeling in literature and art, the intersections between race and desire, and the sometimes surprising forms of sexual freedom we discover in the past. We will pay particular attention to the forms, conventions, and rhetorics of desire, consent, and erotic feeling in the works of writers including John Donne, Aemelia Lanyer, Thomas Carew, Katherine Philips, George Herbert, Lucy Hutchinson, Mary Wroth, Shakespeare, Petrarch, Aretino, and Louise Labé.

ENGLISH 90LS Literacy Stories
CourseID: 216201
Faculty:
Next Term Offered:

This course investigates literacy, literacy instruction, and literacy movements past and present--and in theory and practice. Engaging with recent fiction and memoirs (i.e. "autobiographies") by authors such as Miriam Toews, Ocean Vuong, and Richard Wagamese, with African-American slave narratives, laboring-class autobiographies, and other texts from the 19th century, and with materials from the history of alphabet books and children's literature, "Literacy Stories" investigates the rich and ambivalent ways in which literature has depicted the literacy needed to consume it. Given under the auspices of both the English Department and Harvard's Mindich Program for Engaged Scholarship, "Literacy Stories" also involves collaborations with, and volunteer work, for, institutes for life-long learning, public libraries, and book clubs?various community
organizations devoted to literacy advocacy and instruction.

Life in quarantine has recently prompted many of us to reflect anew on our reading habits. Separation from their usual schedules and hang-outs is making people more self-conscious about when and where our reading happens. Those of us who miss our usual reading chairs or lamps have been reminded, maybe painfully, of something we generally forget—that reading is a corporeal as well as a mental act. Many virtual book clubs have been founded since March 2020 (students in this class might well be getting involved in some of them), and many people have resolved to use the new emptiness of the days to (as they put it) “catch up on their reading.” These developments make it a good time to reflect—something we’ll do in part by learning from our community partners about the many ways of relating to texts that flourish beyond campus? on the contradictory ways in which we value reading.

To that end, this class will consider, for example, the friction between solitary and social reading?the way that the pleasures of this activity lie sometimes with how it separates us from others and sometimes with how it connects us with others. We will be thinking about literacy’s long-standing association with individual self-determination and thinking about how that association is put into question whenever people’s reading matter gets weaponized as an instrument of their domination? as it was in 17th-century Massachusetts, for instance, by missionary educators who, aiming to conduct North America’s Indigenous populations into knowledge of the Scriptures, also sought thereby to eradicate these nations’ own complex systems of record-keeping and knowledge-transmission. Literacy, the literary and theoretical texts on the syllabus will alike remind us, has a politics. Learning to be literate often involves experiences of unequal power relations and exclusion. Reading with (rather than "to" or "at") others is an ethical challenge?one that English concentrators especially ought to explore.

The writing assignments you will do for "Literacy Stories" will join together academic analysis with personal narrative and social reflection. They will likely encompass regular short responses to the assigned texts, journal entries that reflect critically on what you have been learning from your volunteer work beyond Harvard, and interviews with literacy advocates and community organizers. The capstone project for the seminar will be a memoir—your own literacy story—reflecting on your own memories of reading instruction and integrating those memories with your experiences in the community over the course of the semester.

ENGLISH 90LW Spenser’s Faerie Queene and the Renaissance Imagination: Seminar
CourseID: 130672
Faculty:
Next Term Offered:
A study of the works of the Edmund Spenser, with an emphasis on his masterpiece *The Faerie Queene*. The course will give particular attention to Spenser's roots in the *Bible* and classical literature, his use of allegory, and his engagement with the politics and writing of his own day.

**ENGLISH 90QO T.S. Eliot: Seminar**
CourseID: 146542
Faculty: 
Next Term Offered: 

This course will study the poetry of T.S. Eliot, while also attending to selections of his critical and dramatic writings.

**ENGLISH 90RG Recognitions**
CourseID: 207583
Faculty: 
Next Term Offered: 

Representation and recognition: this course considers the European fortunes of art and recognition from Homer through to the Holocaust. What if recognition of what and whom we have *known already* is the most emotionally forceful, illuminating experience of art? What if we feel ourselves to be recognized by art? What if originality were not what strikes us most forcefully in art? This course will test the force of these propositions, by looking to both literature and visual art (especially painting). In addition, we will look to rhetoric, cognitive psychology and philosophy in order to understand the artistic experience of recognition. The course starts with Homer and ends with the great challenge to recognition: does the Holocaust fundamentally damage the possibility of recognition?

**ENGLISH 90RS The Red Scare and the Blacklist**
CourseID: 218133
Faculty: 
Next Term Offered: 

The Hollywood blacklist, which lasted from 1946 to 1960, barred actors, directors, screenwriters and other professionals from working in the entertainment industry, based on claims that they were, or had been, members of the Communist party, or had sympathized with Communist goals or ideas, or had refused to testify to Congressional investigation committees. This course will engage with the literature, film, television and memoirs of the blacklist, together with a consideration of the transcripts of the House Un-American Activities Committee (HUAC), the “Hollywood Ten” and their defiance of HUAC, and the parallel anti-Communist crusades of FBI Director J. Edgar Hoover and Senator Joseph McCarthy. Authors, screenwriters and actors to be considered include
Lillian Hellman, Arthur Miller, Dalton Trumbo, Victor Navasky, and Paul Robeson; films and film scripts will include *High Noon*, *On the Waterfront*, *Spartacus*, and *Point of Order*.

**ENGLISH 90TC Selfies: Solo and Verbatim Performance**  
CourseID: 214440  
Faculty:  
Next Term Offered:

This course will explore performances of the self--both storytelling and the first personal monologue, and documentary theater and third person verbatim performances. Each seminar will be divided between theoretical and critical discussion of plays and performances--with particular attention to themes of gender and sexual identity, race, community building, and US politics--and a studio practicum in which students will perform their own stories and the stories of others. For the final assignment, students will create either a one-act length verbatim/documentary performance or a one-act length solo show. Course materials will include plays and performances by artists including Heidi Schreck, Anna Deavere Smith, Alan Rickman and Katherine Viner, Erin Markey, Diana Oh, Lily Tomlin, Moises Kaufman, Doug Wright, Joe Salvatore/NYU Verbatim Performance Lab, and The Civilians.

**ENGLISH 90WR War and Its Representations**  
CourseID: 203066  
Faculty:  
Next Term Offered:

This course will explore a range of approaches to representing war. Among the questions we will ask are: When does war begin, and when does it end? At what distance do we sense war, and at what scale does it become legible? What are the stakes of writing, filming, or recording war, or for that matter, studying its representations? We will address these issues through units on violence, trauma, apocalypse, mourning, repair, visuality, and speed. Texts will most likely include Homer's *Iliad*, novels by Virginia Woolf and Pat Barker, Supreme Court cases, films by Alain Resnais and Akira Kurosawa, and theory by Judith Butler, Jacques Derrida, Sigmund Freud, Susan Sontag, Sun Tzu, and Paul Virilio.

**ENGLISH 103G Old English: Working with Manuscripts**  
CourseID: 116977  
Faculty:  
Next Term Offered:

The task of translation will be supplemented by consistent attention to the manuscript contexts of Old English literature. The texts will include selections from the Anglo-Saxon Chronicle, Genesis, the Exeter Book Riddles, Beowulf, and others. The course will guide
students through basic principles of manuscript study and will culminate in a collaborative edition of an Old English text.

ENGLISH 110FF Medieval Fanfiction
CourseID: 205152
Faculty:
Next Term Offered:

Fanfiction is a surprisingly powerful tool for examining medieval literature. It sheds light on the dynamics of rereading and reception that characterize medieval texts, which in turn deepen our own understanding of creative originality. In this class we will read some twentieth- and twenty-first century fanfiction with medievalist themes alongside medieval literary texts that rewrite, reimagine, or let their authors star in pre-existing stories. This medieval 'fanfiction' will include Arthurian romances, 'sequels' to the Aeneid and the Canterbury Tales, and Christian spiritual texts in which devout men and women imagined themselves as 'Mary Sues' in scenes from the Gospels.

ENGLISH 111 Epic: From Homer to Star Wars
CourseID: 130257
Faculty:
Next Term Offered:

Epic is one of the most enduring and far-reaching forms of artistic expression. From the heroic poems of the ancient Near East to modern films of quest and adventure, epic speaks to the shared values and collective aspirations of cultures, peoples, and communities. Yet though its formal conventions and thematic interests endure, epic changes over time. In this course, you will study the historical and literary evolution of epic as it moves from oral verse into new genres and media, reading texts from ancient Greece and Rome alongside works of poetry, fiction, and cinema from early modern Britain, twentieth-century America, and the modern Global South. We will look at some texts in their entirety and others in extracts, focusing on Homer's Iliad and Odyssey, Vergil's Aeneid, Milton's Paradise Lost, George Eliot's Middlemarch, Derek Walcott's Omeros, The Mahabharata (in prose and film versions), and George Lucas' Star Wars, with detailed analysis of Gwendolyn Brooks's American epics on Black life, Annie Allen and In the Mecca. If issues of identity, belonging, and community have always been explored in epic, what is the place of epic in a pluralist multi-culture? What are our contemporary epics today?

ENGLISH 155BN The Nineteenth-Century British Novel
CourseID: 213731
Faculty:
Next Term Offered:

This course explores how the relatively new cultural form of the novel represented and responded to the new features of social life that characterized nineteenth-century Britain.
The nineteenth century was a period of drastic historical change in which the institutions that continue to define modern life became consolidated: companionate marriage, mass transit, urbanization, telecommunications, colonial expansion, secularization, innovations in medicine and psychology, and the establishment of mass culture. Even after they achieved eminence, these institutions continued to evolve at a rapid pace that perhaps only the novel could capture. The novel was in a privileged position to represent and reflect on how these new developments affected everyday life because of its extended length, flexible form, and intricate techniques for examining the relations among self, society, and the world.

This course begins with Jane Austen's *Persuasion* and Charlotte Brontë's *Jane Eyre* in order to establish how the novel form represents these relations, with particular focus on how novelists connect their provincial settings to the operations of empire. The next unit explores how the relation between self and society changes with the emergence of the modern city, where the upheavals of industrial capitalism have particularly insidious effects. Next, we consider how new understandings of the self developed in medicine and psychology affect one's relations to others. In the final part of the course, we turn to two works that reflect on whether the institutions of modern life are harmful or liberating, Thomas Hardy's *Jude the Obscure* and Oscar Wilde's *De Profundis*. In addition to the works mentioned, we also read Elizabeth Gaskell's *Mary Barton*, Charles Dickens's *Bleak House*, Anthony Trollope's *The Warden*, George Eliot's *The Lifted Veil*, and Robert Louis Stevenson's *Dr. Jekyll and Mr. Hyde*.

**ENGLISH 163AN 20th Century American Novel**

CourseID: 214530  
Faculty:  
Next Term Offered:  

Obviously it's impossible to cover 100 years of literature in a semester but we will engage intensely with a group of major American novels published approximately 1900-2000. We will study their literary forms and styles: while also setting them in the context of American literary history and the sociopolitical developments with which they were engaged. Authors may include: Hemingway, Faulkner, Hurston, Himes, Larsen, Ellison, DeLillo, Morrison, Hagedorn, Cather.

**ENGLISH 167BL Post-1945 British Literature**

CourseID: 203074  
Faculty:  
Next Term Offered:  

Why are we so taken by Harry Potter, Lord of the Rings, Downton Abbey, James Bond, and "Keep Calm and Carry On," and the ideas of Britain they project? This course will use this recent surge of Anglophilia as a springboard into our study of post-1945 British literature: a period whose social and political upheavals both radically redefine and conservatively re-entrench "British" as a category of analysis. Among the issues we'll be
considering are war and end of empire, new patterns of migration, emerging formations based on race, gender, and sexuality, and devolution and globalization. Our readings will range from highbrow to genre fiction; from declassified MI6 files to the latest episode of Doctor Who. Authors will most likely include Caryl Churchill, Helen Fielding, Graham Greene, Alan Hollinghurst, Kazuo Ishiguro, John Le Carré, Philip Larkin, David Mitchell, Samuel Selvon, Zadie Smith, Muriel Spark, Salman Rushdie, and Jeanette Winterson.

ENGLISH  169CF Contemporary Fiction
CourseID: 212760
Faculty:
Next Term Offered:

Description TBA

ENGLISH  170A High and Low in Postwar America
CourseID: 130260
Faculty:
Next Term Offered:

Relations between avant-garde, mainstream, and commercial culture from 1945 to 1972.

ENGLISH  172ME Poetry in America: from the Mayflower to Emerson
CourseID: 216062
Faculty:
Next Term Offered:

TBD

ENGLISH  176FR On the Run: Fugitives and Refugees in American Literature
CourseID: 205001
Faculty:
Next Term Offered:

Escaped slaves, refugees, outlaws, and rebels are all on the run in the pages of American literature. In a nation founded in the name of "life, liberty and the pursuit of happiness," stories of the fugitive making a break for freedom have been both troubling and enchanting. In this course, we will examine narratives of flight by American writers from the early days of the Republic through the present. These authors explore many different kinds of fugitivity: from the story of Henry "Box" Brown, a slave who hid in a crate and mailed himself to freedom in the North, to recent fiction by Edwidge Danticat and Viet Thanh Nguyen. Along the way, we'll consider narratives of outlaws, war
ENGLISH 178X The American Novel: Dreiser to the Present
CourseID: 111575
Faculty:
Next Term Offered:


ENGLISH 183ED Poetry, Exile and Displacement
CourseID: 161291
Faculty:
Next Term Offered:

This course studies lyric poetry and its thematic as well as formal expressions of exile, the loss of home, the experience of estrangement or dispossession. Such displacements may be from the self, or from assigned "identity" ("why should I be my aunt,/or me, or anyone?"), as much as from other persons, conditions, regimes. Selected poems will certainly coincide with the urgent unease regarding questions of the body, of the passions, of gender, of background, of national or global citizenship. With some prior examples from the ancient world to the Renaissance and Romantic periods (from Sappho and Ovid, to the anonymous author of "Tom o' Bedlam," and from Wordsworth and Coleridge to Tennyson, Hemans and Dickinson), the course will focus primarily on Twentieth Century works by Marianne Moore, Elizabeth Bishop, James Wright, Anthony Hecht, James Merrill, Derek Walcott, Seamus Heaney, Yusef Komunyakaa, and several others.

ENGLISH 186L Introduction to Law and Literature
CourseID: 213538
Faculty:
Next Term Offered:

This course introduces students to interpretative approaches to law and literature. Why might a lawyer or judge want to examine the law from the perspective of literature or use tools of literary analysis to understand a case? What role has literature played in the development of legal rules and principles? Organized around four major legal topics: nationality, personhood, property, and testimony, this course will explore the rhetorical basis of law, the historical roots of equity,
similarities between literary and legal interpretation, debates about the use of literature to humanize legal decision-making, and the use of narrative as an alternative paradigm for justice. Additionally, we will address the major academic debates in the "law and literature movement," which has seen a recent burst of scholarly activity.

Primary texts may include Claudia Rankine's *Citizen*, M. NourbSe Philip's *Zong!*, Mary Shelley's *Frankenstein*, Sophocles' *Antigone*, Richard Powers' *The Overstory*, Herman Melville's *Benito Cereno*, and J.M. Coetzee's *Disgrace*.

**ENGLISH 189HL How to Live: When Literature Meets Self-Help**
CourseID: 203060
Faculty:
Next Term Offered:

Can literature teach us how to live? We will read some lauded contemporary narratives that strive to answer this question, such as Junot Diaz's *This is How You Lose Her* (1996), Mohsin Hamid's *How to Get Filthy Rich in Rising Asia* (2013), Tash Aw's *Five Star Billionaire* (2013) Eleanor Davis's *How to Be Happy* (2014), Anelise Chen's *So Many Olympic Exertions* (2017). We will investigate the role and uses of literary guidance in our advice-saturated culture.

**ENGLISH 195EC Growth, Technology, Inequality, and Education**
CourseID: 212859
Faculty:
Next Term Offered:

An economist and a humanist, together with professors from the natural sciences, analyze familiar conceptual and policy-relevant issues from viewpoints of their respective disciplines. For example, how do we measure inequality, and at what point does it become problematic (and how do we know)? How then should it be addressed (e.g., tax code, minimum wage)? What are the best policies to confront job losses from technology? What does sustainable growth mean? The goal is not merely to examine four intertwined issues "growth, technology, inequality, and education" but also to understand the distinct concerns and methods of the humanities, social sciences, and natural sciences.

**ENGLISH 224PS Psychoanalysis and Shakespeare**
CourseID: 216100
Faculty:
Next Term Offered:

A consideration of major works of psychoanalysis that have influenced critical interpretations and productions of Shakespeare's plays. Many courses that bring these
two terms together are structured around individual plays (Hamlet, King Lear, The Merchant of Venice, Coriolanus, etc) and the various critical approaches that psychoanalysts and literary critics have brought to bear upon them. This graduate seminar will work in the opposite way, focusing on individual psychoanalytic readings—whether by analysts (e.g. Freud, Lacan, Jung, Rank, Adler, Klein) or psychoanalytic literary critics so as to give participants a stronger and more specific sense of the principles and techniques of psychoanalysis. Participants will be expected to read the plays in conjunction with the theoretical arguments under discussion.

ENGLISH 229S Edmund Spenser: Graduate Seminar
CourseID: 116886
Faculty:
Next Term Offered:

An introduction to Spenser's poetry, concentrating on The Faerie Queene. We will examine questions concerning the theory of allegory, the nature of romance, the place of thinking in poetry, and the tension in Spenser's work, present, because of him, in almost all subsequent English poetry, between personal expression, social structure, and cosmic order.

ENGLISH 230LP Milton Lyric Poetry
CourseID: 218145
Faculty:
Next Term Offered:

A survey of Milton's total poetic output in lyric poetry in English, Latin, and Italian, from the age fifteen (1624) to the choruses of Samson Agonistes, published when he was sixty-two (1671). Prior experience of Milton's epics is necessary. Although the greater part of the lyric poems to be studied are in English, considerable attention will be given to the important Latin poems, for which translations will be consulted alongside the Latin texts. Prior experience of Latin poetry is not required. But some experience of basic Latin is requisite to appreciate the art of these texts and their importance for Milton's English works.

ENGLISH 231 Divine Comedies: Graduate Seminar
CourseID: 130910
Faculty:
Next Term Offered:

A study of four poetic and/or visionary works written 1300-1400: Dante Alighieri’s Divine Comedy, John of Morigny’s Book of Flowers, Julian of Norwich’s Revelation of Love, and William Langland’s Piers Plowman. We consider the inter-relationship between the poetic and the visionary in light of the categories of "orthodoxy" and "discretion of spirits" during a period when both were fiercely contested.
ENGLISH 260 The Edge of the Novel: Poetry, History, Philosophy:
Graduate Seminar
CourseID: 146574
Faculty:
Next Term Offered:

Readings include works by Henry James, George Meredith, Walter Pater, Thomas Bernhard, Anne Carson, W. G. Sebald, David Markson, Thomas Bernhard, John Ashbery, Kenzaburo Oe.

ENGLISH 280QL Queer Literature
CourseID: 212795
Faculty:
Next Term Offered:

Queer and trans literary writing now, its parallels and its precursors, from late medieval to the present day, along with useful ideas about it. Some history, some theory, but mostly queer and trans and queer-adjacent literature. Marlowe, Rochester, K. Phillips, Wilde, Rich, Baldwin; some primary texts determined by *your interests,* including less-often-studied genres and media such as graphic novels and YA.

ENGLISH 282B Ethnic Studies: Past, Present, Future
CourseID: 213576
Faculty:
Next Term Offered:

An interdisciplinary graduate research seminar exploring cutting-edge approaches in ethnic studies. From its institutional beginnings in the late-1960s, the field of ethnic studies built frameworks to critically examine questions of inequality and power through intersecting analytical paradigms of race, indigeneity, gender, sexuality, class, and citizenship. With visiting scholars at Harvard's Warren Center, students will explore how such frameworks remain useful and relevant, interrogate limitations and contradictions within the field, all the while exploring new possibilities and directions within ethnic studies.

Co-taught with Professor Lorgia García Peña

ENGLISH 285SA South Asian Poetry
CourseID: 214514
Faculty:
Next Term Offered:

When we look at literature by writers on the margin (whether this refers to race, nationality, gender, sexuality, and so on) is there a danger of only seeing their art in terms
of its politics, and, rather than recognizing their creativeness, always putting their work through the same victim-template?

Focusing on post-1947 Indian poetry, this course will also glance at Sri Lankan poetry from this period. These poets make a decisive break with the wannabe-colonial, archaically emulous stuff which came before them?and they do this with the aid of European modernism, and US poetry's turn to open forms and a streetwise vernacular. We'll read Nissim Ezekiel, Sujata Bhatt, A.K. Ramanujan, Kamala Das, Arun Kolatkar, Dom Moraes, Eunice de Souza, Adil Jussawalla, Arvind Krishna Mehrotra, and Agha Shahid Ali?poets whose politics is inextricable from the aesthetic richness of their work.

ENGLISH 293S How Sentences Work (in novels, and out of them)
CourseID: 216210
Faculty:
Next Term Offered:

The author of prose (which includes fiction and non-fiction?novels, stories, essays, journals) works with one basic unit of meaning and wonder: the sentence. (Complaining about how bad a writer Dan Brown is, we often poke fun at his daft sentences.) This course examines a range of writers?William Hazlitt, Ralph Waldo Emerson, Walt Whitman, Gerard Manley Hopkins, Herman Melville, D.H. Lawrence, Virginia Woolf, Marion Milner, Saul Bellow and Adil Jussawalla?looking closely at the sound, rhythm, imagery, and syntax of their sentences. It is with sentences that a writer describes a person or a landscape?and what links these writers is their fascination with feelings which demand a new language for their expression. Each of their paragraphs is an adventure into the unknown.

ENGLISH 296CT Topics in Criticism and Theory
CourseID: 212796
Faculty:
Next Term Offered:

This course surveys major works in literary theory and criticism from the high watermark of 'French Theory' as it crossed the Atlantic in the 1970s up to the present. Our goal will be twofold: firstly, to grapple with these arguments and methodologies on their own terms and gauge their impact on literary study, with students encouraged to draw on examples from their respective fields. Secondly, to historicize our own reception of 'theory,' assessing its present place in scholarship and its possible futures at a time when various contemporary modes of inquiry like, "surface reading," "new formalism," and "weak theory," are all pushing back on this intellectual legacy, forcing us to rethink the limits and aims of critique.

ENGLISH 297C Experimental Criticism
CourseID: 216101
Faculty:
uring a time of rampant, often necessary, pre-professionalization, this graduate seminar is meant to both model and inspire academic risk-taking. It offers a selective survey of recent literary criticism that productively transgresses formal, conceptual, and disciplinary norms. Readings may include: Brent Hayes Edwards, Susan Stanford Friedman, Sianne Ngai, Eric Hayot, Paul Saint-Amour, Paul Stephens & Robert Hardwick Weston, and more.

ENGLISH  298DH Methods in the Digital Humanities
CourseID: 203055
Faculty:
Next Term Offered:

This course introduces practical skills in programming for the Digital Humanities (DH) while also investigating the theories and debates that continue to define that field. We will focus primarily on DH's applications to research questions in the humanities rather than on any pedagogical or archival uses. The course is designed with a firm belief not in DH's righteousness?indeed, we will devote considerable time to critiques of the field?but rather in the necessity of grappling with its ideas and practices in an informed manner. To that end, our exploration of DH methods will involve considerable work in computer programming (though you need have no prior knowledge of those skills). Our practical work with coding and with pre-fabricated digital tools will give us the tools to understand what happens to our thinking when we think about the humanities with computers.

ENGLISH  370 Placement Seminar
CourseID: 207884
Faculty:
Next Term Offered:

The job placement seminar will meet during the Fall semester to help students prepare dossiers and oral presentations of their work for the academic job market. The class will meet roughly every two weeks, providing a supportive structure for participants to produce, workshop, and revise application materials. We will also arrange mock interviews and practice teaching demonstrations. The placement officers provide one-on-one support with editing/proofing materials and guidance in navigating the applications process. This seminar is restricted to students in the English department. We welcome students who are intending to actively apply for postdocs or jobs this year to enroll; some seminar sessions suitable for those interested in thinking about the market or their career options but not actively applying this year will be advertised more widely and open to all graduate students in the department.
English and American Literature and Language

ENGLISH V Reading and Writing Fiction
CourseID: 218552
Faculty:
Next Term Offered:

Created for student import
Satellites provide a vast and powerful suite of global observations of Earth system processes. In this course, students will learn research methods and work with satellite data, including those targeted at: land use, ocean biochemistry, climate change, and air pollution. We will emphasize skills for designing and proposing projects, such as: project planning, reading scientific papers, writing research proposals, and exploratory data analysis. This course will provide the framework and understanding for the students to design future missions to address environmental, scientific, and societal challenges. By the end of the course, students will have learned to work with big data both to address existing scientific questions and to pose new ones.

A comprehensive study of the major carbon-containing gases in the atmosphere (CO2 and CH4), emphasizing biogeochemical processes in the oceans, land and atmosphere that regulate their global abundances, plus the human-controlled processes and multiple feedbacks that perturb them. Roles in energy balance, air chemistry and pollution, and stratospheric chemistry will be studied. The course emphasizes active learning, including hands on data analysis of global, regional, and ecosystem observations and creation of models for understanding the cycles and their responses to a changing environment. Students develop research projects throughout the course, and present them publicly in lieu of a final exam.

Observations and fundamentals of ocean dynamics, from the role of the oceans in global climate and climate change to beach waves. Topics include the greenhouse effect, oceans and global warming; El Nino events in the equatorial Pacific Ocean; currents: the wind driven ocean circulation and the Gulf stream; coastal upwelling and fisheries; temperature, salinity, the overturning circulation and its effect on global climate stability.
and variability; wave motions: surface ocean waves, internal waves, tsunamis and tides; ocean observations by ships, satellites, moorings, floats and more.

A field trip to the Woods Hole Oceanographic Institution on Cape Cod will be held during the course, which will be an opportunity to learn about sea-going oceanography.

Software for scientific computation and graphics will be introduced (students may choose either Matlab or python), which will be used for some homework assignments.

**ESE 138 Mysteries of Climate Dynamics**  
CourseID: 210896  
Faculty:  
Next Term Offered: 2020 Spring

We will study the evidence in the climate record for dramatic changes in the climate system and delve into how these challenge our understanding of climate dynamics. Case studies will include the dim early sun paradox, the Snowball Earth, Equable Climates, Glacial/Interglacial and Stadial/Interstadial transitions and ENSO.

**ESE 161 Applied Environmental Toxicology**  
CourseID: 156933  
Faculty:  
Next Term Offered: 2021 Spring

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.

**ESE 163 Pollution Control in Aquatic Ecosystems**  
CourseID: 109684  
Faculty:  
Next Term Offered: 2021 Fall

This course is focused on aspects of environmental engineering related to the fate, transport, and control of pollution in surface water ecosystems. Course modules will
cover ecological impacts of environmental contaminants; fundamental chemistry of natural waters; surface water aspects of engineering hydrology, including rainfall-runoff relationships; quantitative models of pollutant fate and transport in rivers, lakes, estuaries, and wetlands; best management practices for the prevention and control of aquatic pollution; and sustainable natural treatment systems for water quality improvement.

ESE 166 State-of-the-art Instrumentation in Environmental Sciences
CourseID: 161263
Faculty:
Next Term Offered:

This course will showcase how novel technologies have allowed fascinating new insights into key aspects of our environment that are of high societal importance. Students will gain both an understanding of topics such as climate change and air pollution as well as detailed knowledge of the design and underlying principles of environmental instrumentation, especially via the hands-on laboratory sessions.

The development of novel instrumentation, driven by technological advances, is transforming observations and revolutionizing the environmental sciences. For example, they introduce new observables and extend the spatial and temporal coverage and resolution of (Earth) observations. This course will highlight how state-of-the-art instrument design has enabled these fascinating advances by focusing on the engineering as well as physics and chemistry principles that are central to this success. A central component of the course consists of laboratory sessions that provide hands-on experience on important aspects of instrumentation, ranging from data acquisition, instrument control software, basic electronic filtering all the way to learning design concepts and operation of spectroscopic, mass-spectrometric and separations instrumentation. There will also be a tour of some of the laboratories using state-of-the-art environmental instrumentation at Harvard. The course and especially the laboratory experiments contain aspects from various engineering disciplines including environmental, electronic and mechanical engineering.
This course examines federal environmental law in the United States. It provides an introduction some of the most important environmental laws, the methods of regulation and enforcement represented by those laws, and current controversies regarding their implementation and development. Each week's class will be divided between a general discussion of the law under examination and an in-depth discussion of a current controversy involving that law, with a particular focus on the Trump administration’s environmental rollbacks.
Expository Writing

EXPOS 20 English Composition
CourseID: 218554
Faculty:
Next Term Offered:

Course created to support student import
Government

FAS 94MK The Politics of Land, Resources, and Colonialism in North America
CourseID: 217631
Faculty:
Next Term Offered:

This course examines the colonial basis of the continental political economy of the United States and Canada, which has long been understood as the United States' main resource hinterland. It offers students a range of analytical tools through which to understand contemporary contestation over land and resources in both countries. Drawing on writings by political scientists, geographers, anthropologists, and historians, the course moves between theories of nature and settler colonialism; Indigenous perspectives that transcend and exceed Canada and the United States; and specific historical geographies of colonialism, extraction, and contestation. While the course is centered on the structures of power that reproduce the extractive economy, students will also engage with themes of resistance and resurgence throughout.

FAS 1005 Big Data
CourseID: 217628
Faculty:
Next Term Offered:

Everyone talks about big data. Few know how to deal with it. This course will teach you how to work with data of all sizes. How much money is donated to political campaigns? What characteristics are associated with voting Republican? Has the connection between income and ideology changed over time? We need data, often big data, to answer these questions. This course, an introduction to the tools needed for data science, will teach you how to think with data, how to gather information from a variety of sources, how to import that information into a project, how to tidy and transform the variables and observations, how to visualize, how to model relationships, and how to communicate your findings.
Irrationality and self-deception are striking and troubling features of life in society. But how to understand them? This course will examine the theory of ideology as it developed in Marxist social thought before looking at some prominent recent accounts of false consciousness and its significance for politics.

This class explores the ways internet-based and computational technologies are changing political behavior and governing institutions and processes. This includes discussing technologies, such as social media, that influence partisanship, civic participation, and activism, as well as technologies adopted within government, such as pretrial risk assessment software. In addition to analyzing the effects of basic automation and the internet, we will also be focusing on emerging computational technologies including the Internet of Things, Augmented Reality, Advanced Robotics, Machine Learning, and Artificial Intelligence.

This class introduces students to quantitative methods and how they are applied to political science research. It has two overarching goals. First, we focus on the theory of statistical inference - using facts you know to learn about facts you don't know - so that you can truly understand a wide range of methods we introduce, feel comfortable using them in your research, digest new ones invented after class ends, implement them, apply them to your data, interpret the results, and explain them to others. Second, students learn how to publish novel substantive contributions in a scholarly journal. A substantial portion of those in this class publish a revised version of their class paper as
their first scholarly journal article. Please see http://j.mp/G2001 for details.

GOV 1023 tbd  
CourseID: 216177  
Faculty:  
Next Term Offered:

GOV 1188 Identities, State Building, and Political Change in Eurasia (with a focus on Caucasia)  
CourseID: 119776  
Faculty:  
Next Term Offered:

Caucasia has in the past constantly changed its identity and geography. It inhabits an isthmus between the Black and Caspian Seas and is dominated by the Great Caucasus mountain range. On the periphery of competing empires, and straddling important trade routes, the region has always been geopolitically significant. Divided between the North Caucasus (part of the Russian Federation) and the South Caucasus (Georgia, Armenia and Azerbaijan), over the last 30 years, the new states in the region have experienced interethnic conflict, civil war, and repeated revolutions. What has made the state building process in the region so difficult? How has the issue of "stateness" intersected with the region's complicated multiethnic and multireligious heritage? We will examine the socio-economic transformations in the region over the last three decades, including class, religious and ethnic identities, and connect them to changes in the political system? focusing on political parties, legislatures, executive power, the judiciary, civil society, and the press.

GOV 1430 Tech Science to Save the World  
CourseID: 110053  
Faculty:  
Next Term Offered:

This course explores ways to create and use technology to assess and solve real-world societal, political and governance problems. Case studies involve real-world data (e.g., twitter, online ads, and images). Hands-on lab format.
Major movements in German literature and thought from the mid-18th to early 19th century: Enlightenment, Sentimentalism, Storm and Stress, Classicism, Romanticism. Readings include Kant, Klopstock, Lessing, Goethe, Lenz, Schiller, Hölderlin, Kleist, Schlegel, Novalis. This course meets 12-2:15.

To explore key literary, cultural and critical theories, we pose questions through readings of classic and contemporary theorists, from Aristotle to Kant, Schiller, Arendt, Barthes, Foucault, Glissant, Ortiz, Kittler, and Butler, among others. Their approaches include aesthetics, (post)structuralism, (post)colonialism, media theory, gender theory, ecocriticism. Each seminar addresses a core reading and a cluster of variations. Weekly writing assignments will formulate a question that addresses the core texts to prepare for in-class discussions and interpretive activities.
Mathematics

FAS 292Y The Ricci-flat Metric on K3 Manifolds  
CourseID: 215919  
Faculty:  
Next Term Offered:  

We will cover the exact Ricci-flat metric in the first nontrivial example of a compact Calabi-Yau manifold, following the Strominger-Yau-Zaslow and Gaiotto-Moore-Neitzke programs. Along the way, I hope to make contact with enumerative geometry, wall-crossing structures, counts of flat surfaces, hyperkahler quotient constructions of compact manifolds, and possible applications to representation theory.

FAS 295Y Arithmetic Dynamics  
CourseID: 215922  
Faculty:  
Next Term Offered:  

We will discuss various connections between complex-algebraic dynamical systems and arithmetic geometry.
We will discuss various connections between complex-algebraic dynamical systems and arithmetic geometry.

FAS 295Y Arithmetic Dynamics
CourseID: 215925
Faculty:
Next Term Offered:

We will discuss various connections between complex-algebraic dynamical systems and arithmetic geometry.

FAS 295Y Arithmetic Dynamics
CourseID: 215927
Faculty:
Next Term Offered:

We will discuss various connections between complex-algebraic dynamical systems and arithmetic geometry.

FAS 295Y Arithmetic Dynamics
CourseID: 215931
Faculty:
Next Term Offered:

We will discuss various connections

FAS 295Y Arithmetic Dynamics
CourseID: 215932
Faculty:
Next Term Offered:

We Will discuss various connections

FAS 295Y Arithmetic Dynamics
CourseID: 215933
Faculty:
Next Term Offered:

We will discuss various connections between complex-algebraic

FAS 295Y Arithmetic Dynamics
We will discuss various connections between complex-algebraic dynamical systems and arithmetic geometry.

Topics related to the use of D-Modules and Hodge Modules

Course created to support student import
MATH 110 Vector Space Methods for Differential Equations
CourseID: 126610
Faculty: 
Next Term Offered: 2022 Spring

Develops the theory of inner product spaces, both finite-dimensional and infinite-dimensional, and applies it to a variety of ordinary and partial differential equations. Topics: existence and uniqueness theorems, Sturm-Liouville systems, orthogonal polynomials, Fourier series, Fourier and Laplace transforms, eigenvalue problems, and solutions of Laplace's equation and the wave equation in the various coordinate systems.

MATH 115 Methods of Analysis
CourseID: 111065
Faculty: 
Next Term Offered: 2022 Spring

Complex functions; Fourier analysis; Hilbert spaces and operators; Laplace's equations; Bessel and Legendre functions; symmetries; Sturm-Liouville theory.

MATH 119 Introduction to Stochastic Calculus
CourseID: 212889
Faculty: 
Next Term Offered: 2021 Fall

The goal of this class is to provide an introduction to Brownian motion and stochastic calculus. In addition, we will cover basic martingale theory. We will also give an intuitive derivation of Ito's formula and cover some of its application.

MATH 141A Mathematical Logic I
CourseID: 207500
Faculty: 
Next Term Offered: 2021 Fall

Introduction to mathematical logic focusing on the fundamentals of first-order logic (language, axioms, completeness theorem, etc.) and the basic results of model theory (compactness), Lowenheim-Skolem, omitting types etc.

MATH 141B Mathematical Logic II
CourseID: 207501
Faculty: 
Next Term Offered: 2022 Spring
Introduction to the incompleteness phenomenon, covering the incompleteness theorems and the basic results of recursion theory.

MATH 145A Set Theory I  
CourseID: 156119  
Faculty:  
Next Term Offered: 2021 Fall  

An introduction to set theory: ordinals, cardinals, transfinite induction, the cumulative hierarchy, ZFC, the theory of the infinite, and the basics of independence.

MATH 153 Mathematical Biology-Evolutionary Dynamics  
CourseID: 119502  
Faculty:  
Next Term Offered: 2021 Fall  

Introduces basic concepts of mathematical biology and evolutionary dynamics: evolution of genomes, quasi-species, finite and infinite population dynamics, chaos, game dynamics, evolution of cooperation and language, spatial models, evolutionary graph theory, infection dynamics, somatic evolution of cancer.

MATH 224 Representations of Reductive Lie Groups  
CourseID: 125563  
Faculty:  
Next Term Offered: 2022 Spring  

This course will introduce algebraic groups, along with some necessary tools from algebraic geometry. The goal of the course is to arrive at the classification of reductive groups in terms of root data.

MATH 230BR Advanced Differential Geometry  
CourseID: 115039  
Faculty:  
Next Term Offered: 2022 Spring  


MATH 243 Evolutionary Dynamics  
CourseID: 119511
Advanced topics of evolutionary dynamics. Seminars and research projects.

MATH 388 Topics in Mathematics and Biology
CourseID: 118701
Faculty: 
Next Term Offered: 2021 Fall

MATH 397 Topics in Number Theory
CourseID: 216376
Faculty: 
Next Term Offered: 
Folklore and Mythology

FOLKMYTH 98A History and Theory of Folklore and Mythology
CourseID: 115032
Faculty: Stephen Mitchell
Next Term Offered: 2021 Fall

Examines the development of folklore and mythology as fields of study, with particular attention to the methodological approaches suited to their areas of enquiry. Considers the study of folklore and mythology in the 19th and early 20th centuries, but focuses especially on theoretical contributions to the study of folklore, mythology, and oral literature in recent decades.

FOLKMYTH 106 History of Witchcraft and Charm Magic
CourseID: 109652
Faculty: Stephen Mitchell
Next Term Offered: 2022 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 108 The Art and Craft of Scholarly Storytelling: A Workshop in Folkloristic Writing and Expression
CourseID: 210898
Faculty: Lowell Brower
Next Term Offered: 2021 Fall

Storytelling is not just an object of folkloristic study, but also a central aspect of the folklorist's job. This course asks how scholars of human communities and expressive practices might do justice to other peoples' stories while turning them into stories of their own. An intimate, supportive, writing-intensive seminar, FM 108 introduces students to a host of exciting and innovative approaches to "scholarly storytelling," allowing them to develop both practical and poetic academic writing skills as they engage in hands-on peer review workshop sessions and theoretical discussions about academic writing, narrative craft, and creative expression. Students should enter the class having already begun a larger intellectual project?be it a senior thesis, a creative project, a major research paper?and be prepared to share this project with the class and offer thoughtful feedback to their peers. Along with reading and critiquing one another's works-in-progress, we'll examine everything from classical folklore collections, to ethnographic
novels, to former departmental theses, to experimental non-fiction, to yesterday's most
tolkinstic tweets, taking inspiration from our predecessors in our quest to become better
storytellers about the communities, expressive practices, and consequential questions
that we've chosen to explore.

FOLKMYTH 116 African Storytellers and Oral Traditions: Folklore and the
Verbal Arts from Abidjan to Zanzibar
CourseID: 215723
Faculty: Lowell Brower
Next Term Offered: 2021 Fall

African Storytellers and Oral Traditions introduces students to the pasts, presents, and
futures of Africa's verbal arts, and to a vibrant cast of African storytellers, poets,
performers, and artists engaged in various projects of meaning-making, tradition-
bearing, connection-forging, and world-building. Exploring folktales, myths, legends,
praise poems, proverbs, and songs -- as artistic texts, as situated performances, and as
social acts -- this course attempts to do justice to the powers, potentials, politics, and
poetics of African storytelling circa 2020. Organized thematically rather than temporally,
this course seeks to trouble both the typical assumptions about "modern" vs. "traditional"
expressive culture (as well as long-standing debates about "orality and literacy") by
highlighting the coexistence and co-pollination of cattle songs and battle raps, trickster
tales and Nollywood screenplays, sacred origin myths and neoliberal critiques,
supernatural legends and human-rights testimony. Highlighting the relationship between
communal storytelling performances, ancient oral traditions, and contemporary
expressive texts, our course readings, discussions, and social engagement activities will
amplify and illuminate the myriad forms of creative expression though which African
storytellers are making their voices heard.

FOLKMYTH 131 The Storyteller in Flight: Migrant Narratives, Refugee
Camp Cultures, and the Arts of Displacement
CourseID: 213673
Faculty: Lowell Brower
Next Term Offered:

What are the effects of displacement on tradition, storytelling, and cultural belonging?
How does migration influence narration, creative expression, and imagination? What are
the powers and potentials of artistic communication after existential rupture? What is the
role of the storyteller in flight? This course explores expressive cultures in motion, amid
crisis, and out of place, and asks how tradition bearers and creative innovators adapt
when the communities in which their preexisting cultural practices had once flourished
are destroyed, uprooted, transformed, or dispersed. It also asks how researchers, aid
workers, activists, and other outsiders might engage in ethical and beneficial ways with
individuals and communities in exile. In examining the impacts of forced migration on
cultural production, transmission, and innovation, we will put classical theories of
Refugee and Migration Studies in conversation with recent ethnographies and folklore
collections, as well as memoirs, novels, songs, and films by and about displaced persons. With case studies ranging from colonial Africa, to post-war Europe, to contemporary America we will explore what, if anything, holds together "the refugee experience," while also interrogating our own neighborly obligations and scholarly commitments as we navigate what has famously been deemed "the century of the migrant." Course work will include analytic and creative projects as well as experiential learning opportunities. The social engagement option for this course will offer students the chance to investigate our course topics in collaboration with local community members.

FOLKMYTH 132 The Folktale and Its Tellers: The Powers, Politics, and Poetics of Enchantment
CourseID: 213674
Faculty: Lowell Brower
Next Term Offered: 2020 Fall

In defiance of Walter Benjamin's premature 1936 lamentation that "the art of storytelling is coming to an end," this course explores the enduring powers of once upon a time in the here and now. By studying "the folktale" genre cross-culturally and trans-historically, in its myriad local forms and historical manifestations, we will explore what folktales are, how folktales move, what folktales mean, and what folktales do. On our folkloric journey, we'll meet a colorful cast of unlikely heroes, wicked stepmothers, swallowing monsters, and bawdy tricksters, as we visit with storytellers from the cattle kraals of South Africa, to the film studios of Hollywood, to the alleyways of India, to the turf fires of Ireland, to the post-genocide villages of Rwanda. Along the way we'll delve into narrative conventions, formal properties, character studies, common motifs, interpretive frameworks, literary and filmic adaptations, theories of transmission and variation, the poetics of performance, and the politics of storytelling. At the center of our investigations will be the figure of the storyteller - that master of enchantment, wielding words to change the world.

While exploring folktales from academic point of view through scholarly readings and intellectual theorization, we will also engage with storytelling on the ground, through community engagement, embodied performance, sensuous listening, and intersubjective exchange. Experimenting with both folkloristic research and folklore-in-performance, we will gain practical experience in storytelling and story-collecting. Working with local yarn-spinners, we will try our hands at collaborative folkloristic research: documenting, presenting, and interpreting a contemporary tale-in-performance. In order to better understand the storyteller's art, we will also experiment with tale-telling and embodied performance ourselves.

Course readings will include oral-literary texts, ethnographic studies, artistic performances, theoretical works, creative writing, songs, and films. Course work will include close readings of expressive texts, analytic and creative projects, social
engagement activities, and storytelling performances.

FOLKMYTH 160 Scandinavian Folklore: Trolls, Trolldom and the Uses of Tradition
CourseID: 205673
Faculty: Stephen Mitchell
Next Term Offered: 2022 Spring

Examines Nordic folklore and folklife, with an emphasis on narratives, supernatural beliefs, and material culture from the 17th to the early 20th centuries, interpreted against additional sources of information drawn from the archaeological and historical records. Key strategies used in the fields of folklore, literature, and cultural history to interpret such texts discussed in detail, and applied in analyzing our materials. Also carefully considered, the history and development of folklore studies in Scandinavia and the role of folklore (and folklore studies) as, and in, anti-colonial and nation-building movements.

FOLKMYTH 176 Tattoo: Histories and Practices
CourseID: 161297
Faculty: Felicity Lufkin
Next Term Offered: 2021 Fall

Tattooing has been practiced in many different social and cultural settings, in many different time periods, to different ends. In the United States, tattooing was long associated with marginalized and stigmatized groups, but since the 1970s, has become increasingly popular and even mainstream. This seminar style class will explore distinct regional histories of tattoo, the development of tattooing in the US, and the different ways that contemporary tattoo practitioners situate themselves historically and negotiate boundaries of race, class and gender. We will also consider tattoo as an art form that both invites and resists aesthetic judgments.
Romance Languages and Literatures

FRENCH 15 Intensive Beginning French: Parisian Culture & Life
CourseID: 124332
Faculty:
Next Term Offered:

This intensive Beginning French course provides an accelerated introduction to Beginning French with intensive work on interpersonal communication and interpreting and producing language in written and oral forms. Students explore diverse facets of Parisian life through the interpretation and exploration of photos, art, and film and through interactions with native French speakers. Students learn to speak and write in the past, present, and future, make descriptions, ask questions, make comparisons, accept and refuse invitations, give advice, and express hypothetical situations, emotions, and opinions.

FRENCH 61N Exploring French Language and Culture Through Industry:
Fashion, Cabarets, and les Grands Magasins
CourseID: 148202
Faculty:
Next Term Offered:

In this advanced French language and culture course, you will refine your communicative competence by navigating the cultural landscape of French industry. Through the analysis of articles, images, literary texts and discussions with classmates and invited guest speakers, you will explore topics such as the invention of the department store in Paris and the commercialization of art and entertainment in Montmartre during the Industrial Revolution. Course assignments include weekly essays, in-class debates, exams, an oral presentation, and a final project.

FRENCH 70B Experiments in Justice, Gender, and Genre: Introduction to 19th - 21st Century French Literature
CourseID: 119121
Faculty:
Next Term Offered:

Gender identity and expectations; prison reform and the death penalty; personal accountability and protest; new media and modes of expression. Writers in the 19th and 20th centuries grappled with these questions as we do today. How do their sometimes revolutionary, sometimes surprisingly familiar approaches overlap with movements like
Romanticism, Realism, Existentialism, and other new forms of fiction? We will explore short works by Sand, Hugo, Balzac, and Zola; poetry by Baudelaire; drama by Camus; a novel by Colette; a graphic novel by Fres; and films by Berri and Tavernier.

FRENCH 70C Introduction to French Literature III: The Francophone World
CourseID: 118532
Faculty:
Next Term Offered: 2016 Fall

Survey of Francophone literature, cinema, and art from Africa, the Caribbean, the Indian Ocean, and Vietnam.

FRENCH 85 "It's the end of the world as we know it, and I feel?": Apocalyptic and Dystopian French Fiction
CourseID: 213685
Faculty:
Next Term Offered:

The French novelist Stendhal once described the novel as "un miroir qu'on promène le long d'un chemin," a mirror we carry along the road. This course examines apocalyptic and dystopian French novels in order to explore what sort of reflection of reality such narratives of catastrophe, corruption, destruction, and dysfunction reveal to us. What are the political and literary stakes of writing the end of the world as we know it? What does it mean to be human at a moment in history where we are constantly poised at the edge of the end of humanity? What can and does literature do for us? Readings include Darrieussecq, Despentes, Garréta, Volodine.

FRENCH 110 Marcel Proust and his times
CourseID: 213367
Faculty:
Next Term Offered:

This course will introduce newcomers to Proust's In Search of Lost Times, and enrich veteran readers' understanding with context and perspectives. Special consideration will be dedicated to the visual aspects of Proust's writing and his interest in the visual arts, taking advantage of the collections of the Fogg Museum, the Museum of Fine Arts and the Isabella Stewart Gardner Museum.

FRENCH 128 Growing Pains: Le roman d'apprentissage, l'apprentissage du roman
CourseID: 203381
Faculty:
Next Term Offered:

Explores the modern roman d'apprentissage in order to see how these novels about growing up show how the novel itself grows up as writers confront the political, social, and intellectual volatility and instabilities of a twentieth-century world. Readings include Colette, Céline, Duras, Queneau, Sarraute, Wittig.

FRENCH 135 Under the Table/Sous la Table
CourseID: 213686
Faculty:
Next Term Offered:

An exploration of the underbelly of the flourishing of the culinary arts in France, from pre-revolution to today, with a focus on the 19th century. Pairings of novels, newspaper articles, etc celebrating gastronomy with others exposing how such a flourishing was facilitated. Weekly units might be: sugar; rum; spices; working class; slaves (etc)

FRENCH 142 Encounters: Face-to-Face Interaction, Affects, Politics, and the Arts in Early Modern France
CourseID: 126963
Faculty:
Next Term Offered:

This course explores different types of visual encounters during the 17th century, by considering early modern experiences and ways of meeting and seeing others, works of art, spaces. Readings include drama (Corneille, Racine, Molière), comical histories (Cyrano de Bergerac), gallant novels (Madame de Lafayette), treaties of civility, pictorial theory, and travel literature, as well as historical and theoretical texts on the gaze and social behavior (Foucault, Jay, Marin, Mondzain, Goffman).

FRENCH 144 Humanimals in Medieval French Literature
CourseID: 203310
Faculty:
Next Term Offered:

Animals are everywhere in medieval literature. We find horses and dogs in epic and courtly romances, birds in love poetry, pigs, cows, sheeps and chickens in fabliaux, lions and eagles in fables, Renard the fox in his own romance, unicorns, phenix and yales (yes, yales?) in bestiaries, and the human animal in all the above mentioned. Using texts by Aristotle and medieval theologians and philosophers, we will examine the unstable distinction between human and animal, their frequent fusion and confusion, their relationship, and their coexistence.

FRENCH 148C Performing in French: A Production of a Modern Tragedy
CourseID: 109972
This course focuses on the preparation of a student-led production of a contemporary French play, and concludes with a performance in French at the end of the semester. To react to the challenges we will face in staging a "modern tragedy", we will examine the diversity of tragic forms and motifs since the 17th century up to our days through the close readings of a given set of plays, as well as the main trends in the contemporary staging, through the viewing and discussion of video versions of recent productions.

FRENCH 153 The Novel after the New Novel
CourseID: 203385
Faculty:
Next Term Offered:
A survey of the contemporary French novel, defined loosely as the novel after the New Novel, viewed by some as the last avant-garde literary movement in France. We will begin with the New Novel and move chronologically through to the present, reading authors from a period—the contemporary—who is in the process of being formed. Readings will include Carrère, Chevillard, Darrieussecq, Echenoz, Ernaux, Pireyre, Volodine.

FRENCH 174 Mediterranean Crossings: Exiles, Migrants and Refugees
CourseID: 156589
Faculty:
Next Term Offered:
The Mediterranean has long been the locus of a turbulent history and of vast population movements. This course will focus specifically on the period since the middle of the twentieth century, that is, since decolonization in North Africa and the Middle East. Civil wars, political strife and economic hardship push many into voluntary, forced or even metaphoric exile, lead to massive migrations and produce refugees in record numbers. This course will study some of these movements with a triple focus on exiles, migrants and refugees, as seen through literary works and film. We will ask what artistic practices contribute and how they mediate these contexts.

FRENCH 175 Julia Kristeva: Can Literature Still Change the World?
CourseID: 122353
Faculty:
Next Term Offered:
A textual and political introduction to one of the most important intellectuals of the 20th century as well as an attempt to draw some conclusions about the promises of her work for the future. Designed for both undergraduates and graduate students looking to understand and evaluate the import of art and literature on the world stage. Special
attention will be paid to the question of gender and women in Kristeva’s writings.

FRENCH 192 Spectacular France: Topics in Music from 1600-1800
CourseID: 215683
Faculty:
Next Term Offered:

Spectacular France. French musical theater in the 17th & 18th centuries. This course considers French spectacle in all dimensions with special emphasis on absolutism and the politics of performance. Genres include machine tragedy, comédie-ballet, horse ballet, carrousels, and opera; collaborators include Jean Racine, Jean-Baptiste Lully, Molière, Jean-Philippe Rameau, and Georg Friedrich Handel. Guest performers will discuss historical staging and French operas performed in colonial Haiti. Readings are in English.

FRENCH 216 The Romance of the Rose
CourseID: 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 250 Urban Cannibals: Les Mystères de Paris
CourseID: 205163
Faculty:
Next Term Offered:

Les Mystères de Paris, Eugène Sue’s serialized novel of 1842-43, was one of the earliest French novels to focus on the working classes, and became an instant cross-cultural and international hit. It has not ceased to generate debate: around its project (simple potboiler or serious social reform?), its narrative aesthetics (crazy criss-crossed plotlines or proto-modernist collage?) and its ambiguous discursive strategies (populist and elitist, reformist and nationalist, abolitionist and racist, progressive and eugenic). We’ll explore both the internal microcosm of the novel and the radiating external worlds it pulls into its pages from France in the world, circa 1840. Each student will choose a research project spinning out from the novel (prisons, markets, hunger, cannibalism, social services, journalism, poverty, criminality, crowds, slavery, reform, revolution, class conflict, imperialism, charity, urban/pastoral, etc.)
Selected readings from Saint-Simon, Fourier, Le Bon, Nordau, Charcot, Lombroso, Marx, and Sue's own maritime tales, from the nineteenth century, and the more recent work of Louis Chevalier, Dominic Kalifa, Kaja Silverman, Alex Woloch, and others.

FRENCH 262 Transnationalism and the Francophone World: Race, Gender, Sexuality
CourseID: 161257
Faculty:
Next Term Offered:

This graduate course links different regions of the Francophone world and provides an introduction to the major debates about gender issues in postcolonial Francophone studies. We focus on the aesthetics and politics of writers who challenge the notion of a stable identity, be it national, racial or sexual. The course draws on the historico-cultural issues pertinent to each region (Africa, the Atlantic, Pacific, and Indian Ocean). Writers include Mariama Bâ (Senegal), Maryse Condé (Guadeloupe/France/USA), Ananda Devi (Mauritius and France), Fatou Diome (Senegal and France), Assia Djebar (Algeria/France/USA), Marie Chauvet (Haiti), Shenaz Patel (Mauritius), and Linda Lê (Vietnam and France).

ITAL 73 Healing Words after the Black Death: Boccaccio, Petrarch, Catherine of Siena
CourseID: 213365
Faculty:
Next Term Offered:

A survey course on the impact of the Black Death (1350ca), one of the most devastating ecological crises in human history, on Italian medieval society. Through an examination of literary, visual and architectural artifacts, we will look at how the great plague affected the life of many. Using the prism offered, in particular, by the works of Boccaccio, Petrarch, Catherine of Siena, Christine de Pizan, Giotto and Piero della Francesca, we will discuss the development of medicine and the rise of physicians; art as evasiveness, entertainment and introspection; spiritual and secular solidarity; story-telling and laughter as a form of healing; and a new approach to Roman and Greek antiquities laying the foundation of Italian Humanism.

ITAL 96R Italian and the Community: Italy. Academic Internships in Italian Language and Culture: Special Crse
CourseID: 124993
Faculty:
Next Term Offered:

An opportunity to engage in the practical applications of Italian language and culture in
an immersion environment. Internships may include placement in a variety of sectors, including public education, the media and the arts.

**ITAL 138 The Cosmos of the Divine Comedy**

CourseID: 207950
Faculty:
Next Term Offered:

Dante's *Commedia* is the story of a journey back from personal and societal Hell, through self-knowledge and friendship. The book itself is an act of friendship. It never disappoints. It teaches itself. It has been engineered to improve design thinking and emotional intelligence in its readers in proportion to their commitment. It prompts readers to experience knowledge as a communal and continual endeavor. Its metaphors are accessible irrespective of time, linguistic or socio-cultural barriers. Its characters and their voices brought solace into the darkest corners of modern history. The book is human craft and ingenuity at their best. The ways in which notions and ideas are encoded in Dante's *Commedia* are testimony to the capabilities of the human mind at investigating and preserving the diversity of the world, and the interconnectedness of all matter.

This introductory course has been designed to make Dante's masterpiece accessible and relevant to students interested in a variety of disciplines and bodies of knowledge. The readings and lectures are intended to provoke free inquiry and critical thinking into a highly complex linguistic object, and the information contained therein.

The course has two principal aims. First, through guided and independent 'reverse engineering' - by exploring the text piece by piece - and by working closely with the professor, students will gain an understanding of the mechanisms and potentialities of verbal language and of poetry in particular, as the conjunction of verbal language and music. This will help you to become a better writer and a better reader: more sophisticated, less credulous, more perceptive. Second, the course will introduce you to a key period of world's history, the European Middle Ages, its practical realities and its key spiritual, scientific, political, and artistic dilemmas. This is the time that saw the emergence and flourishing of new languages over Latin; of academic communities; that established the separation of religious and secular power; that saw the first monastic rule written by a woman.

**ITAL 139 Intermedia Italy: Poetry and Visuality in the Twentieth Century**

CourseID: 214524
Faculty:
Next Term Offered:

Moving in the hybrid space where the encounter between poetry and visual arts takes
the forms of intermedia representation (involving painting, typography, photography, cinema, and music), this course explores the evolution of Italian visual poetry in the twentieth century. To this end, we will analyze a series of exceptional artifacts, from Futurism to Neo-Avant-Gardes: metal books; object and collage poems; video, sound, and performative poetry. Materials will be examined directly (if available at Harvard) or digitally (if from Italian archives), with respect to the local and global cultural context of their time, drawing an unprecedented outline of modern Italian poetry.

ITAL 141 Epic Wars: Heroic Stories from Homer to the Renaissance
CourseID: 108771
Faculty:
Next Term Offered:

A journey through the epic, literary genre that has narrated the founding myths of nations and civilizations, from the war of Troy to the origins of Rome, from the battle of Roncevaux to the Crusades. Includes a close reading of Torquato Tasso's Jerusalem Delivered, the Renaissance poem celebrating the modern West's new imperial vision of and its discontents.

ITAL 165 Cultural Leadership: Machiavelli, Gramsci, and the People
CourseID: 216040
Faculty:
Next Term Offered:

 Mostly dedicated to two Italian thinkers four centuries apart, this seminar explores the rise and development of modern populism, and suggests that culture and the arts are indispensable characteristics of good government. Readings include Niccolò Machiavelli's The Prince and The Art of War, and Antonio Gramsci's Prison Notebooks.

ITAL 201R Italian Studies Colloquium
CourseID: 123829
Faculty:
Next Term Offered:

Current scholars in the field of Italian Studies present their most recent works on literature, art and architecture, history, and the social sciences. Students also learn how to conduct video interviews and write book reviews.

ITAL 267 Satire and Censorship in 20th Century Italy
CourseID: 212934
Faculty:
Next Term Offered:
This seminar allows you to study and discuss a wide range of different texts and topics related to satire from within Italian culture of the modern era. It focuses on artifacts of different kinds (novels, poetry, manifestos, cartoons, comics, theatrical plays, tv series, movies), works in different media (written texts, film, visual arts), and different modes of cultural enquiry (literary criticism and theory, intellectual and cultural history, cultural sociology and philosophy), to give you a rich sense of the variety and complexity of the satirical mode in 20th century Italy. Authors include Marinetti, Malaparte, Flaiano, Guareschi, Fellini, Fo, Guzzanti, Sorrentino.

PORTUG 70 Samba, Bossa Nova and Beyond: Brazilian Society through the Study of Music
CourseID: 203375
Faculty:
Next Term Offered:

Deciphering contemporary Brazilian society through its music. This seminar-like course will employ critical reading, writing, and listening without excluding its hands-on elements and music workshops. Students will develop a deeper knowledge of political currents that have influenced Brazilian music, have the opportunity to explore a wide variety of musical genres that surpasses Samba and Bossa Nova, as well as interact with Brazilian musicians and critics from Brazil and beyond. The diversity of Brazil's music will be celebrated by considering its regional (música do norte, nordeste, sul e sudeste), and sociopolitical aspects.

PORTUG 123B Portuguese Literary Studies II
CourseID: 156541
Faculty:
Next Term Offered:

A continuation of Portuguese 123a, with an emphasis on the nineteenth century and modernity.

PORTUG 182 The Worlds of Camões
CourseID: 110085
Faculty:
Next Term Offered:

A study of the Renaissance Portuguese imagination through the work of Luís de Camões. The course will center on the epic and lyric poetry of Camões as a way to think broadly about the literary and intellectual currents of the 16th century. Empire, the structure of the cosmos, and mythography will figure into our analyses. To promote an understanding of the international culture of letters and humanism, authors from Spain, Italy, and France will also be included. Prerequisite: Reading knowledge of Portuguese.
PORTUG 226 Laughter and Disaster
CourseID: 212914
Faculty:
Next Term Offered:

This course examines how the comedic and the disastrous/tragic function as modes of cultural critique and establish and contest varying conceptualizations of national identity in Portugal from the Middle Ages to the 19th century.

ROM-LANG 220 Second Language Research and Practice
CourseID: 207688
Faculty:
Next Term Offered:

This course is designed for experienced TFS and TAs who are currently teaching a foreign language at Harvard, or those who have prior foreign language teaching experience. The course will build upon instructors’ understanding of second language acquisition through an in-depth exploration of current theories and trends in second language acquisition, relevant applied linguistics research, and models of theory in practice. Through interactive discussions, video-conferencing, and action research, the course will explore themes associated with social pedagogies, emerging technologies, beliefs and motivation, culture and identity, notions of advancedness, genre-based pedagogies, and multi-literacies and their relationship to language, culture, and literature instruction.

ROM-STD 109 The Global Game: Soccer, Politics, and Popular Culture
CourseID: 127880
Faculty:
Next Term Offered:

Soccer is not only the sport of the world, but a most socially significant practice. In Latin America and Europe it is a staple feature of popular culture, closely connected with national politics. The course will make use of filmic, visual, literary, theoretical, and historical materials to analyze the relationship of soccer to social movements, colonialism, violence, gender, architecture, music, and the star system (Pelé, Maradona, Zidane, Totti, Cristiano Ronaldo, Messi).

ROM-STD 235A Ethnic Studies: Past, Present, and Future
CourseID: 213437
Faculty:
Next Term Offered:

An interdisciplinary graduate research seminar exploring cutting-edge
approaches in ethnic studies. From its institutional beginnings in the late-1960s, the field of ethnic studies built frameworks to critically examine questions of inequality and power through intersecting analytical paradigms of race, indigeneity, gender, sexuality, class, and citizenship. With visiting scholars at Harvard's Warren Center, students will explore how such frameworks remain useful and relevant, interrogate limitations and contradictions within the field, all the while exploring new possibilities and directions within ethnic studies.

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

ROM-STD 235B Ethnic Studies: Past, Present, and Future
CourseID: 213438
Faculty:
Next Term Offered:

An interdisciplinary graduate research seminar exploring cutting-edge approaches in ethnic studies. From its institutional beginnings in the late-1960s, the field of ethnic studies built frameworks to critically examine questions of inequality and power through intersecting analytical paradigms of race, indigeneity, gender, sexuality, class, and citizenship. With visiting scholars at Harvard's Warren Center, students will explore how such frameworks remain useful and relevant, interrogate limitations and contradictions within the field, all the while exploring new possibilities and directions within ethnic studies.

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

ROM-STD 242 Graduate Seminar: Transatlantic Poetics
CourseID: 156631
Faculty:
Next Term Offered:

The seminar studies transatlantic enterprises of Spain and Portugal through their prolific cultures of textuality. Epic, chronicles, lyric and other 15th to 17th-century genres will be scrutinized for influences of Atlantic itineraries, real and imagined, on projects of poetic "making". Authors include Garcilaso, Caminha, Ercilla, Camões, Góngora, Cervantes, Lope, Alarcón, Quevedo, Zurara, and others.

ROM-STD 250 Mahindra Humanities Center Workshop
CourseID: 207026
Faculty:
Next Term Offered:
The Mahindra Humanities Center Workshop (ROM ST 250), is a credit-bearing workshop-style course designed to offer intellectual exchange based on the different activities and conversations convened by the MHC, such as the Tanner Lectures (given by Masha Gessen this Spring), the Mellon Postdoctoral Program on Migration, and the MHC multiple seminars and fora. Each student will choose a few events to attend a month, and the workshop will focus on discussing the ways in which they add depth and complexity to her/his thinking, as well as to his/her preparation for the profession. Event reports and responses to be posted on canvas. Meeting times TBD by the group.

**SPANSH 70A Hispanic Literature: the Middle Ages**
CourseID: 110853
Faculty:
Next Term Offered: 2016 Fall

Introduction to the study of medieval Spanish literature from its origins through the 15th century. Close reading of representative works (both prose and verse) framed in historical context: Cantar de Mío Cid, Milagros de Nuestra Señora, Libro de buen amor, Conde Lucanor, Laberinto de Fortuna, Coplas a la muerte de su padre, Cárcel de amor and La Celestina. Attention to critical approaches and themes in medieval literary studies (e.g. orality and poetics, historicism, folklore and narratology).

**SPANSH 113 Cultural and Political Myth-Making: Eva Peron, Che Guevara, Simon Bolivar and La Malinche**
CourseID: 205168
Faculty:
Next Term Offered:

Political power rests on concrete factors involved in the administration of public resources and the implementation of governmental policies. But it cannot be fully understood without examining cultural strategies of self presentation and the ways in which social groups respond to them. Myth-making is intrinsic to politics, and we will trace its workings in a few Latin American cases.

**SPANSH 119 Introduction to Spanish Art: A History of Its Masterpieces**
CourseID: 206815
Faculty:
Next Term Offered:

This course explores significant works of Spanish art, with a particular emphasis on painting, photography, and sculpture in their historical, political, and cultural context, as well as interactions between painting, photography, and film. Through masterpieces such as Goya's black paintings, Velazquez's Las Meninas, Picasso's Guernica, Frank Capa's photographs of the Spanish Civil War, Gaudi's Parc Güell, and Dali's contribution to the surrealist films of Buñuel and Hitchcock, among others, we will analyze interplays
between art, history, and society. In this course we will develop a vocabulary for appreciating and discussing visual art, as well as learning what works of art can tell us about history and culture.

**SPANSH  122 Spanish Film from Buñuel to Almodóvar**
CourseID: 141012
Faculty:
Next Term Offered:

This course will examine a wide range of core Spanish films from directors such as Almodóvar, Amenábar, Berlanga, Bollaín, Buñuel, Coixet, Erice, and León de Aranoa, among others. It will include analyses of prominent genres (drama, comedy, terror, fantasy, meta-cinema, sci-fi, noir) and will pay particular attention to key historical and cultural moments (the Spanish Civil War, film under dictatorship and democracy, censorship, "La movida," the economic crisis, the rise of immigration, etc.) from the 1940s to the present. Films with subtitles.

**SPANSH  123 Afro-Latin America: History and Culture**
CourseID: 215693
Faculty:
Next Term Offered:

This course explores how African cultural expressions influenced colonial societies and later national cultures in Latin America. How did peoples of African descent shape the formation of Latin American national cultures in areas such as literature, religion, visual arts, music, dance, and cinema? Some scholars have debated whether African religious, musical, medical and communitarian practices were reproduced in the New World or whether they were creolized through fusion with other (European and indigenous) practices. Others have sought to explain how African cultural practices (music, religion, dances) that were derided as primitive and uncivilized in the early twentieth century became "nationalized" and transformed into key expressions of national cultures in many Latin American countries. What are the implications of this process for those cultural forms and their practitioners? How do they impact, if at all, other areas of social life? We explore these questions through historical and literary texts, films, visual arts, and recordings.

**SPANSH  126 Performing Latinidad**
CourseID: 110061
Faculty:
Next Term Offered:

What exactly does the word "latinidad" mean? How has "the Latino" been constructed in U.S. culture? What has been the importance of "latinidad" in the social and political history of people of Latin American descent in this country? What place does "latinidad"
occupy within the North American academy? Our course attempts to respond to these inquiries through an analysis of Latino performance and its representation within particular literary and cultural productions: poetry, theater, film, and stand-up comedy.

**SPANSH 146 Tropical Fantasies: The Hispanic Caribbean and Haiti in Contemporary Literature**  
CourseID: 203758  
Faculty:  
Next Term Offered:  

The Caribbean has long been portrayed as an exotic region of the world. Colonial depictions of the Caribbean imagined wild, savage creatures that ate human flesh. Travel narratives of the 19th century chronicled the region as backward, and underdeveloped while rendering Caribbean subjects, particularly women, as hypersexual and sexually available for consumption. This course proposes an analysis of the different myths and fantasies that have been created about the Caribbean and of the historical and cultural realities surrounding these myths. Through a close reading of literary, artistic, critical, and historical texts we will examine topics such as: race, ethnic, and gender identity constructions; the rise of the plantation economy; and the emergence of modern nations. The relationship between the presence of coloniality—evidenced in the continued ties between Caribbean islands and United States and Europe—and the emergence of diasporic Caribbean voices of dissidence will be a guiding tone for our conversations throughout the semester as we unpack the links between colonialism and diaspora in the Caribbean. Although our class will mainly focus on the Hispanic Caribbean and Haiti, we will establish a dialogue with intellectual productions from other islands.

**SPANSH 165 Bilingual Arts**  
CourseID: 114477  
Faculty:  
Next Term Offered:  

Bilingual practices are everywhere, though we are just beginning to address them in academic disciplines. We will explore the aesthetic dimensions of bilingualism, and some effects in related areas, including politics, language philosophy, and psychology. How do bilingual language games increase political flexibility, or threaten personal or national coherence? Topics will include 1) formalist appreciations; 2) exile as incitation to write; 3) Gains and Losses of heteroglossia; 4) Hybrid Games; 5) Political dialogues; 6) Code-Switching and Creativity; 7) Bilingual Theater, Music and Film; 8) The art of translation; 9) Bicultural Spaces. Readings in prose and poetry by international authors and theorists. Taught weekly, including guest lectures by, and discussions with, anthropologists, linguists, writers, and cultural critics who have worked on this subject.

**SPANSH 178 Queer Latinidad: Race, Sexuality and Culture in the U.S.**  
CourseID: 218538
Faculty:
Next Term Offered:
Freshman Seminars

**FRSEMR 23Y All Physics in 13 Days**  
CourseID: 127972  
Faculty:  
Next Term Offered:

Some claim that there are 13 ideas or principles that can form the bedrock for a pretty good understanding of our physical and technological world. These are: 1) Boltzmann factor and thermal equilibrium, 2) Turbulence, 3) Reaction rates, 4) Indistinguishable particles, 5) Quantum waves, 6) Linearity, 7) Entropy and information, 8) Discharges, ionization, 9) Relativity, 10) Nuclear binding energies, 11) Photon modes, 12) Diffraction, 13) Resonance. Each week we will discuss one of these principles and see how they explain certain things about the physical world. We will discuss these and connections with other principles, as well as how the principle shows up in technology and, more broadly, in our technological society.

**FRSEMR 36S Comparative Historical Mythology**  
CourseID: 109498  
Faculty:  
Next Term Offered:

This seminar will deal with an innovative approach to comparative Mythology, detailed in my 700 pp. book on the topic (OUP, Dec. 2012). Comparative mythology has been a well-trodden but controversial field since at least 1800. The proposed seminar will discuss the matter in a new way by incorporating an historical approach, which has so far been lacking. The two most prominent explanations for the wide-spread, worldwide similarities in myths have been archetypes (C.G. Jung) and diffusion (L. Frobenius / H. Baumann). Both approaches are inadequate to explain these similarities. Approaching myths historically, and working backwards from our earliest written sources (Egypt, Mesopotamia, Levant, India, China, Maya, etc.), earlier stages in the development of mythologies can be detected through successive reconstructions. These are supported by the additional testimony of oral texts found across the globe. Further, recent developments in human population genetics as well as in archaeology, anthropology and comparative linguistics sustain the proposed historical model, which ultimately, but rather tentatively, reaches back to the time of the “African Eve.” This seminar will investigate the ways myths have been compared in the past; further, the underlying assumptions about human spirituality and religion, as well as available scientific evidence for such models. The new historical and comparative proposal will be tested against this evidence. All of this offers a wide scope for students’ class room intervention and individual research in a multitude of ancient and oral texts (in translations) from a variety of languages as well as in the sciences.

**FRSEMR 62V Faulkner, Ellison, Morrison**
The "Great American Novel" is infamously a difficult notion to harpoon and reel in, but any list of great American novelists will undoubtedly contain the names of William Faulkner, Ralph Ellison, and Toni Morrison. Together we will read some of the most celebrated and powerful works of fiction produced during what Henry Luce called "The American Century." We will ponder the significance of these literary giants in relation to U.S. and global history, the role of the novelist as a voice of conscience, and the place and prestige of fiction as a site for grappling with history and morality, as well as the impact of modernism and postmodernism on novelistic form. We will explore the treatment of race, class, gender, and regionalism, and how these writers weave the fissures of our social fabric into texts that attempt to reconstitute and restore marginal perspectives, sustaining narratives that encompass this vast complexity while also discovering within themselves moments of aesthetic bliss. Many of the novels we will read are long and challenging; they are also some of the most essential and lasting testaments to the genius of literary art in the last century.

FRSEMR 70G Entrepreneurship and Venture Capital in the Global Economy
CourseID: 203010
Faculty:
Next Term Offered:

Entrepreneurial activity has been a potent source of innovation and job generation in the global economy. In the U.S., the majority of new jobs are generated by new entrepreneurial firms. Entrepreneurship has had many definitions over the past two and one half centuries since Richard Cantillon first used the term in the early 18th century. Some have focused on the risk-bearing nature of entrepreneurship, while others have focused on the innovations that entrepreneurs create. Both are important elements of what entrepreneurs do, but neither is a complete definition of entrepreneurship. This seminar will examine the role that entrepreneurship and venture capital plays in economic development and innovation. Academics and policy makers have long highlighted the critical role that these sectors play in promoting a dynamic economy and opportunities for sustained competitive advantage. In particular, venture capitalists have been the source of financing for most of the major technology leaders including Microsoft, Apple, Google, Amgen, and Facebook. Numerous countries have sought to grow their domestic venture capital industry. This seminar will explore the phenomenon through the lenses of economics, history, and psychology. Entrepreneurial and venture capital markets in the US, Israel, and China will be examined in depth through academic articles, books, and Harvard Business School case studies. In addition to traditional class sessions, the seminar will incorporate field trips to the Harvard Innovation Lab and startup companies.

FRSEMR 71X Fat Talk and Thin Ideals: Culture, Social Norms, and Weight
CourseID: 212783
In 1995, the Fiji Islands were one of the last places on the planet to receive broadcast television. Within just three years, body weight ideals had transformed from large to thin and purging had become as common in Fijian high school girls as in their Massachusetts counterparts. How can we understand what happened in Fiji? And, likewise, how did heaviness in the U.S. migrate from signifying prestige to stigmatizing? In this seminar, we will examine the bio-social dimensions of disordered eating and being overweight as well as the volatility of weight ideals and their enduring moral salience. We will draw from anthropological and clinical perspectives to explore the rapidly shifting landscape of body shape ideals in the U.S. over the last century, the arrival of eating disorders in the Global South, the medicalization of obesity, and the emergence of pervasive weight stigma—as manifest in ‘fat shaming’ and even in policy interventions that have had unintended consequences. We will ask what the social structural determinants of obesity are, as well as how social adversities relating to the built environment, toxic food environment, climate change, and food deserts are embodied. We will examine variation in how the body is cultivated for self-presentation across diverse cultural contexts alongside evidence that the media have accelerated the globalization of thin ideals. We will conclude by considering both emerging threats inherent to pervasive social media platforms and digital photo-shopping as well as potential opportunities to reset social norms through social movements and policy.
Program in General Education

GEN-ED   5 The Nature of Living Things
CourseID: 218564
Faculty:
Next Term Offered:

     Course created to support student import

GEN-ED   8 Psychological Conceptions of Man
CourseID: 218565
Faculty:
Next Term Offered:

     Course created to support student import
General Education

GENED 1003 Designing the American City: Civic Aspirations and Urban Form
CourseID: 116243
Faculty:
Next Term Offered:

An interpretive look at the American city in terms of changing attitudes toward urban life. City and suburb are experienced as the product of design and planning decisions informed by cultural and economic forces, and in relationship to utopian and pragmatic efforts to reinterpret urban traditions in search of contemporary alternatives. Topics include: persistent ideals such as the single-family home, attitudes toward public and private space, the rise of suburbs and suburban sprawl, cycles of disinvestment and renewed interest in urban centers, and impacts of mobility and technology on settlement patterns.

GENED 1005 Nutrition and Global Health
CourseID: 126200
Faculty:
Next Term Offered:

This course will introduce students to nutrition and its relation to global health problems, including infectious and chronic diseases, maternal and child health, and climate change. Students will explore the demographic, epidemiological, biological, social, political, and economic determinants of nutritional status. Emphasis will be placed on the role of nutritional status and dietary intake as determinants and consequences of health problems. Students will be encouraged to think critically about major challenges to improving nutrition and health at a global level. Nutritional assessment, study design, and efficacy of nutrition interventions will be explored in detail.

GENED 1008 Power and Identity in the Middle East
CourseID: 142447
Faculty:
Next Term Offered:

Why are some countries governed democratically while dictators seem to have a firm grasp on power in others? Why do people threaten and even kill each other in the name of ethnicity or religion in some places and times but not others? This course will give you a chance to explore these questions in the context of the Middle East, a region that has been widely perceived as a bastion of authoritarianism and a hotbed of ethnic and religious politics and political violence. In considering key questions and debates about politics, governance, and identity in the Middle East, you will develop a critical
understanding of politics in the region, while simultaneously gaining the social-scientific vocabularies necessary to question the assumptions that are often made about Middle Eastern politics and people and, more generally, about politics in other contexts. In asking why and how the Arab Spring was possible, and how authoritarian governance has managed to persist following those uprisings, you will have an opportunity to engage some of the most urgent social-political questions of our time. You will leave this course with a clearer understanding of how dictators and militaries maintain their hold on power and how identity politics and conflict are constructed and change over time.

GENED 1010 Satire
CourseID: 212834
Faculty:
Next Term Offered:

A course on satire, its power and limitations, from Classical Rome, through medieval Italy, to Elizabethan theatre and 19th-20th century American cartoonists. Serving as both a critique of social norms and the oppression of minorities (anti-women, anti-Jews, etc.), satire has been one of the most practiced and effective languages in Western culture. By ridiculing ideas, habits or specific individuals, satire challenges and constantly reshapes moral, legal as well as linguistic boundaries. We will discuss various definitions of the genre, with readings on the theory, functions and limitations of satire, focusing on the intellectual debate and juridical responses (censorship, criminal law, libel writs, etc.) that have accompanied satirical expressions across the centuries. Satirical artifacts examined during the classes include poems, novels, theatrical plays, defamatory paintings and sketches, with the participation of contemporary satirists, cartoonists, comedians and judges from around the world.

GENED 1016 Black Radicalism
CourseID: 212852
Faculty:
Next Term Offered:

"Black Radicalism" is a course designed to introduce students to the main currents of black radical thought in the period stretching from the close of World War II until roughly 1980 and the advent of the Reagan Era. The course will be divided into three sections: Anti-Colonialism; Black Nationalism; and Black Feminism and will focus on key works of fiction, theory, and criticism by especially prominent black intellectuals including Frantz Fanon (The Wretched of the Earth); Richard Wright (White Man Listen!); George Jackson (Soledad Brother); Huey Newton (Revolutionary Suicide); Angela Davis (If They Come for Me in the Morning); and the members of the Combahee River Collective (The Combahee River Statement). The goals of the course are to help students understand the ideological roots of some of the most significant social movements of their own time (Black Lives Matter; Me Too). Indeed, the course will be built on the idea that the vexed struggles around race, class, and gender in which we are all now involved are part of a long history in which the efforts of a radical black intellectual class have been at once
challenged and adopted by more mainstream actors. At the same time, students will be pushed to develop both their critical and communicative skills. To that end, course participants write at least two short essays during the semester. They will also complete final group projects that utilize "alternative" platforms?including digital platforms?that reach beyond both the classroom and the campus in order to draw attention to the ways that the ideas and methods of individuals like Fanon, Wright, Jackson, Newton, and Davis operate in contemporary society.

GENED 1017 Americans as Occupiers and Nation-Builders
CourseID: 108359
Faculty: Andrew Gordon
Next Term Offered:

The United States has launched numerous projects of military occupation and nation-building in foreign lands since the late 19th century. These have been contradictory enterprises, carrying ideals of freedom and self-determination "offered" by force or by fiat. This course will assess the meanings and legacies of these projects by examining the ideas, strategies, policies, and outcomes of occupations ranging from the Philippines and Haiti early on, to Japan, Germany, and Korea in mid-century to, most recently, Afghanistan and Iraq. The course focuses on American activities and ideas but also examines the responses of the occupied.

GENED 1019 The Caribbean Crucible: Colonialism, Capitalism and Post-Colonial Misdevelopment In The Region
CourseID: 118290
Faculty:
Next Term Offered:

This course explores the complex, formative role of the Caribbean in the development of Western colonialism and capitalism and the consequences for the peoples of the region. Four major themes will be examined. First, the importance of the region in the origin and early development of Western imperialism and capitalism: Why did both Western Europe and America begin their imperial and colonial expansion in this region and to what degree did the region's slave-based economies influence the nature and development of Western capitalism? Second, what were the consequences of imperialism for the demographic and socio-cultural fate of indigenous and African populations? Is genocide a proper designation of the fate of exploited peoples of the region up to the end of the period of slavery? Third, we examine the post-colonial consequences of this history for the socio-political, economic and cultural development of the region. What have been the main paths toward sustainable development in the modern Caribbean? Why in spite of its long history of engagement with Western capitalism, has the region largely faltered in its efforts to develop? We examine the different paths to development through five case studies?neo-colonial dependency in Puerto Rico, communist dependency in Cuba, democratic socialism in Jamaica, Barbados' neo-liberal strategy, and aid-dependency in Haiti. We also study the common problem of migration and transnationalism and the
degree to which this process undermines national sovereignty. Fourth, we explore the distinctive features of racial classification and cultural representations in the Caribbean. What do we learn about race as a social construction from the Caribbean experience? How do Caribbean racism and colorism unsettle American notions of race and ethnic identities? Why has globalization not led to cultural homogenization? How do we account for the unusual influence of Caribbean music, especially that of Jamaica, on popular global culture?

GENED 1021 The Stories We Tell
CourseID: 212851
Faculty:
Next Term Offered:

*The Stories We Tell* is based on the premise that we are story-telling animals. There have been human societies without the wheel, but none without stories. We use stories to make sense of experience, to understand where we are coming from, and to orient ourselves in the world. Today, we are asked to produce stories to get into college, to run for president, to pitch start-up companies, and to turn scientific insight into new policies. Where do these stories come from?

The course draws on our entire storytelling inheritance from around the globe. We single out different types of stories, from the hero-epics of the ancient world (Gilgamesh) and pedagogical story-collections (1001 Nights) to the invention of psychological realism by the first novelist (Murasaki Shikibu), and we supplement those with modern storytelling techniques from Asia (Eileen Cheng) to Latin America (Clarice Lispector). Since our most important stories are not confined to literature, we also include those religious and philosophical storytellers (Confucius; Socrates) as well as political stories (Declaration of Independence; Communist Manifesto) that have shaped human affairs. Along the way, we examine the technologies, from clay tablets and papyrus scrolls to print and the Internet, thought which these stories have survived into the early twenty-first century and are shaping our world today.

The course includes in-class exercises, research assignments (Wikipedia entries), and a final exam.

GENED 1022 Vision and Justice: The Art of Race and American Citizenship
CourseID: 203077
Faculty:
Next Term Offered: 2020 Fall

This course is organized around a guiding question: How has visual representation both limited and liberated our definition of American citizenship and belonging? Today, as we are awash with images, and as social media has allowed us to witness racially motivated injustices with a speed unimaginable until recently, we have had to call upon skills of
visual literacy to remain engaged global citizens. This course will allow us to understand
the understudied historic roots and contemporary outgrowth of this crucial function of
visual literacy for justice in American civic life.

Sequenced chronologically, the lectures are organized into three parts, examining the
role of visual representation as Civic Evidence, as Civic Critique, and as Civic
Engagement (i.e. movement building and solidarity). Exploring these three categories in
turn, topics include: the role of aesthetics for the invention of race, narratives supporting
and critiquing Native American "removal," the abolition of transatlantic slavery,
immigration, the creation of and destabilization of U.S. segregation, the New Negro
Movement, Japanese Internment, and the long Civil Rights movement. Each lecture
centers on case studies to show the historic roots of the contemporary interplay between
visual representation and justice at these inflection points in the contestation for
citizenship in America.

We are fortunate to have invaluable holdings at the Harvard Art Museums and at the
Peabody Museum and via Cooper Gallery exhibitions that vividly showcase this
contested relationship between art, justice, race, and culture over the course of the
nineteenth, twentieth, and twenty-first centuries. Lectures will incorporate material from
these holdings and sections will meet at these locations to facilitate object-based study.
This course will also include guest lectures from architect Michael Murphy and artist
Theaster Gates. Students will leave the course having developed rigorous skills of visual
literacy and critical analysis foundational to be engaged global citizens regardless of
their concentration or future field of study.

GENED 1035 Dissent and Disobedience in Democracies
CourseID: 214493
Faculty:
Next Term Offered:

Recent political upheavals in several of the world's established democracies have
sparked discussions about dissent and disobedience not seen since the 1960s. When, if
ever, are citizens in a democracy justified in breaking the law to protest or resist what
they believe to be bad, unjust, or illegitimate laws or policies? When, if ever, are public
officials in a democracy justified in undermining or refusing to enforce such laws or
policies? This course will study important examples of principled disobedience in
democracies, and explore normative arguments for and against various strategies of
unlawful dissent through the close reading of texts in political and legal philosophy. In a
series of structured written assignments, students will argue for or against proposed,
ongoing, or recent cases of principled disobedience by public officials or citizens in
democratic states.
The American dream once essentialized the grand promise of a better, fuller, and richer life. At the present moment, however, it seems in many minds to have lost its evocative power as a collective myth. Does this notion still represent a principle of hope or has it become a form of cruel optimism?

In a time of prolonged political crisis, this General Education course has a pressing mission. It aims to further a dynamic understanding of American dreams (for there are many and not just one), to apprehend their complexities and contradictions, to appreciate their diverse manifestations and historical shapes, and above all to take measure of their presence and meaning in the world we now inhabit.

In this endeavor we will study the variety of ways in which feature filmmakers, both in Hollywood and beyond, have created designs for living, indeed the most influential and resonant incarnations of American dreams. We will analyze popular narratives produced during crucial junctures in the modern history of the United States, from the Great Depression and World War II, through the Cold War and the McCarthy era, up to the late 1960s. We will consider the wide range of functions that these productions have assumed, how they have by turns sustained and questioned the status quo. In some instances they have interrogated, revealed, and even indicted social inequity, at other times they have legitimated injustice and fostered exclusion. The class offers a representative sampling of classical Hollywood features as well as some exemplary independent American releases from 1932 to 1969, including Scarface, King Kong, Imitation of Life, It Happened One Night, The Wizard of Oz, Lying Lips, Citizen Kane, Casablanca, Mildred Pierce, The Best Years of Our Lives, Salt of the Earth, The Invasion of the Body Snatchers, Raisin in the Sun, The Manchurian Candidate, The Exiles, and Easy Rider.

We often hear how important it is to make "healthy choices"?to eat the right foods, to get enough exercise, to get plenty of sleep. But to what extent is it really within our power as individuals to "choose" to be healthy? In making choices about your own life, have you ever been confused by conflicting data or faced other obstacles in your pursuit of good
health? Millions of Americans experience lifestyle constraints that may prevent them from putting their health first—from socioeconomic constraints that limit their dietary choices, to labor market constraints that affect their abilities to set healthy schedules, to structural and mobility constraints that compel them to live near areas of high pollution or in so-called “food deserts.” Moreover, most of us struggle to understand the science behind current health controversies—from the growing opioid epidemic to debates over pesticide regulations. This challenge is compounded by the increasing politicization of science, which leads to objective findings becoming distorted as they are twisted to fit one agenda or another. Finding reliable scientific information is a challenge for anyone who wants to fully understand and participate in the national conversation about these complex issues.

In this class, you will learn how scientists approach public health problems, and how their findings are used to assess and intervene against threats to human health. We will begin by looking at health disparities across the US, and considering the biological, behavioral and societal factors that contribute to them. We will then closely examine three pertinent public health issues that significantly affect the health of Americans: 1) mental health and addiction, 2) obesity and cardiovascular disease, and 3) the adverse effects of exposure to environmental pollutants. We will spend a portion of most classes discussing relevant current events, and weekly section meetings will focus on an in-depth exploration of a case study. Our goal is for you gain a greater understanding of your own body, and of what can be done on a personal and societal level to prevent disease. This will ultimately give you the skills you need to analyze and make decisions about current and future public health challenges.

GENED 1049 East Asian Cinema
CourseID: 110464
Faculty:
Next Term Offered:

This course introduces major works, genres, and waves of East Asian cinema from the silent era to the present, including films from Mainland China, Japan, Korea, Taiwan, and Hong Kong. We will discuss issues ranging from formal aesthetics to historical representation, from local film industries to transnational audience reception.

This course does not assume prior knowledge of East Asian culture or of film studies, but rather seeks to provide students with a basic understanding of modern East Asian cultural history through cinema, and with an essential toolkit for analyzing film and media, including narrative, cinematography, editing and sound. In addition to critical approaches, students are strongly encouraged to creatively respond to course materials by collaborating on their own short films, beginning with the illustration of film terms in the first two weeks and culminating in the "Golden Monkey Awards"—a class screening of final projects with Oscar-like awards in various categories.
As a General Education course, East Asian Cinema will help students develop aesthetic responsiveness and interpretive ability to moving images in an increasingly media-saturated world. While becoming acquainted with some analytical vocabulary and critical approaches to cinema, students will also gain insights into East Asian cultures and histories, aesthetic traditions and ethical values, as well as the politics and economics that went into the films' production and reception. Above all, the course will encourage students to be creative and enterprising with the digital media technologies at our disposal, to engage in collaborative teamwork and experiment with unorthodox ways of looking at the world through amateur filmmaking.

**GENED 1050 Act Natural**
CourseID: 215893
Faculty:  
Next Term Offered:  

"To thine own self be true," runs the famous line in Hamlet. But which self? And why? And who's judging? Does this injunction to be authentic even make sense today, when profiles proliferate online and surveillance is ubiquitous? Acting? the art of creating and reproducing selves? can help us navigate these questions. Just as every century's approach to acting tells us something about their idea of personhood, so too can our own era's quandaries around empathy, personae, identity, work, art-making and politics be explored through our approach to acting. The course will examine the construction of private and public selves across eras and disciplines, through a combination of lectures, screenings, readings, and talks. Sections and examinations will be practice-based, focused on a single basic task: students will be asked to turn into each other over the course of the term.

**GENED 1058 Tech Ethics: AI, Biotech, and the Future of Human Nature**
CourseID: 120670
Faculty:  
Next Term Offered:  

The course explores the moral, social, and political implications of new technologies. Will biotechnology and AI enable us to hack humanity? Should we edit the genes of our children, extend the human lifespan, and genetically enhance our athletic ability and IQ? Can algorithms be fair? Will robots make work obsolete? Can smart machines outthink us? In an age of big data and social media, is privacy over? Is democracy?

The course will ask how science and technology are transforming the way we work, learn, make friends, raise children, care for our health, conduct our politics, and understand what it means to be human.
GENED 1061 Digging the Glyphs: Adventures in Decipherment
CourseID: 122942
Faculty:
Next Term Offered:

Writing is an ancient technology, independently invented and forgotten in different times and places over human history. Some ancient scripts can now be read again, while others remain undeciphered?but what makes the difference between them? In this course, we will use the decipherment and interpretation of writing systems as a springboard to larger questions about knowledge and meaning: what signs are and how they work, how we "read" the world around us, and how (and whether) we can be confident that we know what we say we know. You will broaden your understanding of what writing is, the many social functions of script, and how we reason from signs to generalizations about the world. This course will prepare you to think about signs and signification in everyday life and the implicit and explicit role of communications technologies in shaping social realities.

GENED 1062 Ballots and Bibles: Why and How Americans Bring Scriptures into Their Politics
CourseID: 212843
Faculty:
Next Term Offered:

In 2018, in a public speech to law enforcement officers, the attorney general of the United States used a scriptural passage to defend tougher implementation of immigration laws. His reference bewildered observers who were unaware of a long tradition of citing Romans 13 in American political controversies, including such formative conflicts as the American Revolution and the sectional crisis over slavery. This course introduces students to a complex history of political invocations of scripture, encouraging them to think about why this practice persists, the interpretive strategies it involves, and the implications of such scriptural appeals for civic culture. Co-taught by faculty with expertise in biblical studies and American history, the course asks students to engage texts thoughtfully, to consider historical contexts thoroughly, and to see why these texts and their use matters in the present.

Course materials includes primary sources (e.g., campaign speeches, Congressional debates, Civil Rights slogans) and scholarly literature, such as the wealth of research on the history of biblical justifications for war or the legal theories that guide applications of the First Amendment.

Student projects afford class participants the chance to engage in both historical research and textual hermeneutics. The objective of the course is to equip students to recognize the historical legacies that contemporary political conversations carry, to engage critically the modes of textual interpretation that inform political rhetoric, and to write cogently about the complex implications of political appeals to scriptural authority.

GENED 1066 Rationality
CourseID: 212850
Faculty:
Next Term Offered:

How can members of a species that discovered symbolic logic and the double helix also believe that the earth is flat and that Hillary Clinton ran a child-sex ring out of a pizzeria? Human rationality is very much in the news, as we struggle to understand how an era with unprecedented scientific sophistication could harbor so much fake news, conspiracy theorizing, and "post-truth" rhetoric. Rationality has also long been a foundational topic in the academy, including philosophy, psychology, economics, mathematics, and government.

Part I of "Rationality" covers the nature of rationality, including logic, statistical decision theory, Bayesian reasoning, game theory, expected value, critical thinking, and common logical and statistical fallacies.

Part II covers the cognitive science of rationality, including classic writings by psychologists and behavioral economists. Are humans a "rational animal"? Can machines be artificially rational? Could our irrational heuristics and biases be evolutionary adaptations to a vanished world? Could beliefs that are factually irrational be socially rational as expressions of loyalty to a cultural or political tribe? Can people be cured of their irrationality?

Part III covers applications. How can our opinions and practices be made more rational? Examples may include policy (Nudge), crime (Compstat), development aid (Randomistas), sports (Moneyball), reporting (Politifact), polling (538.com), health (Quality-Adjusted Life Years), psychotherapy (Feedback-informed treatment), forecasting (prediction markets & tournaments), and philanthropy (Effective Altruism—a major focus). Some topics will be presented by expert guest lecturers.

Assignments will include a midterm exam, class quizzes, and a capstone project, in which students will choose a cause or concern and explore how principles of rationality could make it more attainable.

GENED 1069 Faith and Authenticity: Religion, Existentialism and the Human Condition
CourseID: 109861
Faculty:
Next Term Offered:

This course engages some of the most fundamental questions of human existence through the philosophical, theological and literary works of 19th and 20th century authors many of whom are associated with the movement called "existentialism." What is an authentic individual life? How does one find meaning in light of modern challenges to claims about the nature of God, revelation and the soul? Is religious faith compatible with an understanding of historicity and the threat of nihilism? With a life of integrity and freedom? Of what use are philosophical and theological reasoning in establishing meaning? This course introduces central questions in Western philosophy of religion through close reading of fundamental texts in existentialism with attention to selected philosophical and theological sources. The course focuses especially on the themes of
authenticity and absurdity, finitude and death, faith and ambiguity, and the quest for
great freedom and responsibility.

GENED 1081 The Celts: People or Construct?
CourseID: 212846
Faculty:
Next Term Offered:

We are exposed every day to terms referring to ethnic groups, and we tend to accept
these terms uncritically, assuming that we know what they mean and to whom they refer.
These labels help to shape our sense of ourselves, of others, and of ourselves in relation
to others. Yet the ethnic identities associated with such terms are in fact ambiguous and
malleable, constructed of a shifting array of elements, including genetics, shared history,
language, religion, economy, political institutions, music, architecture, and foodways.
Ethnic descriptors encode attributes, either positive or negative, with which people want
to associate themselves or others. So, in order to understand the claims implicit in the
use of an ethnic label, we need to evaluate the bases for assigning it and who allows a
people the identity they claim for themselves.

This course takes as a case study the idea of the "Celt," a term thrown around so freely
that it sometimes seems to be as much a brand as an ethnonym. In our readings and a
series of hands on exercises, we explore the ways in which the history, languages,
material culture, and cultural mythology of Celtic peoples are used both to construct and
to deconstruct Celtic identity. Then we examine the cultural and political forces that have
motivated these constructions and deconstructions.

Studying what "Celt" has meant over the course of the past 2500 years, you will develop
tools for analyzing the bases of ethnicity claimed by a people or attributed to them by
others. And by examining the ways in which the name "Celt" has been both adopted as
a badge of honor and assigned as a way of dismissing conquered peoples, you will
better understand the ways in which ethnic labels manipulate attitudes toward the
groups with which they are associated.

GENED 1083 Permanent Impermanence: Why Buddhists Build Monuments
CourseID: 207917
Faculty:
Next Term Offered:

Everything changes. This is, in its simplest and most fundamental formulation, one of the
essential teachings of Buddhism. Buddhist communities throughout history have
preached, practiced, and written about the ephemerality and illusoriness of our everyday
lives and experiences. Ironically, however, many of these same communities have
attempted to express these teachings in the form of monumental structures meant to
stand the test of time. Some of the world's greatest cultural heritage sites are a legacy of
this seeming contradiction between the impermanence that is a central presupposition of
Buddhist thought and the permanence to which these same monuments seem to aspire. If the world is characterized by emptiness and the Self is illusory, how does one account for the prodigious volume of art and architecture created by Buddhists throughout history? This Gen Ed course takes a multicultural and reflective engagement with the challenges presented by this conundrum through a study of Buddhist sites scattered throughout time and space. Pertinent topics such as cosmology, pilgrimage, materiality, relics, meditation, and world-making will be explored. Through these Buddhist monuments in South and Southeast Asia, the Himalayas, Central Asia, China, Korea, and Japan, students will learn about the rich, diverse world of Buddhist practice and experience.

GENED 1085 Energy Resources and the Environment
CourseID: 156316
Faculty: John Shaw

This is a revolutionary time of change regarding how we produce and utilize energy around the world. How will we provide enough energy to support our growing global economy while protecting our environment? This class examines the full life cycle of each energy resource, including where it comes from geologically, how we acquire it, the way it is used in our economies, and the environmental impacts of these activities. We will run the gamut from conventional to emerging sources of energy: coal, petroleum, geothermal and nuclear systems, as well as renewable energy options. By the end of this course, you will be familiar with the materials, tools and methods used in modern energy industries. You will be able to understand the ways in which we currently produce usable energy, and their effect on our environment. These insights into current practices, combined with an assessment of future trends in technology and energy demand, will help you to become a citizen who understands and can therefore help shape our energy systems, and preserve our environment in the face of expanding human development.

GENED 1087 Multisensory Religion: Rethinking Islam Through the Arts
CourseID: 125190

One need only walk into a church, a mosque, a temple, a synagogue or any place of worship to experience the complexity, beauty and aesthetic power of religion through the senses. For millions of believers the world over, their experience of religion is not only?or even primarily?dictated by ideological teachings; it is forged through personal and private experiences, very often sensory in nature and embedded in the arts broadly defined. These "silent" forms of religion?silent because we generally do not hear about them in the media or in political and social spaces?are centered on the individual believers' faith and relationship to the divine or the transcendent. The arts are key to understanding religion as a multisensory experience rather than just an ideology of identity and to asking questions like: What does it mean to call some art "religious"? Who decides what
counts? On what basis? How can interpreting an individual believer's engagement with the arts as an exercise of religious authority help us see "religion" in a new light?

This course focuses on Islam as a case study through which we can explore the complex and multifaceted relationship between religion and the arts. We will learn to listen, see, and experience those "silent" forms of Islam by studying Muslims' engagement with the literary arts (scriptures, panegyrics, love lyrics, epic romances, folk songs, and folk tales), as well as sound and visual arts (Quran and poetic recitations, music, dance, drama, architecture, calligraphy, and miniature painting). In the process, we will create a nuanced picture of the rich and multicolored tapestry of the ways in which the arts create religious tradition and innovation, weaving the voices of poets, novelists, short-story writers, folk musicians, and rock stars with those of clerics, theologians, mystics, scholars, and politicians.

Given the cultural diversity of Muslim societies, the course draws on material from regions beyond the Middle East, particularly sub-Saharan Africa and South and Southeast Asia. This course assumes no prior knowledge of Islam.

**GENED 1088 The Crusades and the Making of East and West**

CourseID: 212838

Faculty:

Next Term Offered:

A series of wars in the later Middle Ages, the Crusades are one of the most significant and deeply symbolic events in human history. Marked by warfare and cross-cultural encounter between Christians and Muslims, they saw the first large-scale migration and colonization by Europeans before the Age of Discovery, the rise of the Italian merchant republics, and the solidification of religious and cultural identities across Europe and the Mediterranean. Students will learn about the origins of the Crusades, the most important expeditions, the expansion of crusading toward new targets, and the decline of crusading after the sixteenth century. This course is about the Crusades both in history and in memory, about communities in war and peace, and about stories and memories that have endured to the present day. With the help of fascinating texts written by Westerners, Byzantines, and Muslims, it explores how each culture interpreted and remembered the Crusades, and how the Crusades have come to mark our understanding of the East and West as distinct cultural traditions.

**GENED 1090 What Is a Book? From the Clay Tablet to the Kindle**
You have spent much of your life since kindergarten (and perhaps earlier) reading books; and you will spend much of your time at Harvard continuing to read them. But do you even know what a "book" is? Is it merely a conveyor, a platform, for presenting a text? Can a book have a use other than being read? Does the nature of the material artifact inscribed with words shape or influence the way you understand their meaning? Do people read a scroll differently than they do a book with pages? Or a digital text on a screen? Why does the physical book persist in the digital age? To answer these questions, we will study the many different material forms in which texts have been preserved—from tablets to e-books—and the technologies that have enabled their creation.

We will also explore every possible aspect of the object we know as a "book," from the title page to the index, and from the layout of a page to the use of illustrations and decorations—and what each of these features of the book can tell us about its historical role, how readers have used the book, and what it has meant to them. Books we will look at will range from the Bible to Vesalius, from Homer to Harold and His Purple Crayon. We will make regular use of the manuscripts and rare printed books in Houghton Library, even if remotely. If necessary, simulated contact with books as material objects will be the focus of the course. The capstone project of the course will be the creation of a (short) book by each student and an accompanying paper explaining its place in the history of the book in the West.

GENED 1101 The Business of China
CourseID: 108854
Faculty:
Next Term Offered:

China will become the world's largest economy by 2030. Chinese firms have transformed business landscapes at home and now seek a global role. What can we learn about China? its people, its government, its culture? from its transformative enterprises? This course uses business as a lens through which to study modern China and its global impact. Using Harvard Business School case studies, we explore the drivers of China's growth: traditional family firms and internet startups; state-owned enterprises and private-sector challengers; and the catalytic role of Hong Kong, Taiwan, and foreign enterprise in shaping contemporary China. We study the role of the Communist Party and government (local and national) in business and society. The course puts special attention on how U.S.-China relations are shaped by business in the era of Xi Jinping and Donald Trump. Can China lead? Will the 21st century be "the Chinese century?" At the end of this course you will be able to make well-informed judgments.

GENED 1103 Living in an Urban Planet
CourseID: 215916
Faculty:
Next Term Offered:

It has become a cliché to say that more than half of the world's population now lives in cities. The speed and scale of urbanization over the past century has been stunning, and we tend to underestimate the extent to which built environments and natural landscapes
have become entangled. As both lived and imagined spaces, cities will continue to shape life on our planet. In fact, if we consider the flow of resources (and refuse), energy systems, the circulation of people and cultures, where do our cities actually end? This class starts from the premise that the urban today represents a worldwide condition in which nearly all political, economic, cultural, and socio-environmental relations are enmeshed.

We will focus on multiple aspects of urbanization, including debates around housing, transportation, and the production of inequalities. We will cover the history of urban planning, and how processes of the past converge in the present. We will discuss the aspirations of individuals and groups that have made cities, often seeking to escape roles assigned to them based on gender, race, ethnicity, nationality, and social class. We will reflect on metropolitan and regional asymmetries, as well as ideas about global cities or megacities. And we will consider the ecological dimensions of urbanization, including research on compact cities as more environmentally sustainable than sprawling settlements.

Urbanization has been an expression of the notion that humans can reshape the built environment, as well as their own destinies. Throughout modernity, people have experienced and imagined cities as places of possibility and frustration. Our aim is to engage a wide range of perspectives on the contemporary global-urban condition and on how we got here, with the hope of opening up alternative possibilities for the future.

GENED 1106 Why You Hear What You Hear: The Science of Music and Sound
CourseID: 215676
Faculty:
Next Term Offered:

Sound and music are integral parts of all human cultures, and play critical roles in communications and social interactions. In this course, we study the production, transmission, and perception of sound, with the aim of expanding communication, musical, and artistic horizons. The course includes many class demos and hands on tools for students to explore. Psychoacoustics (the study of how we perceive and interpret sound) is a central theme of the course, providing a lens through which we can better understand the generation, propagation, and analysis of sound. Student-selected projects (with staff consultation) are an important part of the course.

GENED 1106 Why You Hear What You Hear: The Science of Music and Sound
CourseID: 114922
Faculty:
Next Term Offered:
Sound and music are integral parts of all human cultures, and play critical roles in communications and social interactions. In this course, we study the production, transmission, and perception of sound, with the aim of expanding communication, musical, and artistic horizons. The course includes many class demos and hands on tools for students to explore. Psychoacoustics (the study of how we perceive and interpret sound) is a central theme of the course, providing a lens through which we can better understand the generation, propagation, and analysis of sound. Student-selected projects (with staff consultation) are an important part of the course.

GENED 1107 Energy Bodyworks
CourseID: 212766
Faculty:
Next Term Offered:

How we conceptualize the universe influences what we can discover and know? and vice versa. The history of the understanding of the human body puts forth an instructive embodiment of this principle. This course explores historical and contemporary thinking about the human body, the most recent paradigm of which is as a machine of interconnected components that function together according to force (N) and energy (J) laws. Course topics include historical thinking, the scientific method, and the human body as a force machine. This machine acts through the forces of muscles, leading to movement such as walking and gait, and it is driven by the interconnected system of lungs, heart, blood, and metabolism. The machine constantly interchanges gravitational, mechanical, and chemical energies to do useful actions. How the machine can and does break down, represented by illness and disease, is considered within this context. The student who graduates from Energy Bodyworks should (i) expect and welcome the evolution in scientific understanding in all matters health and otherwise during the span of a lifetime, (ii) be critically cognizant of the body as a mechanical and chemical machine, and thereby (iii) be positioned as a lifetime steward of the body, both personally for one’s own well-being as well as civically for health issues that transect country and globe.

GENED 1114 Painting's Doubt: A Studio Course
CourseID: 212855
Faculty:
Next Term Offered:

Painting is an engagement between the self and the world. It is a practice of embodied making, and, as a language outside of words, can think around conditioned understanding. This introductory studio art course proposes learning to paint as a new experience of relating to the world, and through painting we will investigate not only what we have to say, but what we have to see.

Studio assignments in small sections are complemented by weekly lectures, visiting artist presentations, readings and visits to Harvard's collections. The primary materials
for this course will be oil on canvas, with some excursions into drawing and work on a paper. No experience is necessary, except a willingness to make a mess.

GENED 1116 Medical Ethics and History
CourseID: 108405
Faculty: David Shumway Jones
Next Term Offered: 2019 Fall

Students will encounter the ethical dilemmas of medical practice throughout their lives, whether with their own health, or with the health their families and friends. This course will equip them with the tools of moral philosophy so that they can recognize, critique, and craft arguments grounded in appeals to utilitarianism, deontology, or rights. But the course will focus on historical analysis of the debates so that students understand how social, economic, and political contexts have influenced moral reasoning. By clarifying their own thinking in the classroom, students will be better equipped to engage in the debates and contribute to the ongoing efforts by medicine to relieve human suffering.

GENED 1118 The Holocaust
CourseID: 212918
Faculty:
Next Term Offered:

Who is responsible for genocide? Through the lens of the Holocaust ? perhaps the most-studied genocide of the modern era ? we will grapple with the issues of good and evil, blame and responsibility, duty and dissent as they pertain to violence enacted at the personal and state levels. What is the responsibility of "citizens and citizen leaders" in the face of local and global crises brought on by genocide, refugee catastrophes, terror, neo-fascism, etc.? And how do we make meaning out of what seems senseless? The course will address the historical background and context of the Holocaust, competing theories about who was responsible and why, and representations of the Holocaust in film and literature.

GENED 1119 Law, Politics, and Trade Policy: Lessons from East Asia
CourseID: 212842
Faculty:
Next Term Offered:

How do states balance the challenges and opportunities of international markets? Importing ideas and resources while exporting manufactured goods underlies the East Asian growth miracle but also builds conflict with other governments. This course examines the transformative role of trade policy for Japan, Korea, and China. From the "unequal treaties" of the nineteenth century to the World Trade Organization today, trade law binds the interactions between East Asia and the world. Japan grew from an isolated samurai nation to a leading economic power but now confronts stagnating growth. Korea
relied on business conglomerates for rapid industrialization and embraced liberalization to steer its way out of financial crisis. China turned to the WTO to anchor domestic economic reforms but now faces U.S. resistance to its export dominance. East Asia offers models of the success and problems that accompany globalization.

GENED 1122 The Social Responsibilities of Universities
CourseID: 212853
Faculty:
Next Term Offered:
What do universities owe society? Since their origins in medieval Europe, universities have been granted special privileges because they have been understood to contribute to the social welfare. Do these privileges incur corresponding obligations on universities? Should they influence how universities educate their students or create, share and preserve knowledge or conduct their internal affairs? To explore these questions, we will examine normative texts about higher education's purposes, social scientific studies of how universities function and examples from the history of U.S. higher education. For each of these three domains—the education of students, the production of knowledge, and the administration of institutions—we will analyze historical cases, such as universities' contribution to the military effort during World War I and universities role in "urban renewal" during the 1950s and '60s, as well as contemporary controversies, such as affirmative action and divestment. Students will be asked to consider these issues from the perspective of university leaders and the interests of the larger society as well as consider what it means to them as members of an academic community.

GENED 1129 Infectious Diseases and Social Injustice
CourseID: 110382
Faculty:
Next Term Offered:
Advances in prevention and treatment of infectious disease have left large segments of the global population behind. This course studies the societal impacts of nine infectious diseases: HIV/AIDS, malaria, plague, polio, cholera, smallpox, yellow fever, syphilis, and tuberculosis. As you trace these diseases through history, you will learn about their epidemiology and how they make people sick, explore their effects on humanity as seen through the lenses of history, literature, film, music, and drama, and grapple with questions about injustice, inequity, and stigmatization. Classes will be highly interactive and include case studies, provocations, role plays, advocacy pitches, a mock trial, debates, and collaborative learning. You will leave this course with a holistic understanding of infection as an issue that requires not only medical and scientific advances, but also societal cures.

GENED 1135 Interracial Encounters in American Literature and Culture
CourseID: 146591
Faculty:
Next Term Offered:

From depictions of exchanges in the early colonial Americas to efforts to envision alternate and imminent futures, this class will examine representations of interracial encounters in U.S. American culture. We will explore how various texts and performances have conceived, embodied, and reimagined the relationships not only among differently racialized groups, but also between race and nation, individual and community, and art and politics. Topics addressed in this course will include narratives of indigeneity, contact, and migration; cross-racial performances and the question of cultural appropriation; political and artistic collaborations; and interracial encounters in a transnational context. Course requirements will include two exams, two papers, and individual and group creative projects.

GENED 1138 Consent
CourseID: 108115
Faculty:
Next Term Offered:

Consent will be studied in four domains: Part I-the relation of consent and the body in marriage, in medicine, and in state citizenship; Part II ? the act of consent and dissent in war (beginning with the dissent of Achilles in the Iliad and including readings up to the present); Part III ? freedom of movement, freedom of entry and exit in citizenship (including contexts where right of movement has been denied); Part IV ? consent as the basis of cultural creation. The nature of individual and collective deliberation is at the center of the course throughout. Readings include: philosophic accounts of consent (Plato, Locke, Rousseau), case law (Plessy v. Ferguson, Pratt v. Davis, Schloendorff v. Society of New York Hospital), constitutional writings (Federalist Papers 4, 7, 8, 23, 25, 27-29, 41; Madison's Record of Federal Assembly; Ratification Debates ), plays (Euripides' Hecabe, Sophocles' Philoctetes, five U.S. suffrage plays), poetry (Iliad), films (Philadelphia Story, It Happened One Night), novels (Tale of Two Cities), and historical narratives (Thucydides selections, Underground Railroad narratives).

GENED 1139 Political Interventions through the Arts
CourseID: 123834
Faculty:
Next Term Offered:

How does thinking like an artist ignite political change? We explore the question in collaboration with the Institute of Politics at Harvard Kennedy School. Through guest lectures, we update classic readings on the effects of creative interruption. Readings from Aristotle to Habermas will arouse questions and speculations in written assignments. The final project is to design a collaborative creative intervention for a political challenge. An accompanying individual essay traces the development of this intervention with references to cases and readings covered in class. Students can pursue practical work while reflecting on general issues through an engaged learning
option. This course will prepare you to recognize and to contribute to political change through unconventional interventions broadly defined as art.

GENED 1140 Borders
CourseID: 215894
Faculty:
Next Term Offered:

As a society, we pay particular attention to borders when incidents such as children separated from their asylum-seeking parents or tear-gas being used to deter entry throw the legal divide between two nation states into sharp relief. But seldom do we stop to think about what a border is, or when and why some borders are defended more aggressively than others.

This course looks at the modern history of borders, broadly construed, from national boundaries between sovereign countries, to supranational agreements such as the European Union. It considers how borders are erected and dissolved, both legally and materially. And it queries the legal, diplomatic, social, and ethical considerations that ensue from drawing a line between one side and another, and defending that line. We will also consider how actors within societies create internal (often racialized) boundary lines such as "gated communities" or "redlined zones," that are sometimes extra-legal or even illegal, but have profound effects on the everyday lives of individuals and groups.

GENED 1142 Martin Luther King, Jr. and the Question of Conscientious Citizenship
CourseID: 207580
Faculty:
Next Term Offered:

What does it mean to be a conscientious citizen? What are our responsibilities as civic-minded, morally-engaged members of overlapping communities? This course seeks to answer such questions by exploring the ethical, religious, and political thought of arguably the greatest public intellectual and activist that the United States ever produced, Martin Luther King, Jr. In interrogating King's body of public philosophy, as well as its leading critics and interpreters, we will pursue a body of questions that remain essential to thinking through the problems of citizenship in the current age. Students will debate: How should we think about the tensions between conscience and community? How ought we think about the alignment of moral ends with practical and political means (e.g., violence, law, civil disobedience, coercion, revolution, rebellion, etc.)? Is there room for public profession of faith in political discourse or is it a conversation stopper? Lastly, given the persistence of evil and injustice, can suffering in service of justice be redemptive or does such hope simply reify the structures of injustice?

GENED 1146 Race and Justice
We all agree that racism is wrong. Yet beneath this abstract consensus we find deep disagreements about what to do about it, and even about what racism is. We will address these questions by thinking about some very specific issues, drawing on work in philosophy, law, history, and the social sciences. Is racism best understood as a system of beliefs or social structures? What makes racial discrimination wrongful? Should we seek to discourage hate speech, and if so, should it be regulated by law or through informal social norms? Is a just society colorblind? If so, how should we think about the justice of desegregation, affirmative action and reparations for slavery, all of which aim to use racial categorization to address racism? On the other hand, if a just society need not be colorblind, is it wrong for police departments to use racial profiling where profiling enables them to deploy resources more efficiently? All of these are important questions for us to confront, for the very answers that seem obviously right to some us will seem obviously wrong to others.

This course will require us to probe our convictions about some deeply held beliefs on significant issues. Students will seek out the best arguments that can be marshaled on behalf of their own moral and political views, identify the vulnerabilities of these arguments, and seek to understand those who disagree by considering the strongest arguments for the views they reject. Our understanding of our own values will deepen and may shift in the process. We will emerge from this investigation with a clearer grasp of what racism is, why it is wrong, and what a world without racism might look like.

**GENED 1147 American Food: A Global History**

Food has been central to American history, from Indigenous domestication of maize (now the world's most common food staple) to European invasion in search of spices, and from the starving time in early Virginia to debates about fatness and health in the United States today. But what--if anything--is American about American food? What does food tell us about the American past and what might that past indicate about food today? How have food and eating changed over time? How have individual food choices and national food policies connected Americans to the larger world, both the social or political worlds of other human beings and the natural world of all other living beings? Readings will include primary (raw) and secondary (cooked) sources, and assignments will include two short papers, a mid-term exam, and either a final exam or an individual research paper or project.

**GENED 1152 The Incas and Their Empire**

CourseID: 117137
The Incas forged an empire across altitudinal extremes and without writing, markets, and the wheel?all typical components of the standard conception of "empire." How did they do it, and what made their civilization so different from other ancient empires? Did their empire's collapse after the Spanish conquest eliminate the beliefs, values, and institutions at the heart of Inca society, or might the Spaniards have been influenced by the Incas without knowing it? This course will engage you in conversations about empire and influence, power and defeat, contrasting what we know of the Inca Empire with our knowledge of other ancient civilizations, as well as the first global empire of early modern Spain. In addition to lectures, films and discussions, students will explore the cultural world of the Inca Empire through the hands-on study of ancient Peruvian artifacts in the Peabody Museum of Archaeology and Ethnology. Readings will include such texts as T. D'Altroy's, The Incas (2015), on the nature and organization of the Inca Empire, and J. Sharman's Empires of the Weak (2019), arguing against the long-held belief that European military superiority after 1500 was decisive in Europe's global expansion.

GENED 1154 The Science of Happiness
CourseID: 212847
Faculty:
Next Term Offered:

Recent research in the cognitive sciences?especially psychology, economics, and neuroscience?has begun to examine the factors that promote personal well-being and happiness. One surprising, but consistent, observation has been that many of the things that are widely believed to be crucial for our happiness?wealth, material possessions, "not missing out", even good grades?not only fail to make many people happy but can actively undermine the sense of well-being. The course begins by introducing some misconceptions that many people might have about what makes for a satisfying life. We will then examine the psychological biases and other mental quirks of our mind that make it hard for us to identify what actually makes us happy, and we will then discuss what recent research reveals about factors that promote happiness. Importantly, throughout the course, students will be invited to apply these strategies in everyday life. In other words, we will both discuss what new results in cognitive science suggest to anyone interested in better understanding the factors that promote happiness, and also actively put these scientific findings into practice. Along the way, we will review historical and cross-cultural views on the meaning of "happiness", discuss the limitations of scientific approaches to the topic, and identify aspects of modern life (especially modern life at Harvard) that make it difficult to develop habits that support happiness. Finally, we will also discuss how to apply the new science of happiness beyond our own lives to improve our communities and our planet too.

GENED 1155 Literatures of Decolonization
CourseID: 212883
Faculty:
Next Term Offered:
The first Asia-Africa conference of newly independent states (held in Indonesia in 1955) was hailed by contemporary observers as an event as significant as the European renaissance in global importance. It inspired a sequence of political and cultural initiatives (including several African-Asian writers’ conferences) in pursuit of new forms of cultural exchange and political brokering unmediated by former colonial centers. This course explores the historic tensions of this transition towards a post-colonial global order across two continents. It takes as its point of departure historic notions of African-Asian political and cultural solidarity to explore important questions about counter-imperial forms of autonomy and anti-colonial practices of lateral alliance and cultural exchange. Moving through a range of literary texts and historical documents that mark this historical transition and its internal tensions, the course invites you to engage with the comparative legacies of African-Asian independence movements and solidarity initiatives as they rose to international circuits of recognition, with implications for enduring cultural debates across the Global South.

To the extent that 20th century African-Asian independence movements were considered by many authors in the mid- to late- twentieth century to be politically ambiguous and perennially incomplete, the course more specifically raises the following questions: how did several influential, anti-colonial African and Asian authors and political figures consider the fields of culture and literature to be an extension of their own political engagements? How were the fields of literature and culture comparatively viewed as a way of advancing (anti-colonial) forms of revolutionary change, or of addressing entrenched social grievances and enduring global inequalities? How did writers in the wake of anti-colonial movements reconcile the ambiguities of national independence with the risks of neo-colonial or ethno-nationalist exploitations? At times pursued in the name of lateral solidarities and liberation? And how would counter-colonial efforts to develop transregional, African and Asian forms of cultural exchange contend with the paradox that their "common ground" or shared purpose both derived from and sought to transcend a colonial past?

Readings for the course will include Richard Wright's The Color Curtain, an iconic account of the first Asian-African conference of independent states, on the cultural commonalities and uneven temporalities of African-Asian independence movements; theoretical texts on the cultural ambiguities of anti-colonial nationalisms (such as Fanon's The Wretched of the Earth); and essays by major anti-colonial, political figures such as Sukarno, Nasser, Nkrumah, and Senghor. Literary texts will include revolutionary poetry and prose works, from examples of the "strike novel" to writing that challenged the post-revolutionary emergence of dictatorial regimes and cultural censors across both continents. Course assignments will include three analytical papers.

GENED 1157 Music and Poetry
CourseID: 215891
Faculty:
Next Term Offered:

Song—the combination of music and words—is arguably the most prominent musical soundtrack of our lives and has been for centuries. This combination seems to accomplish something that neither the words nor the music can achieve on their own.
Yet, writings about vocal music are often preoccupied with aesthetic, philosophical, religious, and political debates over which of the two art forms deserves primacy: music or poetry. This course will explore the history of music and poetry from the middle ages to the present day. We shall begin with the middle ages, thanks to the burst of vernacular song by the troubadours and trouvères whose notated songs afford scrutiny of what they and their contemporaries had to say about the power of music to enhance, undermine, or contradict a poetic text. They also wrote songs about why they should sing?thus laying out an aesthetics of their sonic activity. This will serve as a starting point for our analysis of some 800 years of the practice, challenges, and purposes of putting music and poetry together, covering a repertoire of poet-composers (those who write both the text and music), famous collaborations between poets and musicians, and composers who create musical settings of pre-existent texts. Through different cultural and historical contexts, we will explore the rich layers of meaning and interpretation available in the interplay of poetry and music: from readings of the text, to scrutinizing how the music serves as an interpretation of a text (including cases of different musical settings of the same poem), to hearing how different performances bring out different interpretations. Although the focus of this course will be on the Western tradition, students will be invited in some assignments to apply concepts learned in the course to music from any historical and global tradition. No prior knowledge of music or poetry is expected or required.

GENED 1164 Leadership, Social Change, and its Challenges: Boston as a Case Study
CourseID: 212901
Faculty:
Next Term Offered:

Over the last half century Boston has faced a multitude of issues and crises. Reoccurring themes have been the problems of inequality, race and ethnicity, class, and social justice. Their resolution as successes or failures has depended on the actions taken by leaders?individuals or groups. The role of leadership will be analyzed in part through major milestone events -- such as race in the Boston Red Sox and Celtics, the school busing crisis, the sexual abuse scandal in the Catholic Church, the cleanup of Boston Harbor once the filthiest in the US, the "Boston Miracle" in community policing, the "Grand Bargain" around the state's minimum wage, current criminal justice reform efforts, the Encore Casino, and the development of the Seaport and Alston. Key protagonists from each case will visit the class. For their final project students will be required to create a case of their own. This may involve interviewing or shadowing a leader for a day.

SOCWORLD 44 Human Trafficking, Slavery and Abolition in the Modern World
CourseID: 127538
Faculty: Orlando Patterson
Next Term Offered:
This course surveys the nature, types and extent of modern servitude, distinguishing broadly between those resulting from international trafficking such as trans-national prostitution, human smuggling into bonded labor, child soldiering and organ trafficking, and more intra-national forms such as debt-bondage and the domestic exploitation of women and other vulnerable groups. Examines the conceptual and theoretical issues raised in attempts to distinguish among these types of differential power relations; the empirical difficulties of estimating the magnitude of what are inherently secretive processes; and the ideological controversies surrounding the subject. Explores ethical, socio-political and practical issues raised by these trends.
History of Art and Architecture

HAA 176X Prints in 20th C, America
Course ID: 212809
Faculty:
Next Term Offered:

HAA 272Z Post WW II European Art (Part II): Seminar
Course ID: 123274
Faculty:
Next Term Offered:

This term: Great Britain, Scandinavia, Austria, and the Benelux countries. Addresses the artistic responses to the legacies of Surrealism, to American mass culture, and to the impact of Fascist domination.
Human Evolutionary Biology

HEB 1250 Genetics and Human Evolution
CourseID: 202993  
Faculty:  
Next Term Offered: 2020 Fall

This course will explore major questions in human evolution from a genetic perspective. Students will learn how genetic data are used to reconstruct the past, to identify unique human adaptations and to understand relationships among living and archaic hominin species.

HEB 1323 The Science and History of Alcohol
CourseID: 205495  
Faculty:  
Next Term Offered: 2020 Fall

The course is an introduction to the chemistry, biochemistry and physiological impacts of alcohol use. We will explore the use of alcohol by other animals, including nonhuman primates and rodents. A historical perspective on human alcohol use will be woven into the scientific aspects.

HEB 1327 Ancient Diseases
CourseID: 208136  
Faculty:  
Next Term Offered: 2021 Spring

The seminar explores the evidence for diseases in antiquity with an emphasis on environmental determinants, modes of transmission, basic biology of organisms involved, and direct evidence from the fossil record.

HEB 1337 Coexistence in Crisis: How Animals Made Us Human
CourseID: 214597  
Faculty:  
Next Term Offered:  

Human evolution cannot be understood in isolation from other species. Our identities are the product of a multitude of interactions with other life forms, a complex web of constitutive relations. Anthropogenic activities on earth simultaneously undermine and overshadow this reality, rapidly spinning coexistence into a severe and fatal imbalance. We have diluted and dismantled our embeddedness with other beings, choosing a legacy of exploitation over symbiosis?of which our relationships with other animals are a
telling manifestation. How did this come to be? How were "human" and "animal" delineated over time? How can we comprehend and improve the fraught dynamics between humans and other beings emblematic of the Anthropocene?

The animal Other has figured prominently in human evolutionary history, as evidenced by the cave art of the Upper Paleolithic. Today, animal representations abound in diverse and often contradictory forms. This course will explore the variety of ecological and cultural relationships that form between humans and other animals?wild and domesticated species, as commodities or companions, from research objects to spiritual/sacred subjects. The course will draw on an interdisciplinary literature from science and philosophy?covering themes such as deep ecology, posthumanism, and our moral obligations to Others?so majors and non-majors are equally welcome. Class sessions will be largely discussion-based, and students will develop a semester-long research project that investigates how a given nonhuman entanglement with human lives has shaped human evolution?thus exemplifying ecophilosopher David Abrams's assertion that "we are human only in contact, and conviviality, with what is not human."

HEB 1373 Explaining Beauty: The Hidden Functions Behind Aesthetics
CourseID: 208137
Faculty:
Next Term Offered:

Why do people from some cultures find body modifications attractive that others find ugly? What makes a Picasso beautiful? Why are fashion trends constantly changing? This course will delve into the hidden functions that explain our aesthetic tastes, including what we find beautiful in the physical body, art, and fashion. Drawing on classic evolutionary theory, theories of cultural evolution, and game theory, we will seek to explain both aesthetic tastes that remain relatively constant, and those that differ dramatically across time and culture. This course will feature field trips to art museums and discussions with experts in different domains of aesthetics.

HEB 1389 Coming of Age on Planet Earth
CourseID: 205493
Faculty:
Next Term Offered:

The challenges of adult maturation are not unique to our species. Some young adult animals take risks and lose their lives, others respond to stress with eating problems or to traumatic first sexual encounters with subsequent dysfunction. The course will use a comparative approach to explore how young adult animals learn to be safe, how they acquire or lose status and rank, how they come of age sexually, and how they learn to
survive and thrive on their own. The course will combine analysis of literature from scientific fields (behavioral ecology, endocrinology and evolutionary biology) and the humanities (coming of age short stories and novels) for a comparative analysis of the common challenges of maturation across the animal kingdom and in human life.

HEB 1392 What Game Theory Reveals About Social Behavior
CourseID: 208048
Faculty:
Next Term Offered:

What happens when the benefits of one strategy depend on the strategy chosen by another? From doing favors to driving on the right side of the road, this interdependence characterizes much of human social behavior, and game theory is the tool designed to reveal what results. This course will draw on models from game theory and evolutionary dynamics to explain some of the most puzzling aspects of our psychology, including why we speak indirectly, why people end up in feuds over trivial resources, and where our moral intuitions come from. No prior knowledge of game theory or evolutionary dynamics is required.

HEB 1405 The Biology of Aging
CourseID: 126238
Faculty:
Next Term Offered:

The course will focus on human aging by examining experimental models of aging, mechanisms involved in aging, the role of diet and infection in the aging process and the evolution of the human life span.

HEB 1412 Human Energetics
CourseID: 205492
Faculty:
Next Term Offered:

In this course we will study human energy intake and expenditure, with a focus on sports. We will cover the basics of energy consumption and production, including an introduction to biochemical and physiological components. This will include understanding calories (energy) in food, the transformation of food components to usable energy in the body, and how to measure energy expenditure. The course will also feature case studies of extreme endurance feats and modern-day and historical explorers/adventurers to highlight the limits of human energy expenditure.
HEB 1417 Diet and Exercise
CourseID: 205638
Faculty:
Next Term Offered: 2020 Fall

How do diet and exercise—in both past and present— affect human health? How does an evolutionary medical perspective help make sense of the confusing, often contradictory literature on how factors like sugar, salt, fat, obesity, physical inactivity, high intensity exercise and shoes affect the human body? In this seminar, weekly readings and discussion will be used to explore how ancestral diets and forms of physical activity have shaped human anatomy and physiology, and how differences between past and present diets and forms of exercise may contribute to illness, mortality, and variations in reproductive success. In doing so, we challenge popular conceptions of what it means to be "healthy."

HEB 1418 Research Methods in Endocrinology
CourseID: 110741
Faculty:
Next Term Offered:

An introduction to research in behavioral endocrinology (the study of how hormones and behavior are related), focusing on: 1) laboratory techniques (immunoassay) for the measurement of hormone levels (cortisol and C-peptide) in saliva and urine, 2) study design strategies and data analysis methods, and 3) writing a scientific research paper.

Students complete original research projects, collecting samples, analyzing data on hormone levels and how they are related to various aspects of behavior and/or physiology, and presenting their results orally to the class and as a written research report.

HEB 1427 Experimental Methods in Human Energetics
CourseID: 213601
Faculty:
Next Term Offered: 2020 Spring

We explore the ways energy can be measured in animals, including humans. A detailed study involving doubly labeled water will anchor the course. In addition, the metabolic consequences of exercise will be studied via immunological approaches.

HEB 2330 Primate Social Behavior
CourseID: 214598
Faculty:
Next Term Offered:

A review of the behavioral interactions in natural primate populations, drawing on experimental, observational, and theoretical studies. Discussion of ecological, physiological, and developmental bases of primate social behavior, with special attention to the evolution of patterns of behavioral interactions among individuals of different age, sex, relatedness, and status. Topics include sexual conflict, sexual selection, and mating systems; care of offspring and other aid-giving; manipulative and cooperative aspects of communication; competition, dominance, and territoriality; and the evolution of social relationships.

HEB 2480 Human Nature
CourseID: 203596
Faculty:
Next Term Offered: 2018 Fall

This course will examine the evolutionary origins, biological foundations, and psychology underlying human behaviors including kinship, sexuality, incest, parental love, xenophobia, status, homicide, warfare, culture, cooking, language, and religion. Using a comparative approach, we will contextualize human behavior by examining both studies of non-human primates, especially chimpanzees, and the full breadth of human diversity, including both ethnographic and experimental data from hunter-gatherers, agriculturalists, and the most unusual of all?people from industrialized societies.
History

HIST 12Y Capitalism, Crime, and Punishment in American History
CourseID: 218496
Faculty:
Next Term Offered:

This course explores how capitalism and the criminal justice system have shaped each other throughout U.S. history, since the mid-nineteenth century. You will investigate how social conflicts along lines of race, class, and labor fostered new notions of crime and criminality and fueled the development of police, court, and prison institutions?the carceral state?to control those marked as criminal. You will also examine the political economy of carceral institutions, assessing their systemic role in regulating capitalist property and political relations. Finally, the course encourages you to interrogate the relationship between and mutual evolution of White supremacy and capitalism.

HIST 13E History of Modern Mexico
CourseID: 159613
Faculty: Kirsten Weld
Next Term Offered: 2021 Fall

This course explores the history of Mexico in the 19th and 20th centuries, emphasizing the importance of historical approaches to understanding critical phenomena in contemporary Mexican affairs. Topics covered include colonial legacies, race and ethnicity, the Mexican Revolution, the border, nation-building and development, Mexico-US relations, popular culture, economic crisis, the Zapatista rebellion, narco-violence and the "war on drugs," and migration.

HIST 13T Women in Economic Life
CourseID: 207010
Faculty: Emma Rothschild
Next Term Offered: 2021 Fall

Examines the economic lives of women in different historical periods and places. Considers legal, literary, statistical and other sources. Will also explore the place of women in the history of economic thought. Students will prepare individual research projects, and are encouraged to undertake original research using primary sources.

HIST 14D From the Belle Époque to the Third Reich: Culture and Aesthetics in France and Germany, c. 1880?1945
CourseID: 205253
Faculty: Carla Heelan
Next Term Offered: 2022 Spring

This seminar explores French and German culture in comparative perspective, from the last two decades of the nineteenth century through the end of World War II. In this course we will consider culture and aesthetics broadly conceived, from formal artistic and intellectual movements, to institutions, and customs. We will examine a range of primary sources in historical context in order to ask why French and Germans believed that culture was vital to understanding the transformative era in which they lived. Students should expect rigorous discussions that question the historical and ongoing dynamic between culture and power.

HIST 14N The Uses and Abuses of the Past: History in American Public Life
CourseID: 212684
Faculty: Lizabeth Cohen
Next Term Offered: 2022 Spring

The American public learns its nation's history through many venues, most of them outside of the traditional history classroom. Different formats and media lend themselves to different historical interpretations. And many of those interpretations also reflect concerns of the present moment, held by people with varying social and political orientations, as much as understandings of the past. Thus, a nation's history is always being constructed in different ways, at different times, by different narrators, resulting frequently in a contested national story. This seminar will probe how American history is conveyed to the public through various formats and forums and with conflicting agendas that shape historical analyses and public memory. We will examine museum exhibitions, historic sites and reenactments, public memorials, documentary film and photography, oral histories, and popular movies and theatrical productions. Using three key periods of history as our focus—the founding of the United States from early conquest and settlement though the colonial era to the Revolutionary War; slavery and the Civil War; and the civil rights movement and the Vietnam War—we will grapple with differences of historical interpretation, the primary sources they are based on, and their meaning and impact in the present. At the end of the course, students will develop their own public history projects, which can range from research papers to original examples of public history, such as planning an exhibition, making a documentary film or podcast, creating a well-researched walking tour or piece of historical performance, or undertaking an oral history project. All final projects should make use of primary and secondary materials.

HIST 14T My Country Right or Wrong? Nationalism in the Modern World
CourseID: 212862
Faculty: Derek Penslar
Next Term Offered: 2022 Spring

President Trump has said that he is a "nationalist." What does this word mean, and why does its use provoke controversy? This course answers these questions via an analysis
of nationalist ideas and movements throughout the world over the past 250 years. We will trace nationalism's origins in pre-modern identities, liberal and revolutionary forms of nationalisms in the nineteenth and twentieth centuries, nationalisms' relationship with religion, race, and gender, the apparent decline of nationalism in the late twentieth century, and its abrupt return to center stage in our own era. Requirements include a 15-page research essay.

HIST 88B Medieval History and Cinema
CourseID: 126624
Faculty: Cemal Kafadar
Next Term Offered: 2022 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 97C "What is the History of History?"
CourseID: 109928
Faculty: Ann Blair
Next Term Offered: 2022 Spring

Everything has a history, and the discipline of history has a particularly long and broad one. In this section we'll focus on ideas about how and why to study history and on the practices of historical research and writing as they have varied across different cultural contexts. In selected case studies we will consider who wrote and who read history, and how historians answered questions that we also ask ourselves today. E.g. What features are essential to a good historical account? Does the study of history teach moral lessons? How does history interact with memory?

HIST 97D "What is Environmental History?"
CourseID: 109929
Faculty:
Next Term Offered: 2022 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 97J "What is Family History?"
CourseID: 160421
Faculty: Jane Kamensky
Next Term Offered: 2022 Spring

Every family has a history; every past actor had a family. This section investigates the practices and purposes of family history. We will explore primary sources such as diaries, child-rearing manuals, and portraits, and survey methods ranging from demography to cultural history to biography. Our topics will include the "invention" of childhood, the meanings of marriage, and the relationship between the household and the state. In addition to tracing the contours of family life across a wide array of times and places, we will investigate the ebbs and flows of family history itself, including the worldwide boom in amateur genealogy today.

HIST 97K "What is Social History?"
CourseID: 203047
Faculty: Sidney Chalhoub
Next Term Offered: 2022 Spring

For a long time, the writing of history focused mainly on kings, politicians, landlords, slave owners, capitalists—that is, on those with the means to write letters, autobiographies, official documents. In the past decades, historians have increasingly studied the lives of people not apparently entitled to have their histories told: peasants, slaves, women, industrial workers. Social History is the study of the experiences of those who lived most or all of their lives submitted to the power and the oppression of others. What did these people do with what was done to them? What sources are there to investigate this question and how should historians analyze them?

HIST 97L "What is Atlantic History?"
CourseID: 204987
Faculty: Mary Lewis
Next Term Offered: 2024 Spring

We live in a world of intense exchange across borders and seas, yet most history is still taught from a national or regional perspective. By studying inter-regional developments of societies around the Atlantic Ocean, we will examine how the histories of Europe, North America, Latin America and Africa are intertwined. What methods have historians used to study the trade, migration, inter-imperial competition and revolutionary upheaval that together have helped create an "Atlantic World"? Topics include trade in commodities and slaves, the Atlantic and Haitian Revolutions, and the ecological impact of exchange, among other themes.
HIST 97M "What is International History?"
CourseID: 207519
Faculty: Erez Manela
Next Term Offered: 2024 Spring

Relations between states define some of the most important aspects of human history, including major wars, trade relations, and movements of people, ideas, and cultural productions. States, of course, have been important actors in this history, but so have other types of actors, such as international organizations, NGOs, missionary groups, philanthropic foundations, and transnational movements. In this course, we will explore major events, themes, and approaches in international history, all with the goal of better understanding how international interactions have shaped human history and experiences across time.

HIST 97N "What is Gender History?"
CourseID: 207521
Faculty:
Next Term Offered: 2022 Spring

This course examines how the historical framework of "gender" emerged from women's history to a field that explores relational dynamics and examines the processes by which female and male, feminine, and masculine are constituted in culturally and historically specific ways. We will look at how historians have evaluated gender formations and at the same time how they use the concept to understand historical change and processes. The course will also examine the methods of gender historians, the kinds of sources they use, research strategies, and how their methodologies intersect with other frameworks, namely those of class, race, ethnicity, religion, and citizenship.

HIST 204+ Legal History Workshop: Legal Pluralism
CourseID: 215928
Faculty:
Next Term Offered:

This workshop aims to provide students with an historical perspective on the phenomenon of legal pluralism world-wide, but with a focus on the medieval and early modern worlds, Europe and its colonies. Assignments and class discussions will feature a mix of major works in the field of legal history, introducing students to critical methodologies and historiographical debates, and workshop presentations by leading historians currently writing on questions of legal pluralism. Further information about the topics to be covered will be available on the course website closer to the Fall semester.

HIST 1003 (Un)Happy Days: The United States in the Great Depression and New Deal
CourseID: 207524
Faculty: Brett Flehinger
Next Term Offered: 2021 Fall
This course studies the social, political, and cultural consequences of the most profound economic collapse in American history, the Great Depression. We place the New Deal in broader context, tracing Liberalism across the Nineteenth Century and through the Great Society and Civil Rights Movement.

HIST 1005 The Early American Republic: The United States from 1783-1873  
CourseID: 204982  
Faculty: Annette Gordon-Reed  
Next Term Offered: 2022 Spring

This course will explore the creation of the United States after the conclusion of the American Revolutionary War through the presidency of Andrew Jackson. We will focus on politics, social and cultural life during this period. We will discuss, among other things, the concepts of republicanism and federalism, the French and Haitian Revolutions' effect on politics in the 1790s, Jefferson versus Hamilton, slavery, and attitudes toward Native Americans and women. Other topics: Jefferson's election in 1800, the War of 1812, the initial conflicts over slavery, the calls for a "white man's government" and the overall effects of Jackson's presidency.

HIST 1009 The Making of the Modern Middle East  
CourseID: 212665  
Faculty: Rosie Bsheer  
Next Term Offered: 2022 Fall

How was the region of North Africa and West Asia between the Atlantic and Central Asia constructed, physically and discursively, as "the Middle East"? What were the major local, regional, and global events that have most profoundly affected the political, social, cultural, and intellectual realities of the region since the mid-eighteenth century? Throughout the semester, we will draw on interdisciplinary readings to think critically about these and related questions about the challenges of studying the modern Middle East, the politics of modernity, Ottoman reform, the formation of modern nation states, colonialism and imperialism, social and intellectual movements, petro-states in global perspective, and Islam and politics.

HIST 1018 Coffee and the Nighttime: History and Politics, 1400-2020  
CourseID: 207532  
Faculty: Cemal Kafadar  
Next Term Offered: 2023 Spring

Since the fifteenth century, individuals and societies in different parts of the world adopted a gradually but unmistakably quickening tempo in their everyday lives and started to make more uses of the nighttime?for socializing, for entertainment, and for work. In this reconfiguration of the architecture of day and night, people turned to
various psychotropic substances such as coffee to help them better manipulate times of activity and repose. They have also created new social institutions such as coffeehouses, which turned into public spaces for engagement with new forms of arts and politics. The course offers a history of these developments until our own time of “living 24/7” in terms of their social, economic and political consequences. Biological aspects such as addiction and pressures on our circadian rhythms will also be explored in the context of histories of sleep and nocturnal activity.

HIST 1020 The Russian and Chinese Revolutions  
CourseID: 212670  
Faculty: Terry Martin  
Next Term Offered: 2021 Fall  
Explores the origins, experience, and consequences of revolution in twentieth-century Russia and China. Covers the overthrow of the old imperial regimes, the two Communist revolutions, cultural revolution, cooperation and competition between the two Communist regimes, and finally the revolutionary reforms undertaken by Gorbachev and Deng Xiaoping.

HIST 1026 Economy and Society in Postwar Japan  
CourseID: 124213  
Faculty: Andrew Gordon  
Next Term Offered: 2021 Fall  
Examines Japan's rise from the ashes of wartime defeat to global economic power and subsequent stagnation, with primary focus on society and economy. Considers the value and the limits of a narrative of "rise and fall" as the framework for understanding the 75 years since World War II, with focus on trends in gender roles, social (in)equality, and human impact on the environment. Asks how have people in postwar Japan, and the government, explained to themselves and the world the previous embrace of empire and war.

HIST 1032 A History of Brazil, from Independence to the Present  
CourseID: 202988  
Faculty: Sidney Chalhoub  
Next Term Offered: 2022 Fall  
This course will analyze major themes in the social and political history of Brazil from Independence (1822) to the present. Themes to be addressed are the following: Independence, colonial legacies and national identity; state formation and the question of citizenship rights; the African slave trade; land and labor policies in a slave society; slave emancipation and the crisis of the monarchy; the establishment of the republican regime; gender and the crisis of patriarchy; urban renewal and popular protest; social movements in rural areas; the labor movement; populism; the myth of racial democracy.
and its crisis; dictatorship and democracy.

HIST 1056 The New Science of the Human Past: Case Studies at the Cutting Edge  
CourseID: 212671  
Faculty: Michael McCormick  
Next Term Offered: 2021 Fall

Science is powering History into a revolutionary age of discovery through microarchaeology. We will learn how ancient DNA reveals our ancestors' migrations out of Africa and across the globe and recovers ancient pathogens and their impact from Rome to the Black Death and 16th-century Mexico; how paleoclimate science reconstructs ancient environments from natural proxies (ice cores) and historical records; and how IT changes everything from shipwrecks to Roman coins, via medieval manuscripts. We'll explore the new archaeoscience as the discoveries unfold by reading, discussing, and doing, from ancient genomes to tree rings, from Roman coins to ancient pots, and more.

HIST 1217 U.S. Foreign Policy in a Global Age  
CourseID: 160977  
Faculty: Fredrik Logevall  
Next Term Offered: 2022 Spring

The United States is the most powerful player on the international scene today, and is unlikely to relinquish that position any time soon. Understanding how and why this condition arose, and what it means for world affairs today, is our concern in this course. The emphasis is on U.S. policymaking over the past century, with due attention to the international and domestic political context in which decisions were made. Issues to be explored include the tension between isolationism and interventionism and between unilateralism and multilateralism; the emergence of the U.S. as a superpower; the Soviet-American confrontation; the rise of presidential power in foreign affairs; the wars in Iraq and Afghanistan; and the nature of American power in today's world.

HIST 1280 History of the Soviet Union, 1917-1991  
CourseID: 113970  
Faculty: Terry Martin  
Next Term Offered: 2023 Spring

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
CourseID: 109418
Faculty: Terry Martin
Next Term Offered: 2022 Spring

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 1284 Revolutionary Eurasia, 1905-1949
CourseID: 205075
Faculty: Terry Martin
Next Term Offered: 2022 Fall

Analyzes the wave of revolutions in the Russian, Ottoman, Persian, and Chinese imperial spaces from 1905 to 1949; the constitutional revolutions of 1905-1912; the 1917 Russian revolution and its Eurasian impact; revolution from above by Stalin, Ataturk, Reza Shah, and Chiang Kai-Shek; the communization of eastern Europe and the 1949 Chinese revolution.

HIST 1300 Western Intellectual History: Greco-Roman Antiquity
CourseID: 119533
Faculty: James Hankins
Next Term Offered: 2022 Fall

A survey of major themes in the intellectual history of the Greek and Roman World, with special attention to metaphysics, psychology, ethics and the philosophic life. Readings in the Presocratics, Plato, Aristotle, Lucretius, Epictetus, Cicero, Seneca, Marcus Aurelius, Plotinus, Augustine, and Boethius.

HIST 1301 Western Intellectual History II: The Prehistory of Modern Thought
CourseID: 119534
Faculty: James Hankins
Next Term Offered: 2022 Spring

Philosophy, wrote Hegel, "is its own time comprehended in thought." In this lecture course we will seek to understand the transition from Hegel to Marx through careful philosophical reconstruction but also with some attention to the German historical context. We will explore major philosophical themes in Hegel's *Phenomenology of Spirit*, *The Philosophy of Right*, and the lectures on the *Philosophy of History*; we will then consider Marx's thought as an attempt both to fulfill and to overcome Hegel's philosophical legacy in major works such as *The Economic and Philosophic Manuscripts*, the *Critique of Hegel's Philosophy of Right*, "On the Jewish Question," *The Communist Manifesto*, and *Capital*.

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.

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.

This course surveys Latin America from its 19th-century independence movements through the present day. How did the powerful legacies of European colonialism, and the
neocolonial economic order that emerged to replace it, shape the Americas' new nations? Themes include nationalism and identity, revolution and counterrevolution, populism, state formation, race and ethnicity, gender and sexuality, social movements, the role of foreign powers, inequality and social class, dictatorship, democratization, and human rights.

HIST 1520 Colonial Latin America
CourseID: 109436
Faculty: Tamar Herzog
Next Term Offered: 2021 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 1700 The History of Sub-Saharan Africa to 1860
CourseID: 124404
Faculty: Emmanuel Akyeampong
Next Term Offered: 2021 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
CourseID: 140979
Faculty: Emmanuel Akyeampong
Next Term Offered: 2022 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 1776 The American Revolution
CourseID: 203018
Faculty: Jane Kamensky
How, why, by whom, and for what was the United States created? How do the nation's origins?in a bloody civil war, and in a politics marked both by soaring promises and glaring faults?shape America today? This course explores the causes, experience, and consequences of the American Revolution, the conflict war that birthed the United States, among many other results. Treating the conflict as a multi-sided and multi-sited struggle, our vantage point will range among the thirteen rebellious colonies of the Atlantic seaboard, the thirteen other colonies that comprised Britain's America, and the vast stretches of the North American mainland that lay outside Britain's domain, but were nonetheless embroiled in the war. We will also take in the view from London and elsewhere around the globe, as America's revolution triggered realignments across Europe, Africa, and Asia.

Our inquiry will center on the unraveling of British America in the 1760s and 1770s, on the war years of 1775-1784, and on the first tentative steps toward nation building in the late 1770s and early 1780s. We will try, as much as possible, to view history forward rather than backward, exploring contingencies, interdependencies, possibilities, and roads not taken. We will also devote considerable time to pondering what it means to own the American Revolution in contemporary civic society: not only to admit the fissures of the founding era, but also to make good its still unrealized promises. Your final projects will ask you to connect primary-source research and your mastery of our assigned readings to various places the American Revolution lives in the twenty-first century, from high school classrooms to theatrical productions to monuments to museum exhibitions.

HIST 1878A The Ottoman Empire and the World, ca.1000-1550
CourseID: 142695
Faculty: Cemal Katadar
Next Term Offered: 2021 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 1878B Ottoman State and Society II (1550-1920)
CourseID: 148158
Faculty: Cemal Katadar
Next Term Offered: 2022 Spring

Surveys the transformations of the Ottoman order in the Middle East and southeastern Europe in the early modern era and in the long nineteenth century until the demise of the
state. Topics include changes in the conduct of state; social and religious movements; the impact of the new world economy and new trade routes; relations with Europe; emergence of nationalism; the `Eastern Question.' Ethnic and religious diversity, rural society, urban popular culture, guilds, gender and family life are also examined. The importance of this era for understanding today's Middle East is stressed.

HIST 1903 How Societies Remember (and Forget)
CourseID: 212673
Faculty: Kirsten Weld
Next Term Offered: 2022 Fall

As the adage goes, "All wars are fought twice: the first time on the battlefield, the second time in memory." This seminar interrogates the relationship between history and memory by analyzing how modern societies have chosen to remember ? and to forget ? their histories of war, conquest, violence, and dispossession. We examine cases from across the Americas and diverse strategies of memorialization and redress, including museums, monuments, reparations, and exhumations, to understand how contested pasts generate both political challenges and political possibilities.

HIST 1910 The History of Energy
CourseID: 205112
Faculty: Ian J. Miller
Next Term Offered: 2022 Fall

The history of energy is the history of modern political economy. The history of energy is the history of a scientific concept and its technological application. The history of energy is the history of climate change and environmental catastrophe. The history of energy is the history of life, the universe, and everything. All of these statements are true. This seminar is a critical introduction to the roles that energy has played in history and historiography. Using this ubiquitous and fundamental concept, we will explore questions ranging from climate change and capitalism to causality and colonialism in diverse places and times.

HIST 1913 Dirty Wars, Peace Processes, and the Politics of History in Latin America
CourseID: 108531
Faculty: Kirsten Weld
Next Term Offered: 2024 Spring

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 1916 The History of Evidence
CourseID: 110442
Faculty: Jill Lepore
Next Term Offered: 2023 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 1918 Directions in Civil War History
CourseID: 212921
Faculty: Drew Faust
Next Term Offered: 2022 Spring

This course will explore the history and historiography of the U.S. Civil War with a special emphasis on new directions that have emerged in recent scholarship.

HIST 1921 The History of Law in Europe
CourseID: 212653
Faculty: Tamar Herzog
Next Term Offered: 2021 Fall

This is a conference course on the history of law in Europe (including both England and the Continent, as well as Europe's overseas domains) from the fall of the Roman Empire (5th century) to the establishment of the European Community (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.

HIST 1924 Violence, Substances and Mental Illness: African Perspectives
CourseID: 159556
Faculty: Emmanuel Akyeampong
Next Term Offered: 2023 Spring
An introduction to African perspectives on mental illness, exploring the development and practice of psychiatry as a medical field in Africa, examining the grey areas within psychiatric knowledge, and engaging the ongoing debates about the interface between race, culture and psychiatry. Will review African therapeutic systems; witchcraft, causation and mental health; substance abuse; violence and mental illness; and more recent links between HIV/AIDS, loss and depression.

HIST 1930 Literature and Social History: A View from Brazil
CourseID: 159656
Faculty: Sidney Chalhoub
Next Term Offered: 2023 Spring

The objective of this course is to study major authors and works of nineteenth-century Brazilian fiction. Writing fiction from a spot deemed to be in the "periphery" of the western world meant a difficult and complex engagement with European literary and intellectual traditions. The course will focus primarily on the evidence regarding changes in the politics of social dominance in the period—from slavery and paternalism to the worlds and meanings of "free" labor. Questions of class, gender and race in the general context of defining and setting new limits of citizenship rights will be emphasized.

HIST 1932 Fictions of Adultery: From Flaubert to Machado de Assis
CourseID: 202989
Faculty: Sidney Chalhoub
Next Term Offered: 2023 Spring

This course seeks to analyze the ways in which Machado de Assis, the most important Brazilian novelist of all times, appropriated the European tradition of the novel of adultery. In doing so, he sought to discuss literary models (realism), scientific ideologies (social Darwinism), gender (he expected the misogyny of readers to fill the lacunae of the narration), and class conflict (characters in dependent relations, women in particular, deploy an array of strategies to deal with the potential violence of patriarchal figures). Readings: selected pieces on theoretical approaches to fiction from the perspective of social history and novels by Flaubert and Machado de Assis.

HIST 1935 Byzantine Imperialism
CourseID: 110448
Faculty: Dimiter Angelov
Next Term Offered: 2022 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 1945 Slavery and Public History
CourseID: 212674
Faculty: Tiya Miles
Next Term Offered: 2023 Spring

Confronting vexed historical meanings and present-day uses of the past is the special charge of public historians. This course explores the theme of slavery through the lenses and methods of public history, a field of historical inquiry and applied knowledge production that stresses past-present connections, community engagement, collaborative work, and audiences beyond the academy. As a foundational element in the structure of U.S. society, slavery has made a lasting imprint on social, cultural, political, and economic relations. Nevertheless, American public culture has avoided sustained exploration of the broad and complex history of racialized slavery and instead maintains a stance of discomfort, distance, and ambivalence. We will discuss change over time in public representations of slavery while also addressing the tensions of collaboration and audience engagement.

HIST 1998 Scientific Racism: A History
CourseID: 216220
Faculty: Alejandro de la Fuente
Next Term Offered: 2021 Fall

This course focuses on the history of "race" as a category of difference and explores why "race" has become a globally-accepted idiom to classify humans. It assesses the prominent roles that science and scientists have played in the process of naturalizing "race" and analyzes how "scientific" theories of race were developed and disseminated globally in the modern period. We trace the formation of these ideas in the North Atlantic, their diffusion to various areas of the world, and the manner in which cultural and political elites adopted or challenged them. We will devote considerable time to the emergence of eugenics, the science of racial improvement, in Europe, the Americas, and Africa and study the process of institutionalization of this science in Nazi Germany and elsewhere, including the United States. A final section of the course discusses the impact of contemporary science on ideas of race. Students in this class will work with texts and archival materials related to these scientists, some of whom were Harvard faculty.

HIST 2003 Hegel and Marx: Seminar
CourseID: 212898
Faculty: Peter Gordon
Next Term Offered: 2023 Spring
The transition in nineteenth-century German social thought from the metaphysical systems of German Idealism to a critical and practically-oriented social theory is associated most of all with two names: G.W.F. Hegel and Karl Marx. In this graduate seminar we explore both the internal (philosophical) and external (historical) significance of this formative moment in the emergence of modern social theory. We will concentrate on the canonical works—Hegel's *Phenomenology of Spirit*, *The Philosophy of Right*, and *The Lectures on the Philosophy of History*, and then turn to Marx's *Economic and Philosophic Manuscripts*, the *Critique of Hegel's Philosophy of Right* the political commentaries, and *Capital*. We will also consult the secondary literature, e.g., inter alia, Herbert Marcuse's *Reason and Revolution*.

**HIST 2006 Readings in Native American and Indigenous Studies: Seminar**
CourseID: 206979
Faculty: Philip Deloria
Next Term Offered: 2022 Fall

This course offers a survey of the historiography of Native American and Indigenous Studies. Centered on six themes—Power and the Middle Ground, Borderlands, Settler Colonialism and Sovereignty, Race and Slavery, Modernity and Futurity, and Global and Comparative Indigeneity—the course is designed to allow explorations into additional terrain, including gender and sexuality, law and policy, and comparative ethnic studies, among others. Core readings will focus on recently published scholarship. To explore field trajectories, scholarly exchange, and indigenous politics, members of the class will research and write historiographical essays that will be shared collectively, and form the basis for seminar discussion.

**HIST 2009 Oil and the Arabian Peninsula: Culture, Power, History: Seminar**
CourseID: 212678
Faculty: Rosie Bsheer
Next Term Offered: 2023 Spring

The principal analytical focus in this seminar will be the role of oil in shaping the cultural, social, political, and economic relations of the Arabian Peninsula. This region has long been at the center of global circulations of commodities, capital, military power, and cultural knowledge. Popular and academic representations, however, tend to render the Arabian Peninsula as insular, homogenous, and historically static. Rather than isolate the Arabian Peninsula from these broader connections, this course uses its focus on oil to examine the complex global linkages—through financial and resource flows, regulatory bodies, political institutions, labor markets, kinship networks, and religious circuits—that shape the region.

**HIST 2039 History from Things: Seminar**
CourseID: 205145
Faculty: Gabe Pizzorno
Next Term Offered: 2023 Spring
This seminar focuses on the use of material culture as a primary source for constructing historical narratives that access aspects of the past not covered by written words. We will look closely at how materiality theory relates to the methodologies and conceptual categories used by historians to understand the past. Students will also be trained in the specific skills needed for interpreting material sources. Because material history relies on methodologies and theoretical approaches that transcend the fields that define our discipline, the course's coverage will be broad across both time and space, allowing for participants to explore corpora of materials according to their own interests and expertise.

HIST 2055 Early Medieval History, Archaeology and Archaeoscience: Seminar
CourseID: 114862
Faculty: Michael McCormick
Next Term Offered: 2021 Fall

Joint philological analysis of Latin texts, archaeological and scientific evidence illuminating the fall of Rome and the origins of medieval Europe, culminating in a research paper.

HIST 2260 Central Europe: Seminar
CourseID: 121634
Faculty: Alison Frank Johnson
Next Term Offered: 2021 Fall

Major themes include nationalism, communism, the `Polish question,' the `Jewish question,' the political and economic viability of the Habsburg Empire, cultural exchange and diplomatic relations between Austria, Germany and the Russian Empire/Soviet Union.

HIST 2271 The Soviet Union: Proseminar
CourseID: 122085
Faculty: Terry Martin
Next Term Offered: 2021 Fall

Introduction to major debates in the historiography of the Soviet Union and late imperial Russia.

HIST 2277 Eastern Europe: Peoples and Empires: Proseminar
CourseID: 109605
Faculty: Serhii Plokii
Next Term Offered: 2022 Fall
This course is an introduction to major themes and debates in the early modern and modern history of the "other Europe." Its main focus is on the histories of European Russia, Ukraine, Belarus, Lithuania, and Poland. Readings discuss international and political developments in the region and their impact on the formation of imperial, national, religious and cultural identities from the rise of Reformation to the collapse of Communism. The course is designed to prepare students for a general exam field in East European history. It is open to graduate and advanced undergraduate students working on a senior thesis.

HIST 2300 Methods in Intellectual History: Proseminar  
CourseID: 124505  
Faculty: David Armitage  
Next Term Offered: 2022 Spring

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

HIST 2445 Constitutions, Law, and Empire: Seminar  
CourseID: 213656  
Faculty: Annette Gordon-Reed  
Next Term Offered: 2022 Spring

What is a Constitution? Why, and under what circumstances, do people make them? What about the United States and its written constitution: Exactly when and how was it made? This seminar will consider these and other questions as we read literature on constitutional developments in the British Empire, with a focus on settler constitutionalism in North America, the constitutional origins of the American Revolution, the development of state constitutions and the Federal Constitution, the law of nations (international law) with respect to slavery, colonization, and territorial expansion, Manifest Destiny, and the crisis of constitutionalism and law that led to the American Civil War.

HIST 2462 Readings in the U.S. in the 20th Century: Proseminar  
CourseID: 112069  
Faculty:  
Next Term Offered: 2021 Fall

Readings in recent monographs as well as older historiography, covering a wide range of 20th-century topics. This proseminar is required of all History graduate students focusing on the United States.

HIST 2477 History of American Economic Regulation: Seminar
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, race and capitalism, competition policy, 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 of 2007-08, and its aftermath up to the present day. The course will examine the social, institutional and intellectual history of economic regulation.

HIST 2495 Politics and Social Movement in the 20th Century United States: Research Seminar
CourseID: 126555
Faculty: Lisa McGirr
Next Term Offered: 2023 Spring

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 2538 Introduction to Islamic Law
CourseID: 214429
Faculty: Intisar Rabb
Next Term Offered: 2021 Fall

This course will survey core concepts of Islamic law (sharia) in historical and comparative modern contexts. Popular perceptions of this legal system imagine it to be a static code from 7th-century Arabia. Islamic law is in fact a dynamic legal tradition, with a rich history that reveals processes of "legislation" and interpretation analogous to our own. It also developed substantive rulings and out of institutional structures quite different from our own. Those laws and structures evolved over time, with notable changes accompanying the breakup of the Islamic empire in the 10th and 12th centuries, colonial interventions in the 18th and 19th centuries, and independence movements in the 20th and 21st centuries. How and why did Muslim jurists, judges, and political leaders define or operate within the grammar of Islamic law? Did the law impose religious-moral values or reflect cultural and socially constructed ones? What explains the recent appeal of shari?a in the last few decades and how might we understand Islamic law in our times? This course will equip students with tools to examine these questions in the course of conversations about five core subjects: Islamic legal theory, family law, criminal law, property and contract law, and constitutional law. We will relate each to the central-most question in law of any system today, through focus on Islamic law as a compelling subject of legal history and comparative law with a widespread contemporary reach: how and why do shifts in institutional structures, moral values, and the legal process affect law? Students may opt for a long paper or four short papers for
HIST 2638 Readings in Modern Chinese History: Proseminar
CourseID: 159563
Faculty: Arunabh Ghosh
Next Term Offered: 2021 Fall

This Pro-Seminar will examine developments in the field of modern Chinese history, with a particular focus on the twentieth century. Our principal goal is to gain some familiarity with the historical debates and methodological approaches that have given shaped to the field. Readings will aim to achieve a balance between classics in the field and contemporary scholarship. Topics covered include empire and semi-colonialism, rebellion and revolution, nationalism, civil society and public sphere, economic development, war, science and technology, foreign relations, and foreign relations.

This Pro-Seminar is particularly recommended for students planning an examination field in modern Chinese history. Reading knowledge of Chinese is recommended but not a required; students must have some prior coursework in Chinese history.

HIST 2692 Colonial and Post-Colonial Histories of South Asia: Seminar
CourseID: 116677
Faculty: Sugata Bose
Next Term Offered: 2021 Fall

Analyzes trends and debates in historical research and writing on colonial and post-colonial South Asia.

HIST 2707 Comparative Slavery & the Law: Africa, Latin America, & the US: Seminar
CourseID: 159554
Faculty: Emmanuel Akyeampong
Next Term Offered: 2021 Fall

This seminar surveys the booming historiographies of slavery and the law in Latin America, the United States, and Africa. Earlier generations of scholars relied heavily on European legal traditions to draw sharp contrasts between U.S. and Latin American slavery. The most recent scholarship, however, approaches the legal history of slavery through slaves' legal initiatives and actions. These initiatives were probably informed by the Africans' legal cultures, as many of them came from societies where slavery was practiced. Our seminar puts African legal regimes (customary law, Islamic law) at the center of our explorations concerning slaves' legal actions in the Americas.
HIST 2708 Sources, Methodology, and Themes in African History: Seminar
CourseID: 117941
Faculty: Emmanuel Akyeampong
Next Term Offered: 2022 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
CourseID: 110313
Faculty: Vincent Brown
Next Term Offered: 2021 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
CourseID: 147101
Faculty: Cemal Kafadar
Next Term Offered: 2022 Spring

Topic to be announced.

HIST 2885 Introduction to Archival Research in Ottoman History: Proseminar
CourseID: 120701
Faculty: Cemal Kafadar
Next Term Offered: 2023 Spring

A survey of archival collections related to Ottoman history. Introduction to the archives of the central government, pious endowments, provincial administrations, and court records.

HIST 2919A International Society in Global Context: Seminar
CourseID: 160050
Faculty: Erez Manela
Next Term Offered: 2021 Fall

A year-long research and reading course on the history of international society in global context from the early modern period to the near present. Themes include international thought; imperial, national, and post national orders; and projects of "civilization," development, and modernization in global context. Students must complete both terms
of this course (parts A and B) within the same academic year in order to receive credit.

HIST 2919B International Society in Global Context: Seminar
CourseID: 160051
Faculty: Erez Manela
Next Term Offered: 2022 Spring

A year-long research and reading course on the history of international society in global context from the early modern period to the near present. Themes include international thought; imperial, national, and post national orders; and projects of “civilization,” development, and modernization in global context. Students must complete both terms of this course (parts A and B) within the same academic year in order to receive credit.

HIST 2951 The Environmental Turn in History: Seminar
CourseID: 128257
Faculty: Ian J. Miller
Next Term Offered: 2021 Fall

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.
American Studies is an interdisciplinary effort to understand the complicated social and cultural lives of people in and in relation to the United States, both past and present. The intersections of History and Literature shape much of American Studies, but the field has also been marked by forays into music, arts, ethnic studies, economics, anthropology, journalism, and even forestry and climate science. This course will introduce students to the history and methods of the field, exploring evocative cases with a range of guest faculty.

Questions of empire are fundamentally intertwined with questions of gender. This course will focus on the imperial and intercultural contact zones of the Mediterranean at once connecting and dividing Europe, the Middle East, and North Africa from the eighteenth to the twenty-first century. With an interest both in men’s and women’s experiences and in representations of masculinity and femininity, our inquiry will also straddle the divide between colonizer and colonized. Readings will include both primary and secondary sources, ranging from images, novels, and films to memoirs, testimonials, and government documents, and from Edward Said and Frantz Fanon to Assia Djebar and Tahar Ben Jelloun. Students will learn to assess how modern imperial encounters were mediated by gendered logics of power; how these overlapped with dynamics of race, class, and nation; and how the Mediterranean region itself gave rise to different understandings of gender and empire.

While music is often touted as a "universal language" that generates social harmony, it also expresses dissent from and resistance to the status quo. This course asks how music works as a type of social and political resistance, and what aesthetic and formal qualities enable it to do so. We will explore the relationship between music and resistance in the twentieth- and twenty-first-century United States, in contexts that range
from Ma Rainey's defiant blues songs to Lin-Manuel Miranda's blockbuster musical Hamilton. Focusing especially (but not exclusively) on African American music and musicians, we will consider how music informs modes of resistance tied to race, class, gender, and sexuality. In addition to asking how music can resist extant arrangements of power, we will also consider the types of futures that music can imagine. By examining an array of historical sources, theoretical texts, and sonic archives, students will develop the ability to analyze music from a critical and interdisciplinary perspective. There will also be opportunities for hands-on and creative projects.
History of Science

HISTSCI 117 Inventing Science: Stars, Bodies, Books, and Beasts, 1500-1700
CourseID: 205189
Faculty: Hannah Marcus
Next Term Offered: 2022 Spring

Between 1500 and 1700, a number of hugely consequential things happened in Europe that have traditionally and collectively been called revolutionary - the Scientific Revolution. Copernicus and Galileo reconfigured the cosmos, Vesalius exposed the inner workings of the human body, Bacon and Descartes debated the fundamentals of scientific truth, and Newton reformulated the mathematical and physical world. But how should we understand events like these? Was there really a Scientific Revolution and did it really invent science? In this course, we will relate the classical moments associated with the early modern history of science to new scholarship that will allow us to ask questions about this so-called revolution’s relationship to ancient and medieval science, the development of the arts in the Renaissance, the impact of print, the politics of European imperial projects, early tensions between science and religion, and the growth of new traditions of observation, empiricism, and rationalism in fields such as astronomy, medicine, and natural history.

HISTSCI 128 The Century of Physics
CourseID: 205259
Faculty: Benjamin Wilson
Next Term Offered: 2022 Spring

The 20th century was a momentous period in the history of physics. It witnessed the collapse of the classical certainties of the past and the emergence of startling new ideas about the nature of physical reality, from the special and general theories of relativity to quantum mechanics, the physics of subatomic particles, and cosmological theories of the structure and development of the universe. These new understandings helped give rise to remarkable technological applications, from nuclear weapons to lasers. In this course, we will study the ideas, events, and personalities that shaped physics in the 20th century. Of particular interest are the entanglements between physics and the social and political currents of modern history?from the maintenance of empire to the rise of totalitarianism, from world wars to the Cold War.

CourseID: 213572
Faculty: Naomi Oreskes
Next Term Offered: 2022 Fall
This course examines the problem of large-scale technological transformation. Drawing on the classic framework of technological systems by historian Thomas Hughes, we will study a number of examples of large-scale technological transformation, including electricity, automation, the internet and infrastructure. Where do new technologies come from? How do new technologies overcome technological lock-in and displace previous ones? What has been the role of the free market v. the role of conscious planning and government regulation? How does regulation and finance stimulate or block innovation and uptake? Does technology drive social change or does social change drive technological innovation? Above all, how do we get the technologies we need? And if we don't get the technologies we need, why not?

HISTSCI 131B Transforming Technologies: Science, Technology, and Climate Change: The Present and Future
CourseID: 213574
Faculty: Naomi Oreskes
Next Term Offered: 2023 Spring

This course applies insights from the history of technology to the present challenge of climate change. We examine the required energy transition to prevent anthropogenic climate change, and the obstacles to it. Topics include the history and development of renewable energy, (including the factors responsible for the recent dramatic drop in the price of renewables), the prospects for smart grids and smart appliances, the problems of scaling, and the role of the private sector and private finance v. the role of government policy in stimulating uptake of new technologies. We will also look at the history of nuclear power, both in the United States and elsewhere, to consider what contribution nuclear power could or should make to our future energy mix.

HISTSCI 132 History of Environmental and Earth Sciences
CourseID: 204998
Faculty: Naomi Oreskes
Next Term Offered: 2022 Fall

Our understanding of Earth has changed radically in the last two centuries: after many years of debate, many major questions have come to be seen as largely answered. It is now accepted that the planet formed over 4.5 billion years ago; that the Earth's surface is made of rigid segments called plates whose horizontal motions are responsible for the major terrestrial features, and that there is both life and deep circulation in the deep ocean. Most recently, contributions from planetary sciences and astrobiology have queried Earth's uniqueness. This course introduces students to the history of the earth and environmental sciences from the eighteenth century to now. We investigate debates over gradualism versus catastrophism, plate tectonics, ocean circulation, Biblical and geological understandings of Earth's origins, the Gaia hypothesis, and anthropogenic climate change, as well as the emergent technology of "geoengineering."

HISTSCI 134 Nature on Display
Advanced seminar for undergraduates. We concentrate on the history of animal and plant collecting, exploration, and the way that "nature" is put on display in museums, zoos, botanic gardens, etc. ranging from the 17th century to the present. We also think about media and imagery including illustrations in books to early wildlife film. The course hopes to enlarge your understanding of the complex relations between display, entertainment, and scientific knowledge—as well as the natural history tradition in North America. Visits will be made to museums and archives at Harvard.

HISTSCI 137 Animals in History
CourseID: 160366
Faculty: Janet Browne
Next Term Offered: 2022 Spring

This course serves as an introduction to animal studies while also exploring the history of animals in relation to humans. Topics include the history of animals as food, laboratory animals, animal-human boundaries, museum and zoo displays, conservation and extinction, panda diplomacy, the anti-vivisection movement, animals in literature, and animals as pets. All these issues invest animals with crucial socio-political meaning. There will be a field trip and perhaps films. Small research projects through the semester will allow students to explore their own interests as well as relevant issues in the news. Among the things that make animal studies such an interesting area is the constant need for scholars to be aware of their own commitments and assumptions. Students from History, History of Science, and History and Literature are all welcome.

HISTSCI 138 Sex, Gender, and Evolution
CourseID: 127067
Faculty: Sarah Richardson
Next Term Offered: 2022 Fall

Evolutionary theories of sex and gender and central controversies in human evolutionary biology from Darwin to the present. Topics include debates over the theory of sexual selection and the evolutionary basis of monogamy, sexual preference, physical attraction, rape, maternal instinct, and sex differences in cognition. Readings: primary texts and historical, philosophical, and feminist analyses.

HISTSCI 145 Medicine and Health in America
CourseID: 213244
Faculty: Eram Alam
Next Term Offered: 2022 Spring

This course surveys major historical developments in medicine and health in the United
States during the modern period. We will analyze medicine and health within social, cultural, and political contexts to better understand the relationship between medicine and power. Topics will include: citizenship, nationalism, and imperialism; race, gender, and the body; capitalism and the medical marketplace; professionalization, expertise, and authority; crises and epidemics; technology and therapeutics; and questions of care.

HISTSCI 146 (How) Does Medicine Work?
CourseID: 207811
Faculty: David Shumway Jones
Next Term Offered: 2022 Spring

This course explores the history of medicine with a focus on therapeutics. When and why do people seek professional health care? What do patients and doctors hope that medical interventions will achieve? How do they judge the success or failure of the therapies? Answers to these questions have changed over time. By tracing social and intellectual histories of therapeutics, this course will offer perspective on vital debates about therapeutics today.

HISTSCI 146V Bodies in Flux: Medicine, Gender, and Sexuality in the Modern Middle East
CourseID: 156290
Faculty: Soha Bayoumi
Next Term Offered: 2021 Fall

This course examines how bodies, genders and sexualities in the modern Middle East, from the nineteenth century to the Arab revolts, have been shaped and represented via changing and competing discourses. Through a variety of historical, ethnographic, media and literary readings, the course studies multiple and dynamic representations of bodies in flux: medicalized bodies, gendered bodies, sexualized bodies, (re)productive bodies, aging bodies and bodies in revolt. The course pays special attention to medicine and science in their interaction with laws, traditions and religious practices. Some of the topics covered include analyzing histories of and discourses on slavery, femininity and masculinity, homosexuality, health, reproduction, disabilities, circumcision and genital cutting/mutilation and gender-based violence.

HISTSCI 147 The Changing Concept of Race in America: From Jefferson to Genomics
CourseID: 160520
Faculty: Evelynn Hammonds
Next Term Offered: 2022 Spring

This course explores changing concepts of race in American science and medicine, and examines the historical meanings and uses of these concepts in U.S. society from the 18
century to the present. The course asks the following questions: How have diverse scientific and medical disciplines historically defined, measured, and produced knowledge about "race"? How have scientific and medical concepts of race historically interrelated with key political, economic, and social institutions? How do current 21st century genomic concepts of race fit into this larger history of race and science?

HISTSCI 149 The History and Culture of Stigma
CourseID: 110099
Faculty: Allan Brandt
Next Term Offered: 2022 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 152 Filming Science
CourseID: 114680
Faculty: Peter Galison
Next Term Offered: 2020 Fall

Examination of the theory and practice of capturing scientific practice on film. Topics will include fictional, documentary, informational, and instructional films and raise problems emerging from film theory, visual anthropology and science studies. Each student will make and edit short film(s) about laboratory, field, or theoretical scientific work.

HISTSCI 158 Latin America as Laboratory, 1492-Present
CourseID: 207953
Faculty: Gabriela Soto Laveaga
Next Term Offered: 2022 Spring

Since 1492 outsiders have tried to explain and define the region we now call Latin America. In the fifteenth century the inhabitants of the Americas, often displayed as curiosities in the courts of Europe, served as a source of perplexed wonder. Were these humans? If so, what type? Questions about the humanity of natives led to philosophical debates about the nature of humankind and introduced the concept of race. Unknown flora, arriving on ships, sparked notions that expanded the fields of botany, biology, and medicine. Ocean navigation and a new understanding of the relationship between land and water emerged when mariners experienced the hurricanes of the Caribbean. From
royal botanical expeditions to astronomy European scientific knowledge expanded with
the introduction of knowledge and raw material coming from the Americas.

In this course students will understand the role that the Americas played in building our
modern world, they will broaden their understanding of knowledge circulation from the
fifteenth to the twenty-first century; examine place and knowledge production; race,
citizenship, and science; and how Latin America fueled Europe’s Age of Reason and the
Industrial and Scientific Revolutions. By placing Latin America in conversation with
Europe we gain a fuller understanding of how science is produced and consumed.

HISTSCI 174 Critical Experiments in the Human Sciences
CourseID: 122167
Faculty: Rebecca Lemov
Next Term Offered: 2020 Fall

This course focuses on high-impact experiments - among them, the Milgram
"Obedience" experiments and the Stanford Prison Experiment - carried out in the
twentieth-century human sciences by anthropologists, sociologists, social psychologists,
and/or experimental psychologists. Many dreamed of a "technology of human behavior"
and conducted experiments toward this end. What were the results, and how do they
continue to affect our thinking and daily lives today?

HISTSCI 176 Brainwashing and Modern Techniques of Mind Control
CourseID: 126335
Faculty: Rebecca Lemov
Next Term Offered: 2023 Spring

This course examines the phenomenon of "brainwashing" as a modern set of techniques
that can apparently force a subject radically to alter her beliefs against her will. The Cold
War roots of 'brainwashing' - both the myth and the reality -- lie in the politics of
twentieth-century anti-Communism and the deeper fear that people's most strongly held
thoughts, ideas, and ideological commitments could be vulnerable to powerful infiltration.
In order to understand the dynamics of this process we will examine case studies
beginning with the Korean War-era emergence of the term 'brainwashing', the American
interdisciplinary science of "coercive persuasion" that arose in response, and successive
waves of technological, political, and sociocultural developments. We will also look at
how brainwashing and analogous persuasive techniques may operate among larger
groups, crowds, organizations, and mass societies.

HISTSCI 179 The Freudian Century
CourseID: 109859
Faculty: Elizabeth Lunbeck
Next Term Offered: 2021 Spring
Explores the consolidation and rise to prominence of a distinctively modern psychological perspective on human nature, motivation, and desire from 1900 to the present. Opens with the debut of therapeutic culture and the Freudian recasting of the self, with attention to dreams, sexuality, interiority, gender, and cultures of trauma. Moves to the mid-century period and beyond, the heyday of the psychological perspective in the United States, looking at the psychology of affluence, the invention of “identity,” the new narcissism, and personalities and power in the workplace. Ends with an assessment of the virtues and liabilities of the 21st century expressive self.

HISTSCI 182 An American Way of War: Technology and Warfare
CourseID: 203128
Faculty: Matthew Hersch
Next Term Offered: 2021 Fall

American society has, from its founding, been transformed by the experience of warfare. This lecture course explores two interconnected ideas: the development of military technologies from the earliest settlement of North America to the present day, and the profound impact of these technologies on people, including veterans and the societies to which they returned. Beginning with an examination of bladed weapons and the psychology of killing, we will look at how supposedly revolutionary weapon systems?the gun, the tank, the airplane, the atomic bomb, the drone?came to define a distinctly American mode of warfare, and created new problems for those exposed to their lethality.

HISTSCI 183 Engineering East Asia: Technology, Society, and the State
CourseID: 207617
Faculty: Victor Seow
Next Term Offered: 2021 Fall

Who creates and controls technology within society? How have technological developments shaped and, in turn, been shaped by social change? Do technological artifacts have particular politics? In this course, we will explore these and other questions concerning the intertwined relationship of technology, society, and the state within the context of East Asia’s long twentieth century. From the era of steam power to the present, East Asia has undergone epochal social and technological transformations. China’s recent bold forays into artificial intelligence are but among the latest in broader trends, beginning with Japanese, South Korean, and Taiwanese successes with consumer electronics manufacturing over preceding decades, that have marked the region as the site from which we may very well see the emergence of our technological future. In examining the history of technology in modern East Asia, we will gain a deeper understanding of the region and its technological revolutions and, more generally, of the workings of technology in the industrial modern age.

HISTSCI 184 Technology and Capitalism
CourseID: 207695
How have capitalist economies facilitated technological change? Conversely, how have technological developments shaped and sustained the system of capitalism? Technological inventions and innovations have resulted in products that have generated consumer demand and desire. Technology has also altered processes of production and, in so doing, shifted the meaning of work. This seminar looks at the complex relationship between technology and capitalism through cases drawn from all around the globe. Topics we will cover include but are not limited to patents and intellectual property, research and development, and mechanization and automation. Readings consist of primary sources, classic works, recent scholarship, and a graphic novel. As part of this course, we will be working with archival materials in Baker Library at the Harvard Business School.

HISTSCI 188 Open Minds, Wired Worlds: Computers and Cyberculture
CourseID: 160371
Faculty: Matthew Hersch
Next Term Offered: 2022 Spring

From the birth of the electronic computer through the rise of social networking, this lecture course will trace both the eighty-year effort to create an electronic information machine, and the parallel effort to use this technology to enable people to create new kinds of communities. Beginning with the rise of information science and cybernetics, and continuing through the origins of digital logic and electronic computation, this course will explain the rise of smaller, faster, and more personal computers while examining the attendant political, social, and economic forces that spurred the development of a global communications network.

HISTSCI 191CU Harvard's Changing Landscapes: A Contemporary History Project
CourseID: 213483
Faculty: Dave Unger
Next Term Offered: 2022 Spring

This project-based class is designed to introduce students to the range of skills needed to research and document historical change while it is "in process." It will take as its focus the School of Engineering and Applied Sciences on the eve of their move to Allston. Students will learn the theory and technique of oral history, will practice other public history-oriented forms of documentation, and will study collecting practices used to preserve the record of modern-day science. To fully make sense of their site, they will also be introduced to scholarly perspectives on architecture and science, lab communities, and experimental practice, while also learning about the often invisible inner workings of Harvard's labs. They will also learn broadly applicable skills for project management and teamwork. The documentation gathered by the students will be part of a larger collecting initiative, and will become part of the CHSI collection.
HISTSCI 194 Scientific Sites
CourseID: 208323
Faculty:
Next Term Offered:

This course aims to explore scientific-technical sites—places of research, production, teaching, testing, and disposal. Some may be historical (such as disused Cold War relics) others in current use. How are these places shaped by the work that goes in them, how do the sites, in return, condition the work? Our sources will be a mix of site visits, texts (e.g. historical, ethnographic) and films (documentary). Each student will produce both a paper and a short cell-phone filmed video (no experience, we will teach all you need). Open to undergraduates and graduates.

HISTSCI 194 Scientific Sites
CourseID: 208185
Faculty: Peter Galison
Next Term Offered: 2022 Spring

This course aims to explore scientific-technical sites—places of research, production, teaching, testing, and disposal. Some may be historical (such as disused Cold War relics) others in current use. How are these places shaped by the work that goes in them, how do the sites, in return, condition the work? Our sources will be a mix of site visits, texts (e.g. historical, ethnographic) and films (documentary). Each student will produce both a paper and a short cell-phone filmed video (no experience, we will teach all you need). Open to undergraduates and graduates.

HISTSCI 199 Science and Religion in America
CourseID: 203705
Faculty: Naomi Oreskes
Next Term Offered: 2021 Fall

This course examines the history of science and religion, with a focus on the United States. Science and religion are often viewed as intrinsically at odds with each other, but are they?? Or have we over-emphasized a small number of conspicuous conflicts? And why have certain controversies loomed so large in U.S. historiography? Topic will include the founding father’s views of science and religion; the 19th century creation of government-based scientific agencies; the development of research universities as an alternative to denominationally-based higher education; Andrew Dickson White and the "warfare of science and religion" thesis, the trial of Tennessee school teacher John Scopes for teaching evolution and the popular interpretation of that trial; creationism in the mid-late 20th century, and religious-based opposition to climate science. We will pay particular attention to the question of how the relationship between science and religion has changed over the course of U.S. history, and the drivers of those changes.

HISTSCI 224 Science and Security
Modern states have interpreted science as an instrument of security and a realm of special security concern. This graduate seminar contemplates security as a subject and an analytical category in the history of modern science. It considers various approaches to historical writing about ideals, concepts, and practices of security at the intersection of knowledge and power. Readings will touch on projects of imperial control and postcolonial modernization; the Cold War and the nuclear age; environmental and energy security; and broad themes including security expertise and its construction, risk, prediction, and secrecy.

HISTSCI 226 Science in the Cold War
CourseID: 205382
Faculty: Benjamin Wilson
Next Term Offered: 2022 Spring

This seminar examines the broad and multifaceted interaction between science and the Cold War. In the years between 1945 and the collapse of the Soviet Union, science was enrolled in a remarkable range of ideological, cultural, political, and technological projects. In what ways did Cold War priorities and institutions shape the development of modern science? How did modern science make the Cold War? Readings will include classic and recent works that have explored and critiqued the notion of "Cold War science."

HISTSCI 227 Scientific Visualization: From Galileo to Black Holes
CourseID: 214531
Faculty: Peter Galison
Next Term Offered: 2023 Spring

Visualization has been central to the development of science over the last 400 years. From diagrams and thought experiments through traces, photographs and film, the ability to picture, and reproduce, images of scientific phenomena has shaped our understanding of the natural world. This course will explore that history, philosophy, and sociology; how the scientific image has shaped standards of demonstration, opened up new ways of knowing, and accompanied the development of the very idea of objectivity.

HISTSCI 231 Transforming Technologies: Science, Technology, and Social Change
CourseID: 110280
Faculty: Naomi Oreskes
Next Term Offered: 2020 Fall
Climate change threatens severe dislocation of our environment, culture and infrastructure, as well as substantial losses to biodiversity and natural beauty. Virtually all experts agree that to avoid extensive disruptive climate change, we must transform our energy system from one based on burning carbon-based fuels to renewables or other energy sources that are net carbon-neutral. This will require a technological transformation. This course examines that challenge in light of past and present transforming technologies. In the first part of the class, we examine past examples of technological transformation, and consider what we might learn from them. In particular, we consider the questions: where do new technologies come from? What has been the role of the free market v. the role of conscious planning? Does technology drive social change or does social change drive technological innovation? Above all, how do we get the technologies we need? Do we get the technologies we need? In the second part we examine the required energy transition to prevent anthropogenic climate change, and the obstacles to it.

HISTSCI 238 Rethinking the Darwinian Revolution: Seminar
CourseID: 122166
Faculty: Janet Browne
Next Term Offered: 2020 Fall

We will explore the new historiography of evolutionary ideas, covering the political, social, literary, and scientific commitments of 19th and early 20th century thought, and reassess the roles of Charles Darwin and Alfred Russel Wallace. There will be an opportunity to read key Darwin texts.

HISTSCI 238A Rethinking the Darwinian Revolution: In the Field
CourseID: 205270
Faculty: Janet Browne
Next Term Offered: 2020 Fall

Companion field work for graduate seminar: We will explore the new historiography of evolutionary ideas, covering the political, social, literary, and scientific commitments of 19th and early 20th century thought, and reassess the roles of Charles Darwin and Alfred Russel Wallace. There will be an opportunity to read key Darwin texts.

HISTSCI 239 History of Biology 1800-2000
CourseID: 213482
Faculty: Janet Browne
Next Term Offered: 2021 Fall

This course covers many of the big conceptual themes in the history of biology. It starts in 1800 when the word biology was first defined as a particular way of thinking about life and organisms, and ends in 2000 with the modern re-evaluations brought about by genomics. Attention will be paid to the rise of evolutionary theory. Classes will be based
on assigned readings and discussion with weekly response papers. It is most suitable for graduate students.

HISTSCI 240 Air Pollution: A Global History
CourseID: 212937
Faculty: David Shumway Jones
Next Term Offered: 2022 Fall

Air pollution has become a leading cause of death worldwide, killing more people than AIDS, tuberculosis, and malaria. This seminar draws on environmental history, history of science, and history of policy to understand this problem. It will examine the material history of air pollution, from the ancient world, to the industrialization of Europe and America, to contemporary India and China. It will track the shifting configurations of how air pollution has been understood as a social, medical, or moral problem. It will assess the measures taken by different societies to control air pollution, exploring histories of activism, policy, and regulation.

HISTSCI 242 Global Perspectives on the History of Medicine
CourseID: 205195
Faculty: David Shumway Jones
Next Term Offered: 2020 Fall

The seminar will design and develop a General Education course that uses a global perspective to teach key themes in the history of disease and medicine.

HISTSCI 243 Documentality: On the Archive
CourseID: 213379
Faculty: Eram Alam
Next Term Offered: 2021 Fall

"There is no political power without control of the archive," writes Jacques Derrida, yet, "nothing is less clear today than the word 'archive'." In this course, we will examine the multivalent concept of the archive and its relationship to different forms and structures of knowledge. The course will begin with an introduction to theories of the archive, attending to issues of power, memory, subjectivity, and governance. Then, we will turn to critiques of the archive or archival practice and study texts that interrogate race, gender and the body; science, medicine, and technology; and coloniality/post-coloniality in relation to the archive. Readings will span disciplines, geographic regions, and time periods.

HISTSCI 245 The Changing Concept of Race in Science and Medicine in the U.S.: From Jefferson to Genomics
CourseID: 108811
Faculty: Evelynn Hammonds  
Next Term Offered: 2021 Spring

This course explores the history of the concept of "race" as used by biologists, anthropologists, and physicians from the 17th century to the present and social and political responses to the concept of race in these fields.

HISTSCI 249 The Opioid Epidemic in Historical Perspective  
CourseID: 207699  
Faculty: Allan Brandt  
Next Term Offered: 2020 Fall

This course will trace the use of opiates and other addictive substances over the last century. The goal will be to understand the historical and social contexts of the emergence and significance of the current epidemic, as well as public policies designed to address its impact. The course will also explore the social, cultural, medical, and political determinants of the rise in opioid addiction and its associated morbidity and mortality. Students will be required to write an original research paper that will be part of a multi-authored anthology on the history of the epidemic.

HISTSCI 251 Feminist Science Studies  
CourseID: 205427  
Faculty: Sarah Richardson  
Next Term Offered: 2023 Spring

An introduction to central texts, theories, and research methods in scholarship on gender and science.

HISTSCI 252 Sciences of History  
CourseID: 160522  
Faculty: Alex Csiszar  
Next Term Offered: 2022 Spring

What is historical method, and in what sense might history be made a science? Proposed answers to these questions have varied over time, in part according to changing conceptions of science and its methods. Course topics will include concepts of the event, agency, and causation; the constitution and use of archives; quantitative approaches to history; values of objectivity and completeness; and big history. Emphasis, not exclusive, on how historians of science have approached these historiographical problems.
HISTSCI 253 Bioethics, Law, and the Life Sciences
CourseID: 122616
Faculty: Sheila Jasanoff
Next Term Offered: 2022 Spring

Seeks to identify and explore salient ethical, legal, and policy issues - and possible solutions - associated with developments in biotechnology and the life sciences.

HISTSCI 258 Latin America as Laboratory, 1492-Present
CourseID: 207952
Faculty: Gabriela Soto Laveaga
Next Term Offered: 2021 Fall

Since 1492 outsiders have tried to explain and define the region we now call Latin America. In the fifteenth century the inhabitants of the Americas, often displayed as curiosities in the courts of Europe, served as a source of perplexed wonder. Were these humans? If so, what type? Questions about the humanity of natives led to philosophical debates about the nature of humankind and introduced the concept of race. Unknown flora, arriving on ships, sparked notions that expanded the fields of botany, biology, and medicine. Ocean navigation and a new understanding of the relationship between land and water emerged when mariners experienced the hurricanes of the Caribbean. From royal botanical expeditions to astronomy European scientific knowledge expanded with the introduction of knowledge and raw material coming from the Americas.

In this graduate seminar students will broaden their understanding of knowledge circulation from the fifteenth to the twenty-first century; examine place and knowledge production; race, citizenship, and science; and how Latin America fueled Europe’s Age of Reason and the Industrial and Scientific Revolutions. By placing Latin America in conversation with Europe we gain a fuller understanding of how science is produced and consumed.

HISTSCI 268 Health, Science, and Development in the Twentieth Century
CourseID: 204422
Faculty: Gabriela Soto Laveaga
Next Term Offered: 2020 Fall

In this graduate seminar we examine how the rhetoric of science was used to 'solve' problems in Africa, Latin America, and South Asia in the twentieth century. From civil engineering wonders, like the Panama Canal, to agricultural solutions, like the Green Revolution, we will discuss the unexpected consequences of foreign models in colonial and postcolonial spaces. Examining cases such as uranium extraction in African nations or glaciology in Peru can help us understand the socio-political consequences of science-on-ground when countries become laboratories for foreign-led aid.

HISTSCI 272 Big Data: Past, Present, Future
The goal of this class is to understand more deeply the roots and current practices involved in "Big Data," an umbrella term and current buzzword used to mark the revolutionary potential inherent in working with scaled-up collections of data and new data-processing and -storage technologies. We will begin by examining claims that Big Data has ushered in a new era of epistemology and scientific understanding. Next, we will investigate the historical development as well as material and political conditions that produced the current moment. We will read histories and ethnographies of Big Data and its historical precursors across fields as diverse as (but not limited to) bioinformatics, climate science, anthropology, library science, and paleontology, and will consider the interpenetration of Big Data's practices in commerce, national security, personal life ("self-tracking") and the project of self-engineering. The aim of the course is to be better able to assess the challenges and opportunities the current "data deluge" poses to society.

HISTSCI 276 Science and Technology of the Self
CourseID: 214615
Faculty: Rebecca Lemov
Next Term Offered: 2023 Spring

This class examines the ambition to capture the self in scientific language via new methodologies and technologies. How did large research enterprises comprising "big social science" emerge in the 20th century at the meeting place between anthropology, psychology, psychoanalysis, and other human and life sciences? We begin by looking broadly at the history of the self, and ask how to define "technologies of the self." The course then explores 20th and 21st century attempts to represent the self in graphs, ethnographic interviews, psychograms, fMRIs, fieldwork, and large datasets of dreams. Can "inner life experience" be quantified?

HISTSCI 277 Big Data and Surveillance
CourseID: 207913
Faculty: Rebecca Lemov
Next Term Offered: 2022 Spring

This course investigates the emergence of new types of surveillance fueled by big data. The premise of the course is that these urgent contemporary issues can begin to be better understood by use of historical epistemological methods. In this spirit, first we will examine the question, "What is big data?" We will ask how it differs from other forms of knowledge, how it bears on the scientific method, and how we might best define it. Next the course will explore different historical forms of surveillance ? comparing the totalized top-down forms of surveillance in, for example, East Germany, with new data-driven forms emerging today. Finally we will explore areas such as predictive policing and algorithmically-driven decision-making in many arenas and ask about their implications.
for freedom and subjection.

HISTSCI 279 Freud and His Legacies: Readings in the History of Psychoanalysis
CourseID: 109860
Faculty: Elizabeth Lunbeck
Next Term Offered: 2021 Fall

Selected topics in psychoanalysis from Freud to the present, with attention to conceptualizing and writing the discipline’s history. Among topics to be covered are the conditions of theory change, historicizing the analytic self, and assembling the analytic archive; locating major figures and national schools (Klein, Lacan, Kohut; Britain, France, Argentina); case studies in thinking with psychoanalysis-understandings of people and possessions, conflict and aggression, warfare and welfare; and pathologies of everyday life, from the abused wife to the corporate titan. Throughout, the seminar will focus more generally on writing intellectual and disciplinary histories. Note: Open to advanced undergraduates with permission of the instructor.

HISTSCI 281 Science and Technology in East Asia
CourseID: 207694
Faculty: Victor Seow
Next Term Offered: 2022 Fall

This graduate proseminar surveys developments in the field of science and technology in East Asia from the early modern period to the recent past. Through the critical reading of scholarship both classic and contemporary, we will familiarize ourselves with the main historiographical debates that have shaped the field, and think through the processes and politics involved in writing this history. We will also discuss ways that these debates can be brought into the classroom for undergraduate teaching. Topics we will cover include the Needham question, everyday technologies, natural history and systems of classification, scientific nationalism, and technoscience under communism and capitalism. Background knowledge in East Asian history expected and required.

HISTSCI 284 Algorithms
CourseID: 214503
Faculty: Alex Csizsar
Next Term Offered: 2023 Spring

This course situates the current explosion of interest in algorithms in culture by uncovering a much longer history of attempts to automate or otherwise simplify judgment, decision making, and attributions of trust and relevance. Rather than assuming that our current predicament is a direct result of recent technological advances, the course will stretch back to before the early modern period to consider recipe books and Arabic mathematics, through Enlightenment probability, and early
conceptions of artificial intelligence. Taking our cue from current interest in the role algorithms play in issues of social justice, labor, discrimination, and ethics, we will look to see if we can trace a longer history of algorithms that is not simply a history of ideas but which places these issues at the center of the narrative. Note: Although the second half of the course will engage closely with new work in STS, it is possible to take this course to satisfy the Department of History of Science pre-1800 distribution requirement.

HISTSCI 287 Teaching the History of Science and Technology
CourseID: 203611
Faculty: Matthew Hersch
Next Term Offered: 2021 Spring

This seminar provides graduate students with both an accelerated introduction to the history of science and technology, and to current methods for teaching this subject to undergraduates. While the course will engage with methodological questions, our principal focus will be on developing a series of explanatory frameworks for 5,000 years of techno-science, and crafting a series of discrete lessons capable of conveying important knowledge and skills to students. Intended for graduate students in any field, this course serves as both a refresher on Western technological history and a teaching practicum intended to prepare doctoral students for oral examinations and teaching positions in the field.

HISTSCI 288 The Digital Age: Sources and Methods
CourseID: 214345
Faculty: Matthew Hersch
Next Term Offered: 2023 Summer

Moving beyond the history of any particular device or process, this advanced seminar constructs a broad social and cultural history of the computerized world, from the earliest conceptions of mechanical computation and control to the networked society in which we live today. In this seminar, we will explore the multiple uses to which information technologies?the computer and the Internet in particular?have been put, from war and crime to efforts to create new kinds of communities across a nation and across the globe. By looking at an eclectic collection of scholarly and popular sources?including film?we will situate the development of "cyberculture" in the larger history of the complex relationship between technology and Western society.

HISTSCI 299 Science, State, Corporation
CourseID: 207861
Faculty: Peter Galison
Next Term Offered: 2021 Fall

In the heat of World War II, the state for the first time systematically contracted universities to advance science and technology to pursue the war effort. During the Cold
War, the institutional and legal arrangements that facilitated the state-science relationship broadened to cover a vast range of disciplines and agencies, from the far reaches of theoretical physics to the most applied technologies. This course will explore the major, ongoing post-Cold War shift in this arrangement: corporations and foundations now play a powerful role in directing and supporting scientific inquiry. The seminar asks: How are the relations among state, science, for-profit corporations, and civil society changing? How do contemporary politics interplay with research funding from all sources? What is the new geography of technical-scientific work? What kind of work, what forms of knowledge are stressed or dropped? Who is engaged in its pursuit and how is it disseminated? How do law and (de-)regulation affect the newly emergent model, and how are they affected by it?
Division of Humanities

HUMAN  3 The Rise of the Greek Classic
CourseID: 218571
Faculty:
Next Term Offered:

Course created to support student import.

HUMAN  4 The Forms of Drama
CourseID: 218576
Faculty:
Next Term Offered:

Course created to support student import
Our world is steeped in sound, but we must learn to pay attention to listening. Sounds produce emotions, mark out spaces, call up memories; silence can be deafening; voice is a marker of identity. This course will sharpen our ears. We explore the sonic world through diverse readings and creative projects with sound. Discussions and assignments will open our minds (and ears) to listening practices, what the arts teach us about listening, and how we describe our experiences as listeners. We examine the relationships between sound and time, community, responsibility and attentiveness, and explore the soundscape in which we live.

With readings from Gilgamesh and The Odyssey to Salman Rushdie and Orhan Pamuk, this course explores how great writers refract their world and how their works are transformed when they intervene in our global cultural landscape today.
Linguistics

LING 106 Knowledge of Meaning
CourseID: 117788
Faculty:
Next Term Offered:

This course is an introduction to the field of natural language semantics, which is a branch of linguistics concerned with meaning. What does it mean to know the meaning of a sentence? How do different parts of a sentence compose to form a sentence meaning? We will start by looking at sentence-level meanings and relations between them. Then, we will investigate how the meanings of sentence-internal elements (like verbs, subjects, and adjectives) are composed to form sentence meanings. During the process, we will cover some formal tools that allow us to talk about language in a precise way: set theory, propositional logic, predicate logic, and lambda notation. We will consider how the formal tools apply (and not apply) to natural languages and discuss how we can achieve a more comprehensive understanding of meaning.

LING 108 Introduction to Historical Linguistics
CourseID: 123850
Faculty:
Next Term Offered: 2020 Spring

Methods and goals of linguistic reconstruction. Topics include the regularity of sound change, types of linguistic change, the relationship between linguistic reconstruction and synchronic analysis, language contact and borrowing, and mechanisms of linguistic change, including recent theories.

LING 117R Linguistic Field Methods
CourseID: 123611
Faculty:
Next Term Offered: 2017 Spring

In our study of human language we rely on data from different, sometimes underdescribed, languages. But how do we obtain reliable data? This course provides tools for the elicitation of phonological, morphological, and syntactic information, working with a native speaker of an unfamiliar language. We focus on the practical methodology and discuss problems of data collection and grammatical description in the field, with the aim to prepare students for their own potential fieldwork.
LING 123 Intermediate Indo-European
CourseID: 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 143 Morphosemantics
CourseID: 000143
Faculty:
Next Term Offered:

This course covers topics at the intersection of morphology and (formal) semantics, including, for example, theories of features (e.g., person, number, gender) from morphological and semantic perspectives; converging and diverging evidence for markedness relations; morphological and semantic evidence for the internal composition of grammatical categories; and related topics.

LING 147 Semantics of Questions
CourseID: 203755
Faculty:
Next Term Offered:

This course is an in-depth investigation into the semantics of questions. Several canonical approaches are introduced, including Categorial Semantics, Partition Semantics, and Alternative Semantics. Topics covered include composition of questions, variations of exhaustivity, uniqueness effects, quantificational variability effects, and mention some readings.

LING 168 Introduction to Germanic Linguistics
CourseID: 122755
Faculty:
Next Term Offered: 2021 Fall

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
CourseID: 115947
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
CourseID: 123350
Faculty:
Next Term Offered: 2021 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 190 Quantitative Methods in Linguistics
CourseID: 212923
Faculty:
Next Term Offered:

Introduction to statistical methods for the analysis of experimental and corpus data in linguistics. Emphasis is on case studies from sociolinguistics, phonology, semantics, and historical linguistics and on current approaches to data modeling and visualization in R, a software environment for statistical computing.

LING 205R The Syntax-Semantics Interface
CourseID: 114962
Faculty:
Next Term Offered: 2021 Fall

An exploration of issues related to the architecture of the grammar, with emphasis on the structures that are interpreted at the semantic interface, and how they are derived.

LING 215 Phonological Theory II
CourseID: 107809
Faculty:
Next Term Offered:

This course addresses topics of current interest in phonological theory, potentially including competing constraint grammar frameworks, learnability, naturalness biases, prosody, quantitative approaches (experimental or corpus-driven), variation, gradience, and the morphological interface.
LING 226R Advanced Hittite
CourseID: 124027
Faculty:
Next Term Offered: 2021 Spring

Advanced readings in Hittite and an introduction to Cuneiform and Hieroglyphic Luvian.
Mind, Brain, and Behavior

MBB  S-102 Becoming a Brain Scientist: Neuroscience and Psychology Research
CourseID: 219654
Faculty:
Next Term Offered:

MBB  980S Cognitive Neuroscience of Meditation
CourseID: 207091
Faculty: Sara Lazar
Next Term Offered: 2022 Spring

Buddhist philosophy describes a model of how the mind works, as well as a method, mindfulness meditation, that can be used as a tool to transform consciousness and reduce mental distress. Neuroscientists have begun to study the impact of meditation on brain structure and function, often using Buddhist philosophy to guide their hypotheses. We will review and discuss how the science relates to Buddhist philosophy, using the four foundations of mindfulness as the primary framework. We will also compare and contrast the Buddhist model with modern scientific models of how conscious experience is created in the brain, in order to gain a more nuanced understanding of consciousness that integrates philosophy, neuroscience, and personal experience. No prior knowledge of Buddhism is required. The course will be a mixture of lecture, discussion of two primary scientific articles that are assigned each week, and formal powerpoint presentations by students. Students will write a final paper on a topic of their choice that is relevant to the themes of the course.
MEDVLSTD 106 Poets, Kings, and Travellers: Encountering Alexander in the Medieval World
CourseID: 212866
Faculty:
Next Term Offered:

Organized around three archetypal characters—the poet, the king, and the traveller?this course offers a compelling and interdisciplinary introduction to the medieval world. Our guide on this journey is Alexander the Great, the historical and legendary figure celebrated across the medieval globe, from Asia to the Middle East to Europe and beyond. Alexander’s rich and varied story, as told by his medieval admirers, will provide students with a road map for their own exploration of medieval cultures, societies, and economies, enriched by encounters with the manuscripts, images, and objects they left behind.

MEDVLSTD 119 Constitutional and Legal History of Medieval Continental Europe
CourseID: 147748
Faculty:
Next Term Offered:

A survey of continental European constitutional and legal history from the fall of the Roman Empire to the “Rise of absolutism” at the beginning of the seventeenth century. Focuses on the main expressions of European legal culture over this long period of time. In each period an effort is made to relate the types of law produced to social, political, and religious history.

MEDVLSTD 300HFA Medieval Studies Interdisciplinary Workshop
CourseID: 123301
Faculty:
Next Term Offered:

Focuses on dissertations in progress and other research topics of mutual concern.

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

MEDVLSTD 300HFB Medieval Studies Interdisciplinary Workshop
Focuses on dissertations in progress and other research topics of mutual concern.

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

MUSIC  10A Harvard-Radcliffe Orchestra  
CourseID: 110112  
Faculty:  
Next Term Offered:

This is an experiential learning course. The ensemble gives several concerts each year, sometimes joining with the chorus to perform large-scale works. Students are required to attend all rehearsals and certain special Saturday "retreats" announced in advance. Students are expected to practice the music outside the rehearsal time. Grades are based on attendance and participation.

MUSIC  10B Harvard-Radcliffe Orchestra  
CourseID: 160694  
Faculty:  
Next Term Offered:

This is an experiential learning course. The ensemble gives several concerts each year, sometimes joining with the chorus to perform large-scale works. Students are required to attend all rehearsals and certain special Saturday "retreats" announced in advance. Students are expected to practice the music outside the rehearsal time. Grades are based on attendance and participation.

MUSIC  18A Harvard Jazz Band  
CourseID: 000018  
Faculty:  
Next Term Offered:

The Harvard Jazz Band was created in 1971 by Director of Bands Tom Everett when he first arrived at the University. Passionate that exposure to this unique American art form be part of students' education, he created a rag-tag jazz band of primarily Harvard [marching] Band recruits. Since its inception, the Harvard Jazz band has served as the vehicle for students across disciplines to study and learn the jazz canon. Over the years, the Jazz Band has focused on the literature of Duke Ellington and complete retrospective concerts of the music of Charles Mingus, Charlie Parker, Gerry Mulligan, Lee Konitz, Benny Carter, Buck Clayton, Clark Terry, J. J. Johnson, and Julius Hemphill. Other literature has ranged from the classic arrangements of Count Basie and Fletcher Henderson to the modern jazz of Gil Evans and Charles Mingus, the contemporary ensemble improvisations of Barry Guy and Lester Bowie, and the jazz-rock of Michael Gibbs, Russ Gershon Harvard '81, Rufus Reid, George Cables and Cassandra Wilson. In 2015, Yosvany Terry was appointed Director of Jazz Bands. Under his direction, the
Harvard Jazz Band continues this tradition of focusing on a program of study that provides students with a grounding in a wide range of iconic and new literature. Students are required to take both parts of the course within the same academic year. The curriculum builds throughout the year.

MUSIC 18B Harvard Jazz Band  
CourseID: 206967  
Faculty:  
Next Term Offered:

The Harvard Jazz Band was created in 1971 by Director of Bands Tom Everett when he first arrived at the University. Passionate that exposure to this unique American art form be part of students' education, he created a rag-tag jazz band of primarily Harvard [marching] Band recruits. Since its inception, the Harvard Jazz band has served as the vehicle for students across disciplines to study and learn the jazz canon. Over the years, the Jazz Band has focused on the literature of Duke Ellington and complete retrospective concerts of the music of Charles Mingus, Charlie Parker, Gerry Mulligan, Lee Konitz, Benny Carter, Buck Clayton, Clark Terry, J. J. Johnson, and Julius Hemphill. Other literature has ranged from the classic arrangements of Count Basie and Fletcher Henderson to the modern jazz of Gil Evans and Charles Mingus, the contemporary ensemble improvisations of Barry Guy and Lester Bowie, and the jazz-rock of Michael Gibbs, Russ Gershon Harvard '81, Rufus Reid, George Cables and Cassandra Wilson. In 2015, Yosvany Terry was appointed Director of Jazz Bands. Under his direction, the Harvard Jazz Band continues this tradition of focusing on a program of study that provides students with a grounding in a wide range of iconic and new literature. Students are required to take both parts of the course within the same academic year. The curriculum builds throughout the year.

MUSIC 20 Opera  
CourseID: 204418  
Faculty:  
Next Term Offered:

This lecture course will explore opera, a theatrical genre with a 400-year history, which is still a living and vibrant art. Opera has always been multimedia: Its marvelous singing, and its music, is shaped by drama, by characters, visual spectacles in staging, and theater architecture and machinery. Operatic performance, by engaging and even overwhelming multiple senses, challenges us to question intellectual truisms like critical detachment, sober analysis. Opera has always inspired intense passion in audiences. For some, it is the most beautiful and moving musical genre that has ever existed. For others, it can involve tedium and acoustic strangeness. Opera's special acoustic is defined by its singers, who are often called "gods" ("divas" and "divos"), with voices that are the most powerful unamplified human sonic force in existence. We will look at opera as it evolved over time from its origins in Italy into a global phenomenon, considering
works by famous composers (including Mozart, Wagner, and Verdi) as well as obscure corners and byways. Students will be experiencing live opera performances (in class and on field trips), and opera as technological art in recordings, film, and other media. No previous music courses, no expertise in music theory or ability to read music, are required.

MUSIC   25 Music Festivals
CourseID: 000025
Faculty:
Next Term Offered:

From Carnevale to the Fyre Festival, from Woodstock to World's Fairs, from New Orleans Jazz to Tanglewood: what is it about the "music festival" that has appealed to so many impresarios and audiences across centuries and genres? This class explores the music and sounds that transform festivals into a space outside of everyday time, while simultaneously acknowledging that festivals are always rooted in their sociocultural context. We'll examine the roles that race, gender, and class have played in creating and maintaining the soundscapes of these enormous, imaginative, spectacular events. Expect creative projects as one mode of evaluation.

MUSIC   30 Music, theater and dance of South Asia
CourseID: 204974
Faculty:
Next Term Offered: 2021 Fall

_Music, Theater and Dance of South Asia_ will focus on the unified arts of South Asia. In ancient times, music was understood as part of a larger unit that included literature, drama, and dance (muttami? in Tamil and sang?ta in Sanskrit)?analogous to mousiké in ancient Greece. The course will examine vernacular musical forms ranging from tribal music in South India, to Nepali drumming, to folk song of Northern Pakistan. Part of the course will be devoted to the vigorous literature on classical dance in relation to courtesanship and nationalism. Throughout the course, students will have the opportunity to do at least one assignment involving art-making or critical media practice. The entire class will participate in a set of workshops that constitute the highlight of this first offering: a visit to Harvard of a Kudiyattam troupe. Kudiyattam is the only living Sanskrit theater form today, found in the South Indian state of Kerala and normally performed for multiple days in connection with temple festivals. A UNESCO masterpiece of the oral and intangible heritage of humanity, Kudiyattam is rarely seen outside of India. Students in this class will learn to perform a little bit of abhinaya (conventional facial and bodily expressions), basic postures for standing and sitting, and transitions from one persona to another. If the students are inspired to do so, they may include a brief performance inspired by this visit (and the other course materials) in their final projects.

MUSIC   121 Choral Conducting
Students will develop and cultivate skills required for leading a vocal ensemble, focusing primarily on (1) choral conducting technique, (2) analysis and interpretation, (3) rehearsal methods, and (4) vocal pedagogy. The course will explore repertoire of various styles and genres and consider the art of curating performances. Beyond the craft of conducting, the course will also consider choral music as a vehicle of empowerment and social engagement.

MUSIC 123R Masterpieces of Choral Literature
CourseID: 127668
Faculty:
Next Term Offered:

*Performing Bach Cantatas.*

MUSIC 127R Intensive Conducting
CourseID: 126275
Faculty:
Next Term Offered:

The course will focus on the tradition of Italian opera during the common practice period (Mozart through Puccini). Depending on student involvement, interest, and motivation, the course will be centered on Verdi’s final operatic masterpiece, Falstaff. This would include conducting, singing, and playing the entirety of this rich, challenging, and extraordinary score throughout the course. Background to the music, text, and style will also be discussed.

In addition to the potential focus on Falstaff, the course will also include recitatives, arias, and ensembles extracted from the great classical, bel canto, and verismo operas. Examples will include the recitative accompagnato of Mozart, rubato line in bel canto operas, and accompanying singers in Puccini.

All participants will be asked to learn the assigned scores and to discuss some general interpretive issues. Conductors will be asked to sing the vocal parts and potentially play at the keyboard as well. Singers and pianists will be given the opportunity, if they are interested, to conduct as well. Occasionally, students may be asked to memorize sections of the score or libretto. Additionally, all participants will sing any choral or ensemble parts that may appear in the excerpts studied.

Other topics of discussion will include general conducting, baton technique, diction,
performance traditions, style, and the history of Italian opera.

MUSIC  146 Introduction to Latin American Music  
CourseID: 216370  
Faculty:  
Next Term Offered:  

MUSIC  151 Tonal Analysis  
CourseID: 119522  
Faculty:  
Next Term Offered:  

Intensive study of tonal theory and methods of analysis through a detailed examination of music from the late eighteenth and nineteenth centuries. Students are introduced to historical perspectives on harmony and musical form, as well as a variety of contemporary approaches to engaging with tonal repertoire.

MUSIC  155 Modal Counterpoint  
CourseID: 121992  
Faculty:  
Next Term Offered: 2019 Fall  

Study of representative styles and genres of 16th-century polyphony. Detailed analytic work will be combined with compositional exercises.

MUSIC  157R Theories of World Music  
CourseID: 128035  
Faculty:  
Next Term Offered: 2021 Spring  

MUSIC  158R Interpreting Musical Performance  
CourseID: 117569  
Faculty:  
Next Term Offered:  

Analyzing Performance. Analysis of pieces aimed at discovering and evaluating possibilities for execution and perception. Repertory includes fully notated music and music that has no tradition of notation. Questions addressed are those of perception, notation, and adequacy of conventional analytic categories.

MUSIC  168 Analog Synthesizer and the Digital Age
Vintage and modern copies of many legendary synthesizers are again exciting musicians across stylistic borders. The course explores their use and covers concepts like voltage control, oscillators, filters, envelopes, and step-sequencers. The Harvard University Studios for Electroacoustic Composition started their journey in 1968, using Serge and Buchla instruments. Students will compose on those historic synthesizers, as well as use music software to create non-beat-based drone music.

MUSIC 172R Performer-Composer Collaborative
CourseID: 000172
Faculty:
Next Term Offered:

The Performer-Composer Collaborative (MUSIC 172R) is a new course that explores the dynamic relationship between performers and composers in a contemporary context. The course is open to all undergraduate composers, performers and improvisers seeking to expand their practice. Everyone will perform, everyone will improvise, and everyone will compose! We will study a wide range of existing 20th and 21st century repertory, with emphases on notation, performance practice and interpretation; we will also generate a wide range of newly created work as part of the class for various instrumental and vocal combinations. Guests include composers Liza Lim, Du Yun, Nathan Davis, Phyllis Chen, Lisa E. Harris, Susie Ibarra and performers from the International Contemporary Ensemble. In addition to in-class workshops and informal performances throughout the semester, a final public performance of new works created in the course will take place in December at the ArtLab.

MUSIC 176A Music and Dis/ability I
CourseID: 160644
Faculty:
Next Term Offered: 2021 Spring

Through field work, readings, discussions, and presentations, this course will explore topics related to disability in music history, music theory, and performance studies, and examine recent developments in neuroscience, music therapy, and music education. Defining disability as a cultural construction rather than as a medical pathology, the course will also consider the practice of music as a vehicle of empowerment, reflecting on music's generative role in shaping communities and advancing social justice and human rights. Students will partner with inclusive and democratic community music projects and nonprofit organizations.

MUSIC 176B Music and Dis/Ability II
CourseID: 208098
Faculty:
Music and Disability II continues the inquiry presented in Music and Disability I (Music 176a), exploring music and disability studies, inclusive music education, and disability arts, among other topics. We will consider cultural ideas?and ideals?of satisfaction and beauty through the lens of non-normativity while interrogating established and conventional artistic practices, canons, and relationships with disability aesthetics as our resource. The Engaged Scholarship approach of the course will aim to develop new projects and nurture on-going initiatives that facilitate sustainable creative practice, empowering individuals and communities through active engagement with the arts. Students from other departments welcome. Course will include weekly participation in a community-music ensemble project.

MUSIC 177 Creative Music: Advanced Ensemble Workshop  
CourseID: 000177  
Faculty:  
Next Term Offered:  

This is a workshop for advanced composer-performer-improvisers, focusing on original and collaborative music-making, intended for musicians who have already taken Music 173 and/or 174, or have received permission from the instructor. Students will participate in ensembles with other members of the class and will keep recorded and written journals to document the process. Students will participate in two performances throughout the semester.

MUSIC 181R Performance and Culture: Renaissance Music  
CourseID: 108419  
Faculty:  
Next Term Offered:  

In this course, you become an amateur musician in Renaissance England and learn to play the viola da gamba in a consort. Through this combination of research and hands-on learning, we investigate repertory, culture and musical life circa 1600.

MUSIC 184R 20th Century Performance Practice  
CourseID: 137382  
Faculty:  
Next Term Offered:  

Performance Practice: Meredith Monk Choral Music. What happens when singing is treated holistically, as a natural expression of the body? Meredith Monk has been working at the intersection of music and movement for decades, affirming that the body can sing and the voice can dance. This concept will be explored through Monk's rich and challenging choral repertoire. The course will include
ensemble-building exercises, improvisational vocal and movement techniques, and fundamentals of performance. Participants will work with the voice and body as multi-faceted instruments for discovering range, timbre, resonance, character, gesture and space. The course will host lectures by visiting experts and culminate in a performance at the end of the semester.

MUSIC 185R Experimental Music Ensemble
CourseID: 111136
Faculty:
Next Term Offered:

MUSIC 185R is a course that explores intersection of experimental music practice, cultural production, education and new models of community and organization-building in the 21st century. The Experimental Music Ensemble is open to undergraduate and graduate performers, composers, improvisers and sound artists. New repertories and new organizational practices will be explored in a laboratory format that includes workshops, in-class performances, interviews with guest artists and ensembles, as well as community events and pop-up events throughout the semester in Holden Chapel, the Carpenter Center for Visual Arts, and the ArtLab in Allston. Performance and cultural production activity will be carried out alongside research on existing 21st century music ensembles and organizations. Guests include leading members of the Association for the Advancement of Creative Musicians (AACM), Bang on a Can, the International Contemporary Ensemble, Silk Road Ensemble, Roomful of Teeth, and Constellation Choir.

MUSIC 187R Opera Workshop
CourseID: 000187
Faculty:
Next Term Offered:

Devising New Opera Through Exploratory Collaborative Practices. This seminar will center on the development of Iphigenia, a new operatic adaptation of Euripides' play Iphigenia, with music by Wayne Shorter, libretto by Esperanza Spalding. The course has two "modes." In lab meetings headed by Professor Spalding, students will observe and offer responses to how the creative team of writers, singers, and musicians explore and employ various co-creation processes while developing an opera toward its forthcoming premiere. Special guests will include director Lileana Blain-Cruz, dramaturg Sunder Ganglani, and various musicians slated to perform in the final production. In discussion meetings headed by Professor Abbate, students explore opera as a collaborative genre, gaining experience with analyzing relationships between words, character, drama, and musical sounds, while also considering Iphigenia operas from the past. Work for the course includes responses to the creative lab meetings, short essays on listenings/viewings/readings explored in the discussion meetings. One theme that unites the two course "modes" is reflecting on inherent challenges in foregrounding a collaborative mode of storytelling within a traditionally hierarchical art form. The seminar
will conclude with a final concert presentation of scenes from *Iphigenia* that have been developed and refined over the course of the semester. Final creative projects for students will consist of devising an opera scene, by writing original story and text to existing music.

**MUSIC 192RR Topics in Music from 1600-1800: Proseminar**
CourseID: 112927
Faculty:
Next Term Offered: 2023 Spring

*Spectacular France.* French musical theater in the 17th & 18th centuries. This course considers French spectacle in all dimensions with special emphasis on absolutism and the politics of performance. Genres include machine tragedy, comédie-ballet, horse ballet, carrousels, and opera; collaborators include Jean Racine, Jean-Baptiste Lully, Molière, Jean-Philippe Rameau, and Georg Friedrich Handel. Guest performers will discuss historical staging and French operas performed in colonial Haiti. Readings are in English.

**MUSIC 195R Topics in Music from 1900 - Present**
CourseID: 128047
Faculty:
Next Term Offered: 2021 Spring

*The Gospel Imagination.* The class will explore African American gospel performance, focusing on the tradition's braiding together of music, movement, and belief. When these three expressive dimensions are engaged together, what emerges is "the gospel imagination," the complex of words and music, sound and belief that sustains many expressions of African American Christian worship. How might this integrated notion of gospel performance inform an analytical paradigm? Relatedly, how might this approach inspire performance? This course brings together material and approaches from the fields of musicology, music theory, ethnomusicology, homiletics, and theology to pursue these questions. Through a combination of weekly reading, listening and writing assignments students will immerse themselves in this way of patterning sound as an expression of belief. Alongside these assignments, students will undertake composition in the gospel style, culminating in a masterclass with a nationally-renowned gospel artist.
MUSIC 195RS Topics in Music from 1900 - Present
CourseID: 208060
Faculty:
Next Term Offered: 2021 Spring

Women Creators in Music. In spite of significant gains in gender equality over the last half century, women creators remain dramatically underrepresented in the music world, in all genres of music and in all categories of musical production: as composers, improvisors, producers, conductors, and even as performers. This new course focuses on the contributions of female and non-binary musicians who have composed, improvised, or collaboratively created music in the 20th and 21st centuries.

We will listen closely to their music, asking questions such as: what were the historical, institutional, cultural and educational factors that supported or hindered their work? How do they define their gender identities, gender roles, and sexual orientation, and to what extent do they relate these to their work? How does these identities function intersectionally with others, such as racial, class, national, and transnational identities? How has their work been received? What structures have historically enabled inclusion or fostered exclusion into the musical canon?

The course is not just a history of individuals overcoming obstacles; it is intended to celebrate and acknowledge the contributions of women creators to the history of music. We will also talk about activism: how to "move the needle" and work towards great representation of women's music in different genres today.

We will consider a wide range of women creators from the early 20th century to the present, with examples from classical, jazz, and popular music. Students will help generate the syllabus, but the list could include: Florence Price, Ruth Crawford Seeger, Elisabeth Lutyens, Nina Simone, Pauline Oliveros, Meredith Monk, Younghi Pagh-Paan, Carla Bley, Irène Schweizer, Mary Lou Williams, Laurie Anderson, Tanya Leon, Chaya Czernowin, Björk, Nkeiru Okoye, Okkyung Lee, Reena Esmail, Nicole Mitchell, Maria Schneider, Caroline Shaw, and Alex Temple.

Guests include composers and scholars who are experts on women and music (TBA).

MUSIC 207R Ethnomusicology: Seminar
CourseID: 111282
Faculty:
Next Term Offered:

Music and Language. Methods of phonetics, social linguistics, and ethnomusicology are combined to examine music and speech, including epic storytelling and laments, instrumental speech surrogates, and poetry. Materials potentially drawn from any period
African Music and Theory from the South. This seminar explores leading contemporary cultural theorists of Africa such as Achille Mbembe, Jean and John Comaroff, Kofi Agawu, and Ngugi Wa Thiong'o in relationship to classic issues in the study of African musics. Beginning with popular, regional, and international musical genres the course takes hybridity as a point of departure and then examines historical presumptions about the nature of tradition in the ethnomusicological literature on African music. Classic issues in African music, such as rhythm, transcription, orality, social engagement, and religion are explored in the context of the anthropological and postcolonial literatures.

Groove. This seminar explores the phenomenon of groove, both as a topic of musicological discourse and an element within various musical practices. Common as the notion may be, groove resists simple definition. In certain contexts, "groove" may refer to relatively large-scale recursive structures (to which James Brown's "Play the groove!" makes reference). In other contexts, "groove" refers to the effect engendered by minute variations between sonic elements (summoned when performing musicians talk about "being in the groove"). What, then, is the relationship between these two conceptions of groove? What tensions arise from the term's multiple meanings? And
how might the notion of groove be generalized beyond the contexts of popular music? This course seeks to examine these and other questions, in part, by showing how the syntactical and the sensory, the formal and the phenomenological dimensions of groove work together to animate various musical genres.

MUSIC 220R History of Music Theory
CourseID: 127184
Faculty:
Next Term Offered: 2021 Spring

Music theory and history can be viewed as opposites?music theory takes a systematic approach and tries to abstract timeless, general laws. But it also has a history that shows that both rules and approaches change radically over time. We will chart an anti-chronological path from the 20th century back to the Middle Ages to discuss some of the salient issues music theory is concerned with. We will focus on “Five Classics,” epochal figures in music theory?Schoenberg, Helmholtz, Rameau, Zarlino, Boethius?to mark our path, and discuss specific historiographic issues arising during each period.

MUSIC 221R Current Issues in Music Theory
CourseID: 124044
Faculty:
Next Term Offered: 2019 Spring

What does Music Theory mean in the 21st century? What are the current debates? How might the field change in the near future? We will examine recent and contemporary discussions in (and about) the field, and we will attempt to trace some of the recent history of the field in order to better understand the present state of affairs.

MUSIC 222R Schenkerian Analysis I
CourseID: 113613
Faculty:
Next Term Offered: 2020 Fall

Introduction to the theories and graphing techniques of Heinrich Schenker and his followers through the analysis of selected works.

MUSIC 224R Musical Analysis
CourseID: 214537
Embodied Cognition and Performance Analysis. In recent years, music scholarship has followed the 'embodied turn' in the humanities in rejecting dualist divisions of body and mind. What happens to music theory, analysis, and listening when we recognize an embodied mind? How can we study performance as an activity, from both quantitative and qualitative perspectives? How do we reconcile mainstream music theory with the multisensory experience of listening and incorporate subtleties of expression, interaction, and interpretation in performance? This course offers a broad background in philosophical and cognitive approaches to embodiment and performance analysis in music theory, musicology, and music psychology. Throughout the semester, we'll trace the history of such approaches in the field, study mimetic and conceptual theories of perception, ponder the interpretive agency and gestural expression of performance, and interrogate the assumptions and extent of these theories in light of disability studies, ecological perception, and organology. Along the way, we'll explore new modes of engaging with scores, recordings, and performances in answer to Fisher and Lochhead's call for an 'analysis from the body' some eighteen years ago.

MUSIC 243R Music and Performance Studies
CourseID: 000243
Next Term Offered:

Music is often discussed, in everyday speech as well as academic discourse, in terms of fixed units such as songs, works, recordings, oeuvres, or outputs. This seminar concentrates on music as performance?i.e. as event, ritual, bodily practice, and inventive process?as an alternative (and complement) to more familiar, static musical ontologies. It engages with performance theory and theater studies to develop a performance-centered perspective that can illuminate in new ways how music is embedded in culture, society, and history. Although many readings revolve around jazz, western art music, and popular music, students will develop projects around their own interests and expertise and there are no genre restrictions.

MUSIC 244 Film Music/Film Sound
CourseID: 000244
Next Term Offered: 2022 Spring

This seminar explores film sound and music in classic American and European cinema, concentrating on the 1920s to the 1960s, though jumping well beyond that frame at times. We deal with specific sound technologies, as well as differing approaches to the relation between music, sound, and image. Individual topics cover both technical and theoretical issues, and sociological-historical issues. They include: mechanical procedures that integrated sound and music with image; cultural work done by music in Orientalist movies; operetta movies and insouciance in the 1930s; theories of rendered
This interdisciplinary seminar focuses on recent academic and philosophical interpretations of voice, which has become a focus for intense recalibrations and reconsiderations in the past few years. Voice, as a concept, remains perplexing to analysis, while voice as a material phenomenon can be seen as terrifying, or beguiling, unlovely, or exquisite: that inconsistency has proven disquieting. Readings range across multiple fields, for instance opera studies, sound studies, critical race theory, history of medicine and technology.

Artificial Intelligence and Music Composition. Artificial Intelligence is omnipresent in our daily lives. Many of the tools have been ported from super-computers to easily accessible platforms. We will program neurons, simple networks and use self-organizing maps to experiment with the interaction of human and artificial intelligence. The course aims to provide an intellectual and experimental framework for students to develop their technical solutions to compositional questions. Two experts will visit the class: M.I.T. graduate David Hayden and PRIX ARS Electronica nominated artist and musician Harry Yeff (AKA Reeps One).
Next Term Offered:

Interdisciplinary Composition. How do we create multi-perceptual music? How do we synchronize body and mind? How do we discover forms that surprise even us, the composers? How can other artistic practices inform our own creative process? Meredith Monk, internationally renowned composer/singer, will introduce students to an expansive approach to composition. Starting from the discipline of music, this course will explore how compositional principles can cross the boundaries of art forms. Students will take inspiration from and learn to incorporate other perceptual modes, including visual elements, movement and space, into their artistic practice. Through both individual and group vocal and movement exercises, participants will be introduced to a fresh approach to making music and the joy of risk and discovery. The course will host lectures by visiting experts.

MUSIC 280R Theorizing Improvisation
CourseID: 156365
Faculty:
Next Term Offered: 2022 Spring

The Problem of Presence. This is a cross-disciplinary research seminar in critical improvisation studies, focusing on the three interrelated topics of interest from the last few decades: temporality, embodiment, and improvisation. Their common underlying “discovery” is the very problem of presence. In our studies, recent scholarship in African diasporic music and aesthetics will join a larger conversation on improvisation across multiple areas of inquiry in the arts, the sciences, and the humanities. Through this range of readings, we will examine improvisation as a central feature of individual and collective subjectivities.

MUSIC 281R Musicality
CourseID: 211139
Faculty:
Next Term Offered: 2022 Spring

The term Musicality has at least two senses. In the realm of aesthetics, it connotes “musicalness”, a communicative/affective value, whereas in the so-called music sciences, it is used to posit a biologically determined capacity for musicmaking. At issue is the instability of music as a category, which aligns with the instability of the very category of the human; both designations are as ideological as they are scientific, with membership in each category variously conferred or revoked across axes of difference and power. In this research seminar, we reconsider “musicality” as a critical concept (like “aurality” or “vocality”) that can lead to broader inquiries into the human animal, the infrahuman animal (including those relegated to the margins of the human category), and more generally, the animate. Readings from a variety of fields that question the ontologies of music and “humanness” will guide us in exploring new ways of thinking about music.
MUSIC 281RX Black Speculative Musicalities
CourseID: 000281
Faculty:
Next Term Offered:

*Black Speculative Musicalities* is a course dedicated to new research/theorizing/analysis/writing on radical sonic imaginings of the African diaspora. The goals of the course are: 1) to give graduate and advanced undergraduate students up-close exposure to a range of creative work from the past century that might fall under this rubric; 2) to encourage scholarly "deep dives" into specific subtopics, artists, works, or musical moments; 3) to notice, think through, and theorize about recurring themes, issues, or aesthetics that emerge throughout the course. Each week's class will focus on the work of one or two music-makers, and will be rounded out by readings in Black studies, music theory, and historical musicology. Artists on our syllabus might include Sister Rosetta Tharpe, Thelonious Monk, Sun Ra, Little Richard, Jimi Hendrix, Alice Coltrane Turiyasangitananda, Wayne Shorter, Cecil Taylor, Wadada Leo Smith, Roscoe Mitchell, Milford Graves, Prince, Geri Allen, Missy Elliott, Anti-Pop Consortium, Solange, FKA Twigs, Janelle Monáe, Nicole Mitchell, Matana Roberts, Esperanza Spalding, Moor Mother, Imani Uzuri, DJ Val-INC, and others.

MUSIC 292R Topics in Musicology
CourseID: 000292
Faculty:
Next Term Offered: 2022 Spring

*Music and Philanthropy.* Philanthropy, or the desire to promote human welfare through donations of money, time, labor, and influence, is a central means of assisting art that might not otherwise exist if left to the capitalist marketplace. The roots of philanthropy come from some measure of charity, generosity, and social conscience, just as its existence is rooted in ever increasing global wealth and power inequality. With the exercise of any source of economic, social, or cultural capital, an examination of power is necessary. In this course, we will understand what role philanthropy has played in supporting music in the United States and Western Europe through historical and present-day case studies, including the philanthropy of individual patrons like Isabella Stewart Gardner, non-profit organizations, and large institutions like the Ford and Rockefeller Foundations. Guest visitors to the class will deepen our awareness of how decisions are made on personal and practical levels. We will engage in historical, theoretical, and moral discussions concerning philanthropy and its role in civil society, in order to gain a better understanding of how money speaks in music, as well as learn how to think critically about the impact and efficacy of philanthropic endeavors.
Brain circuits are made up of complex networks of interconnected neurons. In this course, we seek to understand how the architectures of different neuronal circuits support a diverse range of functions, including sensory perception, locomotion, learning and memory. Through discussions of review articles and original research, we will cover a range of state-of-the-art experimental approaches in model organisms ranging from worms to humans, as well as explore how discoveries in circuit neuroscience can benefit engineering fields such as robotics and artificial intelligence.

Students must to complete both terms of this course (parts A and B) within the same academic year to receive credit.

This course introduces students to abstract models of what and how neurons compute and concrete analyses of real neurons in action. Topics include network models of sensory processing, short- and long-term memory, reinforcement learning, the Hodgkin-Huxley model of the action potential, and techniques to analyze real experimental data.
The approach will draw upon recent advances in neuroscience and deep learning. This course will emphasize students’ contributions and classroom interactions. Programming homework assignments and group final projects will be a significant aspect of the course, so programming experience (Python/Matlab will be used) will be assumed. Familiarity with linear algebra and differential equations at the level of Math or Applied Math 21b will be assumed.

**NEURO 1202 Modern Neuroanatomy**  
CourseID: 212832  
Faculty: Randy Buckner  
Next Term Offered: 2022 Spring

How does the global architecture and local organization of brain systems support behavioral and cognitive functions? In this class, classical and newer neuroanatomical discoveries will be discussed that cover what defines brain areas; how areas are organized into parallel, distributed circuits; how distinct areas and systems are organized; and how anatomical form relates to function. Anatomy in the human brain and from model systems (worm, mouse, barn owl, and monkey) will be used to illustrate principles. Newer techniques and analytical approaches will be discussed including micro-scale and macro-scale connectomics. The goal of this class is to survey examples of how emerging understanding of neuroanatomy provides insight into function. Each class will consist of lecture and discussion.

**NEURO 1303 The Human Brain Then and Now**  
CourseID: 212833  
Faculty:  
Next Term Offered: 2020 Fall

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.
Organismic and Evolutionary Biology

OEB 51 Biology and Evolution of Invertebrate Animals
CourseID: 144597
Faculty: Cassandra Extavour
Next Term Offered: 2022 Spring

Introduction to invertebrate diversity, will cover the development, adult anatomy, biology and evolutionary relationships of the main animal phyla including sponges, mollusks, annelids and arthropods among others. Special emphasis is placed on understanding the broad diversity of animal forms and their adaptations to different ecosystems and how these phenomena shape animal evolution. Lectures will be complemented with a mandatory weekly lab, and the course includes a field trip to different areas of outstanding marine diversity in the Caribbean.

OEB 58 How to Build an Animal
CourseID: 204989
Faculty: Stephanie Pierce
Next Term Offered: 2021 Fall

Ever wonder why you and other animals have eyes? What about teeth or even skin? "How to Build an Animal" answers your questions by exploring the wonders of animal biology. Each week, we consider a prominent feature of animal anatomy; study its variation in form and function; and how it's made during embryonic development. To facilitate student learning, each topic is accompanied by a 'hands-on' activity that illustrates the concepts discussed in the lecture. Further, the course introduces a number of scientific areas, including comparative anatomy, functional morphology, phylogenetics, genomics, and experimental embryology. The overall goal is to provide a basic understanding of animal evolution and development and how these processes combine to shape the diversity of life on Earth.

OEB 103 Plant Systematics and Evolution
CourseID: 144583
Faculty: Charles Davis
Next Term Offered: 2021 Fall

An introduction to the diversity and evolution of vascular plants. The course focuses mainly on flowering plants because of their dominant role on the earth, but lycophytes, ferns, and gymnosperms are studied as well. A phylogeny of vascular plants provides the framework for their evolution and diversification. Related subjects, including plant habitats, biogeography, phylogenetics, herbaria, nomenclature, and pollination biology are also presented in lecture and laboratory.
OEB 104 The Mouse in Science and Society
CourseID: 161184
Faculty:
Next Term Offered:

Mice remain the most popular vertebrates used in biomedical R&D today, with tens of millions of lab mice produced annually in the United States alone. At the same time, mice are commonly studied for their own characteristics that continue to enhance our knowledge about innate mammalian behavior, predator?prey dynamics in changing ecosystems, and reservoir hosts for emerging diseases, to name a few. This course intends to provide a strong foundation in mouse biology, both basic and applied, as well as exposure to cultural and political aspects of the current impact of mice (real or fictitious) on contemporary societal values. Instructors: Kathleen Pritchett-Corning.

OEB 106 Plant Development and Differentiation
CourseID: 148122
Faculty: Elena Kramer
Next Term Offered: 2020 Fall

A comprehensive lecture course on the developmental biology of plants from fertilization through all phases of vegetative and reproductive growth. Material includes both morphological and genetic studies. Although the main focus of the course is angiosperms, examples are drawn from other lineages of land plants as well. Additional topics include control of cell division and elongation, signal transduction, and hormone response.

OEB 115 The Developmental Basis for Evolutionary Change
CourseID: 144999
Faculty: Mansi Srivastava
Next Term Offered: 2022 Spring

A lecture course in evolutionary developmental biology. This course will focus on the molecular and cellular bases of how embryos generate adult body plans in order to understand how form, physiology, and life history strategies are modulated over the course of evolution. We will discuss insights from both invertebrate and vertebrate animal model systems as well as plants. We will investigate the forces driving change at both micro- and macro-evolutionary time scales. Particular emphasis will be placed on how changes in development underlie major evolutionary transitions and the origin of innovation in organismal evolution. The course will also emphasize learning of experimental design, molecular tools, and phylogenetic methods currently used by researchers in the field of evolutionary developmental biology.

OEB 120 Plants and Climate
CourseID: 156118
Faculty: Noel Holbrook
How plants are affected by climate - both spatially across the globe and as climate changes over time - is relevant to understanding patterns of plant evolution, ecosystem structure, and the impact of humans on our planet. This course examines how variation in rainfall, temperature, atmospheric humidity and CO2 affects the growth and productivity of plants. Topics include photosynthesis, respiration, transpiration, and vascular transport; experimental approaches and measurement techniques will also be covered.

OEB 157 Global Change Biology
CourseID: 143485
Faculty: Paul Moorcroft
Next Term Offered: 2022 Spring

This course examines how natural and anthropogenic changes in the earth system are affecting the composition and the functioning of the world’s land and ocean ecosystems. Topics include: the ecological impacts of natural and anthropogenic changes in the earth’s physical environment, and the effects of introduced species, species extinctions, land-use change, agriculture, and fishing.

OEB 167 Herpetology
CourseID: 145020
Faculty: James Hanken
Next Term Offered: 2022 Spring

An introduction to the biology of amphibians and reptiles. Lectures and laboratories examine the morphology, systematics, natural history, behavior, ecology, evolutionary relationships, and biogeography of all major taxa.

OEB 173 Comparative Biomechanics
CourseID: 145006
Faculty: Andrew Biewener
Next Term Offered: 2022 Spring

1. An exploration of how animals and plants contend with their physical environment, considering their biomaterial properties, structural form, and mechanical interaction with the environment. Through lectures, seminar discussions, and student presentations based on readings, students are introduced to topics related to biomechanical performance.

OEB 190 Biology and Diversity of Birds
CourseID: 143846
Faculty: Scott Edwards
Next Term Offered: 2022 Spring
An introduction to the biology of birds. Covers the fossil record and theories for avian origins, physiology and anatomy, higher-level systematics and field characters of the ~27 orders, speciation processes, nesting and courtship behavior, vocalizations, mating systems and sexual selection, cooperative breeding, demography and conservation. Optional field trip during spring break. Laboratories will consist of gross anatomy, bird watching excursions in the Cambridge area, field techniques and specimen preparation, and systematic study of avian groups using the collections of the Museum of Comparative Zoology.

OEB 212R Advanced Topics in Plant Physiology
CourseID: 131261
Faculty: Noel Holbrook
Next Term Offered: 2021 Fall

A critical discussion of current research in plant physiology including measurement techniques, modeling, and experimental approaches. In 2019, the focus will be on roots and soils. We will take a two-pronged approach: we will read papers on root hydraulics and soil physics to understand how plants obtain water from the soil and we will read historical accounts of drought and salinization, including the American dust bowl and the Tigris/Euphrates deltas. We will also consider soil water resources in the context of climate change.

OEB 278 Adaptation
CourseID: 144586
Faculty: Robin Hopkins
Next Term Offered: 2023 Spring

This course will cover broad topics in adaptation including the causes and consequences of local adaptation, plasticity, genotype by environment interactions, genomics/genetics of adaptation, and adaptive radiations. This will be a discussion-based course focused on primary scientific literature.
Philosophy

PHIL  117 Medieval Philosophy
CourseID: 156021
Faculty:
Next Term Offered: 2020 Fall

This course will examine three great traditions in medieval philosophy (Neoplatonism, Scholastic-Aristotelianism, and Nominalism) through each tradition's greatest proponent (Augustine, Aquinas, and William of Ockham). Specific topics will include skepticism, knowledge, human nature, divine nature, language, realism, conceptualism, and happiness. Students in the course will acquire a firm understanding of the major currents in one of the most important ? if still neglected ? periods in western philosophy.

PHIL  136 Phenomenology of Lived Experience
CourseID: 000136
Faculty:
Next Term Offered: 2020 Fall

In this course, we will explore phenomenological approaches to lived experience, i.e., the experience we have, as embodied beings, who are embedded in a world and entangled with others. We will begin by looking at treatments of the phenomenology of lived experience in general in texts by Franz Brentano, Edmund Husserl, Martin Heidegger, and Maurice Merleau-Ponty. We will then address attempts to work out the phenomenology of specific modes of lived experience in Simone de Beauvoir's The Second Sex, Frantz Fanon's Black Skin, White Masks, Emilio Uranga's "Essay on an Ontology of the Mexican," and Sara Ahmed's "Orientations: Towards a Queer Phenomenology."

PHIL  138 Heidegger's Being and Time
CourseID: 000138
Faculty:
Next Term Offered: 2020 Fall

A close reading of Martin Heidegger's Being and Time. Topics from Division I of the book include: In what sense, and on the basis of what, is the world we inhabit intelligible? In what sense do we inhabit such an intelligible world? And what, after all, is the relation between what is and what we understand there to be? Division II of the book addresses existential issues such as: death, guilt, authenticity, history, and temporality. We aim to read the entire book.

PHIL  158A Mind, Brain, and Behavior Proseminar: Inference and Memory
CourseID: 118752
In this MBB proseminar we will study both philosophical and psychological theories of episodic memory. Much work in psychology analyses episodic memory in terms of inference. We will spend some time studying different approaches to inference in philosophy. Readings will include but not be limited to selections from philosophers Shoemaker, Michaelian, Martin, Campbell, and Debus, and psychologists Tulving, Schachter, and Neisser.

PHIL 174 Freedom and Slavery in the History of Philosophy
CourseID: 120611
Faculty:
Next Term Offered:

PHIL 247C Conceptual Engineering
CourseID: 218340
Faculty:
Next Term Offered:

We will discuss the idea that philosophy should engage less in analysis of concepts and meanings and more in the evaluation / re-engineering /amelioration thereof. Among topics to be discussed are: the nature of concepts and meanings and their persistence conditions (how much can a concept change before ceasing to be?); the principles that should govern conceptual overhaul; verbal versus substantive disagreement; the role of intuitions in philosophy; the idea of 'bedrock concepts'.
Physics

PHYSICS 12A Introductory Physics: Mechanics and Heat  
Course ID: 218577  
Faculty:  
Next Term Offered:  
Course created to support student import

PHYSICS 12B Introductory Physics--Electricity and Magnetism  
Course ID: 218562  
Faculty:  
Next Term Offered:  
Created for student import

PHYSICS 19 Introduction to Theoretical Physics  
Course ID: 207005  
Faculty: Jacob Barandes  
Next Term Offered: 2021 Fall  
A comprehensive introduction to the foundations of theoretical physics, with a first-principles approach to its five main areas: analytical dynamics, fields, statistical mechanics, relativity, and quantum theory. Specific topics and examples include Newtonian mechanics, chaos, celestial mechanics, electromagnetism, the Lagrangian and Hamiltonian formulations, the connection between symmetries and conservation laws, relativistic gravitation, black holes, and quantum information. In-class discussions regularly address relevant issues in the history and philosophy of physics, as well as the conceptual implications of our modern physical theories for making sense of the world around us.

PHYSICS 112 Introduction to Wave Phenomena and Atomic Structure  
Course ID: 218553  
Faculty:  
Next Term Offered:  
Created to support student import.

PHYSICS 137 Conceptual Foundations of Quantum Mechanics  
Course ID: 218289  
Faculty:
Next Term Offered:

Quantum theory is our best-tested and most predictive scientific theory by many quantitative measures. The theory reliably accounts for the measurement results of atomic clocks and particle accelerators to many decimal places, and much of our modern technology relies on it. However, the theory’s standard textbook postulates contain inconsistencies, and there is still no consensus over what precisely the theory entails about the world. This course, which is intended for science and philosophy students alike, will cover the century-long effort to resolve these mysteries and others, a story that features fantastical notions like parallel universes, pilot waves, quasi-probabilities, alive-and-dead cats, spooky action at a distance, retro-causality, infinite-dimensional configuration spaces, and perspectivalism.

Topics: In the first part of the course, we will review some history, lay out the textbook postulates of quantum theory, and cover how to use the theory in practice. In the second part of the course, we will examine the internal logic of the theory, ultimately finding that the theory’s axioms are not internally consistent. In the third part of the course, we will examine various attempts to patch up and re-interpret the theory to solve these consistency problems. As we proceed, we will continually refer back to relevant questions in philosophy, including debates over metaphysics, laws of nature, instrumentalism, mathematical beauty, scientific realism, determinism, epistemology, explanation, rationality, emergence, supervenience, the meaning of probability, and philosophy of mind.

PHYSICS 140 Introduction to the Physics of Living Systems
CourseID: 127814
Faculty: Aravinthan Samuel
Next Term Offered: 2021 Spring

We will discuss how theoretical and experimental tools derived from physics - e.g., statistical mechanics, fluid mechanics - have been used to gain insight into molecular and cellular biology including the structure and regulation of DNA, genomes, proteins, the cytoskeleton, and the cell. Students will gain an intensive introduction to biological systems, as well as physical and mathematical modeling.

PHYSICS 160 Introduction to quantum information
CourseID: 214446
Faculty:
Next Term Offered:

Introduction to quantum information science, including quantum computation, communication and metrology. Emphasis on fundamental principles, experimental implementations and applications. Background and theoretical techniques will be introduced.
PHYSICS 191 Advanced Laboratory  
CourseID: 121993  
Faculty:  
Next Term Offered:  

Students carry out three experimental projects selected from those available representing condensed matter, atomic, nuclear, and particle physics. Included are pulsed nuclear magnetic resonance (with MRI), microwave spectroscopy, optical pumping, Raman scattering, scattering of laser light, nitrogen vacancies in diamond, neutron activation of radioactive isotopes, Compton scattering, relativistic mass of the electron, recoil free gamma-ray resonance, lifetime of the muon, studies of superfluid helium, positron annihilation, superconductivity, the quantum Hall effect, properties of semiconductors, and plasma physics. The facilities of the laboratory include several computer controlled experiments as well as computers for analysis.

PHYSICS 211AR Topics in Cosmology and Particle Physics  
CourseID: 208076  
Faculty:  
Next Term Offered:  

This course will be about particle physics and cosmology, focusing on those aspects of cosmology most relevant to people studying particle model building and phenomenology. Topics will include inflation, dark matter, and dark energy. The course will be seminar style, with presentations by the lecturer and by students. The aim is to gear up for topics relevant to current research.

PHYSICS 211CR Cosmology and Other Topics  
CourseID: 213240  
Faculty:  
Next Term Offered:  

Standard cosmological model and inflation, scalar inflationary models, cosmological perturbation theory, brief introduction to quantum fields on cosmological backgrounds, interactions and in-in (Keldysh-Schwinger) perturbation theory, non-gaussianities, symmetries and cosmological Ward identities.

PHYSICS 216 Mathematics of Modern Physics  
CourseID: 127815  
Faculty: Arthur Jaffe  
Next Term Offered: 2021 Spring  

equilibrium states. The KMS condition and its consequences.

PHYSICS 247 Laboratory Course in Contemporary Physics
CourseID: 145024
Faculty:
Next Term Offered:

Students carry out three experimental projects selected from those available representing condensed matter, atomic, nuclear, and particle physics. Included are pulsed nuclear magnetic resonance (with MRI), microwave spectroscopy, optical pumping, Raman scattering, scattering of laser light, nitrogen vacancies in diamond, neutron activation of radioactive isotopes, Compton scattering, relativistic mass of the electron, recoil free gamma-ray resonance, lifetime of the muon, studies of superfluid helium, positron annihilation, superconductivity, the quantum Hall effect, properties of semiconductors, and plasma physics. The facilities of the laboratory include several computer controlled experiments as well as computers for analysis.

PHYSICS 264 Lie Algebras, Representations and Quantum Mechanics
CourseID: 203512
Faculty:
Next Term Offered: 2022 Spring

Lie algebras and their representations are indispensable tools in quantum mechanics. Starting from the operator treatment of angular momentum, this course explores some of the (many) useful approaches to this subject with applications in various areas of physics.

PHYSICS 268BR Renormalization Group Methods in Condensed Matter Physics
CourseID: 160744
Faculty:
Next Term Offered:

Renormalization group ideas have had a major impact on condensed matter physics. We plan to develop and illustrate the theory by studying at least three of the following topics: (1) critical phenomena near four dimensions; (2) quantum critical points in Heisenberg spins; (3) flexural phonons in free-standing graphene; and (4) the fluid dynamics of the forced Navier-Stokes equations.

PHYSICS 287BR The String Landscape and the String Swampland
CourseID: 114008
Faculty:
Next Term Offered:
A selection of topics from current areas of research on string theory.

PHYSICS 296 Mesoscale and Low Dimensional Devices  
CourseID: 214614  
Faculty:  
Next Term Offered:  

Concepts of condensed matter physics are applied to the science and technology of beyond-CMOS devices, in particular, mesoscale, low-dimensional, and superconducting devices. Topics include: quantum dots/wires/wells and two-dimensional (2D) materials; optoelectronics with confined electrons; conductance quantization, Landauer-Buttiker formalism, and resonant tunneling; magneto oscillation; integer and fractional quantum Hall effects; Berry phase and topology in condensed matter physics; various Hall effects (anomalous, spin, valley, etc.); Weyl semimetal; topological insulator; spintronic devices and circuits; collective electron behaviors in low dimensions and applications; Cooper-pair boxes and superconducting quantum circuits.
Mind reading is not the stuff of science fiction, it is a complex set of mental processes honed throughout our evolutionary history that allow us to survive and thrive in a social world. But what is a mind? Who has one? Can we ever know what is in the minds of others? We will attempt to answer these questions by exploring how the human mind uses perceptual information to infer other peoples’ thoughts, beliefs, and desires. In this iteration of the course, we will also explore how mind perception is mediated though social technology by reading empirical papers and designing studies to address open questions in the field. Our goal is to critically examine how our social brains, shaped by evolution to understand other minds, might thrive or wither in an increasingly connected world.

Day dreaming. Having a song stuck in your head. Trying to picture a diagram from the textbook during a test. All of these activities require some sort of imagination, or simulating ideas, images or concepts that do not physically exist around you. We use imagination to guide us when making decisions ("What will happen if I choose this?"), when playing with friends ("Pretend the floor is lava!") , and when remembering past events ("I can almost picture it."). This course will examine the psychology of imagination to uncover how and why we imagine. By exploring the role of imagination in children’s play as well as in hallucinations common to schizophrenia, we will trace the functions of fantasizing across development and individuals. Though the course will focus largely on visual and verbal imagery, we will spend a little time on auditory and other sensory imaginations as well.
As students, we can become accustomed to sitting through hours of lectures, transcribing those lectures, and cramming for exams. But is this the best educational method for promoting student learning? And are the same strategies effective for everyone? This course explores the intersections of psychology and education to reveal the science underlying the best practices of learning and teaching. Topics include the influence of attention, cognitive development, emotion regulation, stereotype threat, growth mindset, and motivation on learning. Through in-class demonstrations and the development of evidence-based lessons, we will wrestle with how to apply psychological principles to enhance the practice of teaching and learning. This course includes an experiential component in which you will learn study strategies and practical tips to enhance your own learning and performance in the classroom.

**PSY 1301 Brain Science for Citizen Leaders**  
CourseID: 160658  
Faculty: Talia Konkle  
Next Term Offered: 2019 Spring

Three forces have converged to make this the most exciting time for brain science. First, we don't yet understand how the brain works, how it breaks, and how to fix it: we have important questions to answer. Second, a slew of powerful brain methods have emerged and we have entered an era of massive computing power: we have serious tools. Third, more than ever before, there is a social will and now a political mandate to tackle these questions head on: we all want to know more about brains!

This course will give you an overview of our current state of brain science knowledge and some basic neuroscience know-how. The content is structured to help you best on that future day when you're an entrepreneur, lawyer, scientist, or the next president, so you'll have the foundation to shape the next decade of brain science discovery and policy.

**PSY 1303 The Human Brain Then and Now**  
CourseID: 108478  
Faculty: Randy Buckner  
Next Term Offered: 2021 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 1358 Cognitive and Neural Aspects of Object and Action Knowledge  
CourseID: 127902  
Faculty: Alfonso Caramazza  
Next Term Offered: 2021 Spring

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). How is this knowledge represented and organized in the brain? We will read and discuss key papers on object and action representation and critically evaluate results from behavioral, neurophysiological, neuropsychological, neuroimaging, and computational studies. The seminar will provide a critical review of the current literature and identify important challenges that await future research.

PSY 1406 Biological and Artificial Visual Systems: How Humans and Machines Represent the Visual World  
CourseID: 212748  
Faculty:  
Next Term Offered:

Someday, perhaps very soon, artificial intelligence will enable machines to perceive the world around us better than humans do. Whether AI systems will do so by emulating human perception, or by becoming supra-human and circumventing biological constraints entirely, is yet unknown. In this course, we will survey research on human and machine perception, with an emphasis on vision: How do humans and machines represent the visual world? What does human vision do that artificial neural networks don't (yet)? How can we understand human perception better by focusing on artificial neural networks, and vice versa? By focusing on this intersection between biological and artificial visual systems, we will learn what makes humans fundamentally unique and special, while simultaneously learning about cutting edge discoveries in both fields.

PSY 1555 Wired to Connect? The Neuroscience of Social Understanding and Interaction.  
CourseID: 126848  
Faculty: Mina Cikara  
Next Term Offered: 2021 Spring

By some accounts, the large expansion of the human brain evolved due to the complex demands of dealing with social others?competing or cooperating with them, deceiving or empathizing with them, understanding or misjudging them. This discussion-based seminar surveys the emerging field of social cognitive neuroscience and its multi-level, multi-method approach to understanding the brain in its social context. We will review current theories and methods guiding the field and recent research examining the neural bases of social processes, including: theory of mind, empathy, morality, social decision-making, intergroup relations, among others.
PSY 1585 On and Beyond the Witness Stand: Social Psychology and Law
CourseID: 207887
Faculty:
Next Term Offered:

Why do eyewitnesses often identify the wrong suspect? What leads innocent people to confess to crimes they did not commit? How do jurors evaluate trial evidence and arrive at a verdict? This course examines the interface between social psychological research and the law to address such questions. We will examine scientific evidence and scholarly perspectives surrounding the role of psychological experts in the legal system; the use of social science in law and public policy; criminal behavior and policing; eyewitness memory and lineup procedures; lie detection and police interrogation; innocence and false confessions; jury selection and decision-making; judicial and prosecutorial discretion; and implicit bias and discrimination litigation. This course will equip students with a scientific understanding of how psychology can be used to both inform and improve our legal system and public policies.

PSY 1586 Confronting Bias in the Self and Others
CourseID: 207888
Faculty:
Next Term Offered:

Most people reject hostile expressions of prejudice and are motivated to reduce bias in their judgment and behavior, but many groups continue to be marginalized and discriminated against in modern society. Targets of prejudice often experience interpersonal and institutional discrimination that undermines their psychological well-being and economic mobility. In this course, we will critically examine the psychological processes that underpin conscious and unconscious forms of prejudice and stereotyping. We will examine the effectiveness of interventions for reducing bias, considering how and why many people fight back rather than self-improve when confronted with evidence of their own bias or that of others in society. Together we will work to develop a scientific understanding of how modern forms of prejudice and discrimination operate in human relations and how to confront biases in the self and others.

PSY 1587 Fake News and Political Misperceptions
CourseID: 207890
Faculty:
Next Term Offered:

At its core, politics is about the psychology of persuasion?through rhetorical machination, argumentation, and debate, communicators try to influence how citizens think about an
issue, candidate, or event. In the age of "fake news" and alternative facts, where misleading, sensationalized, or disproven information abounds, how individuals arrive at their political beliefs and acquire political knowledge is of central importance. In this class, we will step "inside the mind" of citizens and political elites to explore the psychological processes underlying the persistence and consequences of misinformation for political psychology. We will examine interdisciplinary perspectives on mass communication, the structure and function of belief systems and political identity, and strategies for correcting political misperceptions (which often fail). A major goal of this course is to consider how psychological science contributes to our understanding of politics, and how the study of politics advances our understanding of human nature.

PSY 1588 Nudge Psychology: How Small Unseen Forces Shape Thoughts, Feelings, and Behavior  
CourseID: 213253  
Faculty:  
Next Term Offered:  
Changing the wording used to remind patients of upcoming medical appointments saved a London hospital millions of dollars by drastically dropping the missed appointment rate. When Spain moved from an opt-in to opt-out organ donation system, the number of organ donors skyrocketed. In this course we will study the power of nudges like this -- subtle but powerful changes in the environment that can counteract behavioral biases and encourage better decisions. We will start with learning about dual-systems models of the mind and then explore how these systems interact to make us vulnerable to bias, heuristics, jumping to conclusions, and erroneous decision-making. Finally, we will investigate how nudges have been leveraged to positively influence behavior and improve social systems. Students will have the opportunity to design and implement their own nudges to improve some aspect of their environments.

PSY 1662 The First Five Years: Parenting and the Developing Mind  
CourseID: 207885  
Faculty:  
Next Term Offered:  
How important are caregivers' actions for determining their children's destinies? In this seminar, we will delve into the ongoing scholarly debate about the extent to which parents can influence children's development over and above their genetic inheritance, with a focus on the first five years of life. We will reason through controversial parenting issues from the perspective of cognitive science, including questions such as what are the pros and cons of breastfeeding? How detrimental is "screen time" to a child's health and well-being? Does raising children to be bilingual help or harm their language development? Given the ubiquity of parenting advice and claims about child development? in combination with our own personal biases as former children and possible future parents? the goal for this course is to become more effective consumers of developmental science and learn to utilize empirical evidence in drawing our own
conclusions about early childhood development.

PSY 1702 The Emotional Mind  
CourseID: 108490  
Faculty: Leah Somerville  
Next Term Offered: 2018 Spring

Not only do emotions permeate our everyday lives, they have aided in the survival of the human species. But what are emotions, and what are they good for? What causes us to experience an emotion? And how do emotional responses, in turn, influence our perception, memory, decision-making, and psychological well-being? This course will address these questions by drawing on key advances from historical, philosophical, psychological, and neuroscientific perspectives.

PSY 1801 Anxiety Disorders  
CourseID: 114346  
Faculty: Richard McNally  
Next Term Offered: 2019 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 1809 Science of Stress  
CourseID: 207564  
Faculty:  
Next Term Offered: 

Stress is a universal human experience. Why do we experience stress? What are common causes of stress in our modern world? How does stress influence our emotions and the way we think and behave? What are the consequences of stress for our health and well-being? Why are some people more vulnerable to developing stress-related illnesses than others? And perhaps most importantly? what are the most effective strategies for coping with stress? This course will address these questions with a particular focus on translating advances in the science of stress and stress management to help students learn how to manage stress more effectively in their lives.

PSY 1853 Self-Destructive Behaviors  
CourseID: 119189  
Faculty: Matthew Nock  
Next Term Offered: 2022 Fall
Why do some individuals intentionally engage in behaviors that cause themselves direct bodily harm, such as suicide and self-mutilation? We explore past and current models for understanding self-harm behaviors. We consider the classification, etiology, assessment, and treatment of self-harm behaviors from psychological, developmental, contextual, and biological perspectives.

PSY 2030 Bayesian Data Analysis
CourseID: 160667
Faculty: Patrick Mair
Next Term Offered: 2021 Fall

Bayesian statistics is becoming more and more popular in psychology. This class covers basic and advanced topics of Bayesian statistics with a strong focus on applications in Psychology. Formulas and technical details are kept on a minimum; it is all about how to integrate Bayesian concepts into your everyday research.

The first part of the course introduces students to the Bayesian paradigm of inferential statistics (as opposed to the frequentist approach everyone should be familiar with). To have a good understanding of this idea, we need to elaborate on various concepts of probability theory (e.g., Bayes' theorem) and statistical distributions. We then introduce the key components of Bayesian inference (prior, likelihood, posterior), and discuss Bayesian hypothesis testing as well as Bayes factors.

Subsequent units focus on Bayesian regression (including model checks and model comparison) and mixed-effects models which, within a Bayesian context, belong to the family of Bayesian hierarchical models. There we also elaborate on modern approaches like integrated nested Laplace approximation (INLA) that allow us to efficiently estimate complex nonlinear, spatio-temporal models.

After midterm we look at what’s going on under the hood: Markov chain Monte Carlo (MCMC). We introduce Stan, a probabilistic programming language for full Bayesian inference, which interfaces with R. We will then use Stan for some tasks related to Bayesian cognitive modeling. The last three units focus on the following special topics: Gaussian process regression and latent Dirichlet allocation (LDA), selected methods from Bayesian psychometrics, and Bayesian networks.

All topics covered will be supported by corresponding computations and illustrations in R.

PSY 2112 Field Experiments in Psychology and Economics
CourseID: 215685
Many societal questions can be informed by randomized controlled field experiments, combining the methods of psychology and cognitive science with those of economics. This seminar will focus on a series of topics amenable to experiments of this sort, to be chosen in accord with the interests of students and faculty. Possible topics include: how to educate the world's children; to strengthen families and promote better parenting; to defuse social conflicts; to use the internet and other digital media to increase knowledge rather than ignorance; or to encourage people to adopt practices that will improve their health and that of the planet.

PSY 2190 Topics in Language Acquisition
Course ID: 116646
Faculty: Jesse Snedeker
Next Term Offered: 2019 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 2301 Theories of Learning
Course ID: 207497
Faculty: Samuel Gershman
Next Term Offered: 2021 Fall

This course provides a tour of foundational topics in learning from a theoretical perspective. It covers a diversity of learning processes, aiming for breadth over depth (although it inevitably neglects several important forms of learning). Each meeting will consist of student-led presentations of two papers. Experience with computational modeling is not required, but students should have some familiarity with basic math (algebra and probability).

PSY 2302 Individual differences and human minds: Perspectives from evolutionary psychology
Course ID: 212734
Faculty: Max Krasnow
Next Term Offered: 2022 Spring

What is personality? Why are there sex differences in how we think and behave? Where does this variance come from and what does it have to do with pathology? In this course we will explore how individual difference can evolve as a result of natural selection, and consider how these models inform our understanding of the many ways people differ. This course is a discussion-based seminar where students will play an
active role in discussion and present weekly readings.

PSY 2400 Cognitive Psychology and Emotional Disorders
CourseID: 117820
Faculty: Richard McNally
Next Term Offered: 2020 Spring

Research and theory on the application of cognitive psychology methods applied to the understanding of anxiety and mood disorders. Limited to graduate students.

PSY 2451 Psychology of Racism, Prejudice, and Discrimination
CourseID: 108488
Faculty: James Sidanius
Next Term Offered: 2020 Fall

This course provides an in-depth and comprehensive exposure to the theoretical and methodological issues within the social psychology of racism and prejudice research. Approaches will include sociology, political science, and anthropology.

PSY 2460 Diagnostic Interviewing
CourseID: 113704
Faculty: Jill Hooley
Next Term Offered: 2021 Fall

In this course, we will focus on basic clinical and diagnostic interviewing skills. Particular attention will be devoted to the Structured Clinical Interview for DSM (SCID-5) with some exposure to other structured interviews (e.g. ADIS, K-SADS). The aim of the course is to provide students with the skills needed to make reliable diagnostic assessments for research and clinical purposes.

PSY 2570R Intergroup Relations: Research Seminar
CourseID: 122753
Faculty:
Next Term Offered: 2021 Fall

The seminar provides students with research experience concerning different forms of intergroup relations, including the social psychology of interracial and interethnic conflict and prejudice. Students meet on a weekly basis to discuss ongoing research on psychological mechanisms involved in power, stereotyping, inequality, identity, and ideology. Undergraduates will work under the supervision of a graduate student in the design and conduct of lab-based and survey experiments, and the input, coding and early analysis of empirical data. Undergraduate enrollees will also attend biweekly critical discussions of research articles in the field, and will have the opportunity to
develop and receive feedback on their own research ideas.

PSY 2670A Decision Making and the Psychology of Possibility
CourseID: 131189
Faculty:
Next Term Offered:

Topics in decision making such as rationality, risk-taking, helplessness, and health are examined through the lens of mindfulness theory. Special emphasis given to the psychology of possibility in applied settings.

PSY 3250 Psychological Testing
CourseID: 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 3501 Rationality: Talking Points
CourseID: 214586
Faculty:
Next Term Offered:

Rationality is in the news, as we struggle to understand how an era with unprecedented scientific sophistication could harbor "post-truth" rhetoric, and it has long been a foundational topic in psychology, philosophy, economics, mathematics, and government. This graduate companion course to GENED 1066 Rationality explores the theories and controversies in greater depth, including the nature and psychology of rationality, and applications including crime, sports, medicine, climate, journalism, policy, and philanthropy, with a focus on effective altruism.

PSY 3560 Professional Development
CourseID: 110489
Faculty: Matthew Nock
Next Term Offered: 2021 Spring

PSY 3900 Professional Ethics
CourseID: 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 1400 Introduction to the New Testament
CourseID: 113956
Faculty: [Faculty Name]
Next Term Offered:

The course will address the questions: What is the New Testament? What work does the New Testament do? We will examine various approaches including scripturalizing, minority Biblical criticism, and historical criticism. Topics include teachings of/by/about Jesus, Jews and Christians, empire and colonialism, the roles of women, Roman and US salvery, the politics of storytelling and canon formation, heresy, and sexualities/masculinities/gender.

RELIGION 1462 Catholicism in America
CourseID: 156258
Faculty: [Faculty Name]
Next Term Offered:

This course focuses on the American Catholic experience. We will discuss French and Spanish missions, Catholic immigration to the British colonies, the rise of nativism, and controversies over slavery, industrial capitalism, "Americanism," feminism, war, and sexuality. We will also discuss the transformation of the Catholic Church in the wake of Vatican II and contemporary divisions between "liberals" and "conservatives." Besides examining Catholic intellectual life, we will also explore Catholic popular religion and devotionalism. Throughout the course, we will focus on the historical development of the Catholic Church and the relationship between Catholics and American culture.

RELIGION 1497 Evangelicalism in America
CourseID: 156250
Faculty: Catherine Brekus
Next Term Offered: 2022 Fall

This course focuses on the American evangelical movement from the 1740s to the present. Beginning with the rise of transatlantic evangelicalism in the eighteenth century, we will explore the role of evangelicals in the American Revolution, the revivals of the Second Great Awakening, the crisis caused by slavery, the Fundamentalist-Modernist controversy in the early twentieth century, the emergence of Pentecostalism and the Charismatic Movement, the controversies created by neo-evangelicalism in the 1940s, the relationship between evangelicalism and the civil rights movement, the political activism of the Christian Right, and contemporary evangelical attitudes toward gender and sexuality. Readings will introduce students to both evangelical ideas and practices. Throughout the course, we will focus on the historical development of evangelicalism.
and the relationship between evangelicals and American culture.

RELIGION 1525 The Holocaust: Religion and Representation  
CourseID: 135951  
Faculty:  
Next Term Offered:

This undergraduate seminar (intended mainly for concentrators) will focus the issue of representation of religion in filmic, literary and memorial representations of the Holocaust. After a brief historical overview of the history of the Holocaust, we will turn our attention to the following issues and themes: philosophical and theological reflections on the issues of representation, especially on the limits of traditional media to represent extremes of human evil and suffering; literary texts and films that are recognized as classics in attempting to mediate the experience of the Holocaust; issues of memory and postmemory; the aestheticization of trauma; God and evil; and the reception of cultural artifacts in Germany, Israel and the United States, particularly among religious communities.

RELIGION 1814 Muslim Devotional Literatures in South Asia: Qawwalis, Sufiana Kalam (Sufi Poetry) and the Ginans  
CourseID: 161217  
Faculty: Ali Asani  
Next Term Offered: 2022 Spring

This course explores traditions of Islamic spirituality in South Asia through the lens of three genres: the qawwali, concerts of mystical poetry; sufiana kalam, Sufi romantic epics and folk poems; and the ginans, hymns of esoteric wisdom recited by the Satpanthi Ismailis. Since these genres represent examples of language, symbols and styles of worship shared across Islamic and non-Islamic denominational boundaries, we will also examine their relationships with other Indic traditions of devotion, particularly those associated with the so-called sant and Hindu bhakti movements. Special emphasis will be given to the impact of contemporary political ideologies, globalization and the revolution in media technology on the form and function of these genres and their relationship with contemporary communities of faith in South Asia and beyond.

RELIGION 2514 Caribbean Materialisms: Wynter and Glissant  
CourseID: 213589  
Faculty:  
Next Term Offered:

This advanced seminar examines the works of two influential Caribbean theorists?Sylvia Wynter and Édouard Glissant?in dialogue with the sources that most shape their works. The course pays particular attention to their contributions to conceptualizing the relationship between materiality, coloniality, language and the sacred. Jointly offered in
RELIGION 2710R Buddhist Studies Seminar: The History of South Asian Buddhist Texts
CourseID: 118741
Faculty: 
Next Term Offered:

This is a seminar for doctoral students planning to take generals exams in Buddhist Studies as well as for advanced masters students in the field. It will study the history of Sanskrit and Pali canonical and extra-canonical literature and their commentaries, translations, "canons," and major schools of interpretation. Foundational modern secondary scholarship will be considered as well, along with the state-of-the-art critical apparatus for Buddhist Studies. Prerequisite: Advanced background in Buddhist Studies and consent of instructor. Jointly offered with Harvard Divinity School as HDS3888.
Slavic Languages and Literatures

RUSS  AH Russian for Heritage Speakers
CourseID: 114640
Faculty:
Next Term Offered: 2020 Fall

Grammar and vocabulary review for students with a Russian-speaking family background. The course covers the entire case system, verb conjugation, aspect, motion constructions, and other essential grammar topics. Emphasis on reading, writing, spelling, and word formation.

RUSS  ATA Elementary Russian through Authentic Texts: Russian through Pushkin I
CourseID: 109273
Faculty:
Next Term Offered: 2020 Fall

Part one of a two part introductory course to Russian language and culture through a selection from the verse and prose works of Russia’s greatest poet, Alexander Pushkin (including The Bronze Horseman, excerpts from Eugene Onegin, shorter poems, and prose in The Queen of Spades). This literary and linguistic approach to Elementary Russian has a strong emphasis on reading authentic Russian, but all four major communicative skills (speaking, listening comprehension, reading, writing) are stressed. Covers all of the basics of Russian grammar, including all six cases, verbal conjugation, and verbs of motion.

RUSS  ATB Elementary Russian through Authentic Texts: Russian through Pushkin II
CourseID: 159636
Faculty:
Next Term Offered: 2021 Spring

Part two of a two part introductory course to Russian language and culture through a selection from the verse and prose works of Russia’s greatest poet, Alexander Pushkin (including The Bronze Horseman, excerpts from Eugene Onegin, shorter poems, and prose in The Queen of Spades). This literary and linguistic approach to Elementary Russian has a strong emphasis on reading authentic Russian, but all four major communicative skills (speaking, listening comprehension, reading, writing) are stressed. Covers all of the basics of Russian grammar, including all six cases, verbal conjugation, and verbs of motion. Assumes no previous knowledge of Russian.
RUSS     BTA Intermediate Russian through Authentic Texts: Russian through Bulgakov I
CourseID: 146663
Faculty:
Next Term Offered: 2020 Fall

Part one of a two-part intermediate course in Russian language and culture through reading of what is arguably 20th-century Russia's greatest novel, Mikhail Bulgakov's "The Master and Margarita". This literary and linguistic approach to Intermediate Russian has a strong emphasis on reading authentic Russian, but all four major communicative skills (speaking, listening comprehension, reading, writing) are stressed as students learn to use the language both as a means of communication and as a tool for reading and research. Further development of vocabulary and oral expression within a comprehensive review of Russian grammar. Systematic study of word formation and other strategies are taught to help free students from excessive dependence on the dictionary and develop confidence in reading.

RUSS     BTB Intermediate Russian through Authentic Texts: Russian through Bulgakov II
CourseID: 159659
Faculty:
Next Term Offered: 2021 Spring

Part two of a two-part intermediate course in Russian language and culture through reading of what is arguably 20th-century Russia's greatest novel, Mikhail Bulgakov's "The Master and Margarita". This literary and linguistic approach to Intermediate Russian has a strong emphasis on reading authentic Russian, but all four major communicative skills (speaking, listening comprehension, reading, writing) are stressed as students learn to use the language both as a means of communication and as a tool for reading and research. Further development of vocabulary and oral expression within a comprehensive review of Russian grammar. Systematic study of word formation and other strategies are taught to help free students from excessive dependence on the dictionary and develop confidence in reading.

RUSS     HB Russian for Heritage Speakers
CourseID: 219696
Faculty:
Next Term Offered:

Part two of a two part introductory course in modern Russian language and culture, designed for heritage speakers of Russian, i.e., students who were born in the US into a Russian-speaking family or students whose linguistic competence had not been completely formed before coming to the US. This course addresses the specific needs of Russian heritage learners at all levels of language competence, including reading and writing in Russian with particular emphasis on orthography, syntax, stylistic devices, and cultural literacy. Taught entirely in Russian. Completion of both RUSS Ha and RUSS Hb
satisfies the foreign language requirement and also count as two courses towards a citation in Russian.

SLAVIC 112 Science Fiction
CourseID: 213726
Faculty:
Next Term Offered:

Considers science fiction's development and shifting emphases in both of its major traditions, in Russia and in the English-speaking world. Touches on perennial themes of the genre including: our relationship to the future and the hypothetical; the technological mediation of human existence; the limits of space and time and the consequences of surpassing them; non-human and non-organic consciousness; radically different forms of human togetherness; and various apocalyptic scenarios. Reading list might include: H.G. Wells, Alexander Bogdanov, Eugene Zamiatin, Ursula K. LeGuin, Philip K. Dick, the Strugatsky Brothers, Octavia Butler, and China Miéville, as well as select films.

SLAVIC 115 The Russian Novel
CourseID: 212750
Faculty:
Next Term Offered:

SLAVIC 121 Ballet, Past and Present
CourseID: 215995
Faculty:
Next Term Offered:

SLAVIC 130 Russian Poetry and Its Borders: Conference Course
CourseID: 205636
Faculty: Stephanie Sandler
Next Term Offered: 2021 Fall

Without borders, can there be poetry? A white paper border surrounds printed poems; digital poems are bounded by the screen on which they are read; national boundaries keep cultural and linguistic traditions distinct; and aesthetic conventions create genres and demarcate poetry from music or dance or film. How Russian poetry perversely challenges such limits, and how it thrives at the edges of the permissible, will be the subject of this course.

We will study the cultural practice of poetry as it crosses four kinds of borders? performative, linguistic, geographic, and aesthetic. That yields four large topics: poetry in public places (how does poetry speak of politics, and how does it write collective trauma?); poetry and translation (how does translation change poetic practice? how to read mixed-language poems?); poetry and emigration/exile (what happens to identities
and allegiances when poets cross geographical borders? What happens to the poet's language?); and poetry and the other arts (how have music, film, drama, paintings, photography, and the philosophical essay been felt in poetry? can poems become visual artifacts, or scripts for performance?).

Examples from the work of Aygi, Brodsky, Dragomoshchenko, Goralik, Glazova, Kaminsky, Khlebnikov, Mandelstam, Mnatsakanova, Nabokov, Pushkin, Sedakova, Slutsky, Vvedensky. Comparisons to American poets, including Susan Howe and Anne Carson, and to films by Tarkovsky and others.

SLAVIC 131 Dostoevsky
CourseID: 207565
Faculty:
Next Term Offered: 2021 Fall

Survey of Dostoevsky's greatest novels, including Notes from Underground, Crime and Punishment, The Devils (The Possessed), and The Brothers Karamazov, as well as his most important short stories and journalistic writing from A Writer's Diary. Lectures will discuss, among other topics, why Dostoevsky chooses the form of the novel to elaborate his ideas on philosophy, religion, politics, crime, and terror.

SLAVIC 132 Russia's Golden Age: Literature, Arts, and Culture
CourseID: 207566
Faculty:
Next Term Offered:

Investigates major works of imperial Russian culture (1703-1917) as products of their original historical contexts and in their on-going life as acknowledged "masterworks." At the center of this course stand the works themselves, their original historical and cultural contexts, the intentions of their creators, and the responses of their initial audiences. Our aim will be to understand how these works intersected with their time to achieve canonical status. What mythologies of national identity did these works propose and why were they so compelling to their first audiences? In what ways were these works radical: formally, aesthetically, ideologically? How have these masterworks been variously renewed and reinterpreted since their initial reception, up to the present day?

Works by Rastrelli, Falconet, Pushkin, Gogol, Dostoevsky, Tolstoy, Musorgsky, Tchaikovsky, Chekhov, Bely.

SLAVIC 136 20C Czech Literature
CourseID: 216026
Faculty:
Next Term Offered:
When the natives of Medieval Rus' (later Russians, Ukrainians, and Belarusians) accepted Orthodox Christianity in the 10th century, their nature-based paganism gave way to a powerfully sensual belief system that made good use of the visual and the verbal to prepare these newest Christians for the coming Apocalypse and Last Judgment. We investigate this transformation from the conversion of Saint Vladimir and the excesses of Ivan the Terrible through the Time of Troubles and the modern turn of Peter the Great. The class features close analysis of architecture, icons and frescoes, ritual, folklore, literature, and history to understand this shift in worldview, including the role of women. Special attention is devoted to the ways in which Medieval Rus' is portrayed in film, opera, and ballet.

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 Pushkin, Gogol, Dostoevsky, Tolstoy, Leskov, Babel, Kharms, Platonov, Nabokov, Petrushevskaya, Shalamov, Dobychin; films by Tarkovsky, Askoldov, Sokurov.

An examination of Ukrainian literature in the decade preceding Independence and in the years since, i.e., the 1980s to the present. Special focus on the massive changes that occurred with the shift from obligatory Socialist Realism to an ostensibly open poetics, with the coexistence of traditionalist forms, aspects of neo-modernism and postmodernism, and also on the significant resistance to these changes. Given the new open poetics and the de facto (if not subliminal) disappearance of censorship, contacts and interaction with western and especially émigré (now diaspora) Ukrainian literature are also examined. Several films exemplifying the changes and poetics involved will also be discussed.

Focus on Dibrova and the onset of Post-Sovietism; the post-modernist performance of Andrukhovych and the Bu-Ba-Bu circle; Izdryk; Prochasko; Kurkov, Zabuzhko and
feminist and anti-feminist writing, Zhadan and the post-modern nostalgia for the USSR; Ukrainian literature in the diaspora: Yurij Tarnawsky and Vasyl Makhno.

SLAVIC 171 The Holocaust in Polish Memory and Culture
CourseID: 213366
Faculty:
Next Term Offered:
Hitler’s plan to destroy European Jewry was carried out by the Nazis mostly on the territory of occupied Poland, where three million Jews had lived before World War II. The Poles’ position has been described as that of bystanders?eyewitnesses to killings, ghettos, and death camps; nevertheless, Polish behavior also encompassed more direct involvement?whether complicity and murder, or the rescuing of Jews. How is this time remembered in Poland? How have eyewitnesses responded to what they saw? What is the relation between the Holocaust memory and Polish wartime history? Could the same person be a bystander, victim, and collaborator? We will look for answers in Polish poetry and essays, fiction and scholarship, written between the 1940s and today, and including authors of Jewish background who stayed in the country after the war. What vision of Polish?Jewish relations do these different works provide? How was the memory of the Holocaust shaped and used by communist Poland? Who shapes it today?

SLAVIC 175 Introduction to Polish Culture
CourseID: 205086
Faculty:
Next Term Offered: 2020 Fall
In the sixteenth and seventeenth centuries, Poland was one of the largest countries in Europe and a multi-ethnic commonwealth; just two centuries later, it had been erased from the map, occupied by three different empires and subjected to constant struggles for independence. Today, it is a medium-size monolithic nation state in the middle of Europe, closely watched for its political developments.

Our course will survey key topics in Poland's 1000-year history by examining important works of literature, art, architecture, and film. We will consider how the past, both celebrated and contested, can shape a country’s contemporary politics and cultural landscape. We’ll also examine the interplay between local, national, and international geographies as we track Poland's ever-changing borders; students will create a personal travel guide and symbolic map of Polish culture, considering the contributions and histories of Poles, Jews, Lithuanians, Ukrainians, Belarusians, Germans and Russians in what was one of Europe's most multi-ethnic and multi-confessional spaces.

SLAVIC 183 Reading Anna Karenina
CourseID: 110329
Faculty:
In this course we will conduct a close reading of Tolstoy’s novel Anna Karenina and a few additional short works of fiction and criticism. Readings are in Russian.

SLAVIC 184 Soviet Theory and the West
CourseID: 214548
Faculty:
Next Term Offered:

This course treats important Soviet theoretical contributions in philosophy, psychology, literature, film, and culture in dialogue with comparable movements in the West. In particular, we will look at the key role of language and semiotics, as well as its rejection, in various theoretical models. Reading will focus on major works by Vygotsky, Bakhtin, Lukacs, Shklovsky, Jakobson, Lotman, and others. All readings will be in English translation.

SLAVIC 189 The Other Russia: Twenty-First Century Films, Fictions, States of Mind
CourseID: 205015
Faculty: Stephanie Sandler
Next Term Offered: 2022 Spring

Russia is in the news these days for its politics and espionage, but what about the daily lives of Russian people? Nothing gets at that reality in all its pettiness and grandeur better than Russian literature. The stories, poems, plays, movies, memoirs, and documentaries of the last twenty-five years are the subject of this course. We will trace the chaotic transitions of the 1990s, the disparities of wealth and polarized politics of the 2000s, the rise of religious thinking (Orthodox, Islam, Jewish), and the several conflicts at Russia’s borders. The impact of travel, diaspora, and the internet on breaking down old walls that once isolated the USSR will be as important as changes in the legal order. The different fates of former Soviet republics will be compared, with examples from Ukraine, the Caucasus, and the far North.

Writers include Svetlana Aleksievich, Joseph Brodsky, Elena Fanailova, Linor Goralik, Alisa Ganieva, Boris Khersonsky, Viktor Pelevin, Liudmila Petrushevskaya, Vladimir Sorokin, and Serhiy Zhadan. Films to include Leviathan, Four, Alexandra, My Joy, and Maidan. Students will also interview and create portraits (visual, verbal, and video) of émigrés from the former Soviet Union living in the Boston area, using the interviews as a context for the cultural representations of life in and beyond Russia.

SLAVIC 190 Historiography and Historical Fiction
CourseID: 213727
Faculty:
Next Term Offered:
Considers historical fiction in its connection with historiography on the one hand and other genres of fictional narrative on the other. Our case study is the contested tradition of historical fiction in the former Yugoslavia (Prince-Bishop Njego?, France Pre?eren, Ivo Andri?, Danilo K?, Sa?a Selimovi?, Aleksandr Hemon), contextualized in the wider development of the genre from its modern origins in Walter Scott and in Romantic nationalism. Theoretical readings include Johann Gottfried Herder, Georg Lukács, Hayden White, and Linda Hutcheon; comparative readings might include Ismail Kadare, Leo Tolstoy, and Vladimir Sorokin.

SLAVIC 197 The Power of the Powerless: Dissidents from Socrates to Václav Havel
CourseID: 123117
Faculty: Jonathan Bolton
Next Term Offered: 2020 Fall

From Socrates and Antigone to Pussy Riot and Ai Weiwei, we are fascinated by the courage of dissidents who oppose tyrannical regimes. But who are dissidents, and where do they gain the conviction, imagination, and political skill to stand up for their beliefs? In this course, we will investigate the role of non-violent dissent in political and cultural life, looking at both historical figures and political actors in the world today. After considering some classic statements of dissent (including Socrates' Apology, Sophocles' Antigone, and Martin Luther King's "Letter from Birmingham Jail"), we will turn to recent and contemporary dissidents to think about their paths into protest, their strategies of political and cultural protest, their complicated relationship with their fellow citizens, and their portrayal in domestic and international media.

Our focus will be on individuals rather than on social movements, and on non-violent rather than violent or revolutionary protest. Drawing examples from the Soviet Union and Eastern Europe during the Cold War, contemporary Russia, China, and other countries, we will consider figures such as Václav Havel, Aleksandr Solzhenitsyn, Vladimir Bukovsky, Liu Xiaobo, Ai Weiwei, Pussy Riot, and others.

SLAVIC 201 Introduction to East Slavic Linguistics
CourseID: 115232
Faculty: Michael Flier
Next Term Offered: 2019 Fall

Introduction to the structure and history of Russian, Ukrainian, and Belarusian.

SLAVIC 207 Russian Dialectology
CourseID: 216167
A review of Russian dialect variation in phonology, morphology, and syntax. The course includes consideration of major isoglosses and linguistic analysis of transcribed dialect speech.

SLAVIC 241 Russian Futurism and Formalism
CourseID: 159557
Faculty: Daria Khitrova
Next Term Offered: 2020 Fall

Follows the development of two major movements in Russian literature — Futurism and Formalism — in close conjunction with each other and in the context of Russian Modernism at large. Examines poems, manifestos, theoretical writings, visual arts, theater productions, films. Key questions include: how could Futurism, with its scandalous manifestos and "transrational" poems, evolve into the Formalist theory with its cult of science and rigorous methodology? How to make sense of the transrational? What made Futurists paint their faces? Works by Bely, Khlebnikov, Mayakovsky, Kruchyonych, Shklovsky, Tynianov, Jacobson, Larionov, Malevich, Zdanevich, Rodchenko, Vertov.

SLAVIC 259 Chekhov: Texts and Performances
CourseID: 213423
Faculty:
Next Term Offered:

Close analysis of Chekhov’s work as playwright and writer of short stories and letters. Considers the performance history of his plays, from the Moscow Art Theatre through contemporary productions. Also explores Chekhov’s on-going reception both inside and outside Russia.

SLAVIC 286 Poetry after Brodsky: How Russian Is It?
CourseID: 124482
Faculty: Stephanie Sandler
Next Term Offered: 2019 Fall

Studies poetic practice since the late 1980s, with an emphasis on very recent work. Includes Aristov, Aygi, Barskova, Brodsky, Dashevsky, Dragomoshchenko, Eremin, Fanailova, Glazova, Goralik, Gronas, Prigov, Rymbu, Sedakova, Shvarts, Stepanova, Skandiaka, Svarovsky, Vasiakina, Yusupova and others. Key themes are border crossings (in language and geography); poetry and other art forms; innovations in form and self-representation; poetry performance and visual display; political and ethical expression; and the changing representations of emotion and mind.
South Asian Studies

SAS 126 Medieval and Modern History of Kashmir
CourseID: 212652
Faculty:
Next Term Offered:

This course presents a survey of the medieval history of Kashmir, beginning with archaeological data and the first available written sources in Indian, Greek and Chinese texts; as well as with the subsequent sources in Sanskrit and Persian. This is followed by an overview of early premodern and recent sources, up to the loss of independence in 1947 and the recent strife in the Kashmir Valley.

TIBET 210 Readings in the Tibetan Literature on the Date of the Historical Buddha
CourseID: 212814
Faculty:
Next Term Offered:

This course examines various specimen of the so-called Bstan rtsis, Buddhist Chronology, literature, with a special emphasis on the different chronologies Tibetan writers proposed for the Buddha's life.

TIBET 212 Readings in Gser mdog Pa? chen Sh?kya mchog Idan's (1428-1507) Tshad ma rigs gter gyi dgongs rgyan
CourseID: 212816
Faculty:
Next Term Offered:

Gser mdog Pan chen's work on logic and epistemology (tshad ma) was path breaking. We will be reading passages from his Dgongs rgyan and contextualize his arguments against the background of the history of Indo-Tibetan Buddhist epistemology and logic.
Stem Cell and Regenerative Biology

**SCRB 15A CRISPR Cas9: Precision Genetics and Gene Therapy**
CourseID: 203604  
Faculty:  
Next Term Offered: 2021 Fall

This year-long hands-on laboratory course hones skills essential for researchers in developmental biology. Students will learn genome editing tools, cell culture techniques, and phenotypic analyses in both cell lines and model systems while addressing unknown questions in the field. SCRB 15 is designed to complement material found in SCRB 10, and is best taken during the sophomore year. Students are strongly encouraged to complete SCRB 15B in the spring.

**SCRB 15B CRISPR Cas9: Precision Genetics and Gene Therapy**
CourseID: 203924  
Faculty:  
Next Term Offered: 2022 Spring

This year-long hands-on laboratory course hones skills essential for researchers in developmental biology. Students will learn genome editing tools, cell culture techniques, and phenotypic analyses in both cell lines and model systems while addressing unknown questions in the field. SCRB 15 is designed to complement material found in SCRB 10, and is best taken during the sophomore year.

**SCRB 35 Spatial and Temporal Genomics**
CourseID: 217902  
Faculty:  
Next Term Offered:

**SCRB 78 Science Communication**
CourseID: 214393  
Faculty:  
Next Term Offered: 2022 Spring

Communicating complex ideas succinctly differentiates 1.5°C and 5°C, biotech success and failure, doctor and dispenser, and, in this class, an A and a C. Over twelve weeks of solo project-based communication practice in scientific presentations, impromptu pitching, New York Times article-writing, videography and video editing, scientific articles, biotechnology, policy, and grant-writing, this class aims to turn you into a standout communicator. This class is highly practical and follows a 'work smarter, not harder' teaching ethic.
SCRB 150 Human Genetics: Mining Our Genomes for an Understanding of Human Variation and Disease
CourseID: 114797
Faculty:
Next Term Offered: 2022 Spring

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 152 Asking Cells Who They Are: Computational Transcriptomics Using RNA-Seq
CourseID: 156937
Faculty:
Next Term Offered: 2020 Fall

This course is a hands-on introduction to computational analysis of RNA sequencing data as a measure of genome-wide transcription. We will cover methods spanning the spectrum of RNA-Seq analysis: starting from raw sequencing reads, obtaining gene expression measures, and interpreting biological significance by differential expression analyses, clustering, and visualization. Coursework will consist of programming assignments in Python exploring real datasets. The course will emphasize skills applicable to independent biological research.

SCRB 155 Epigenetics and Gene Regulation of Human Development and Disease
CourseID: 126154
Faculty:
Next Term Offered: 2021 Spring

Are we destined to be our parents? In this course we will study topics in epigenetics and gene regulation to challenge some of Mendel’s ideas on genetic inheritance. To do this, we will learn about the biochemical processes that control the expression of genes as cells change across human development, aging and disease. Together with genetics, we’ll use science to discuss whether "nature or nurture" defines who we are. Finally, the human genome is huge, employing diverse mechanisms of epigenetic regulation, we’ll learn about data rich experimental tools and work together to use computational methods to study epigenetic processes within cells.

SCRB 178 Immunology: New Tracks and Greatest Hits
CourseID: 111316
Faculty:
Next Term Offered: 2022 Spring

This course will explore cutting edge immunology topics with student presentations of recently published papers discussing topics ranging from hematopoietic stem cells, HIV, gluten, cancer and others. The class will also discuss the classic immunology papers that have shaped the field today, with discussions on the next steps for the future.

Course work: Reading of papers, seminar presentations, and class participation.

SCRB 182 Got (New) Brain? The Evolution of Brain Regeneration
CourseID: 159693
Faculty:
Next Term Offered: 2020 Fall

This course will cover concepts and theories on evolutionary changes in nervous system regenerative capacities of different organisms. Material will be taught in a dynamic setting combining lectures and brainstorming of the literature with hands-on experience in the laboratory. Students will become familiar with classic, paradigm-changing experiments that have shaped how we think about brain regeneration and repair and also consider the newest theories on cellular reprogramming as a way to regenerate the nervous system.

SCRB 190 Understanding Aging: Degeneration, Regeneration, and the Scientific Search for the Fountain of Youth
CourseID: 125185
Faculty:
Next Term Offered: 2021 Spring

This lecture and discussion course will explore the fundamental molecular and cellular mechanisms that govern organismal aging and contemporary strategies to delay or reverse this process.

SCRB 192 Principles of Drug Discovery and Development
CourseID: 109112
Faculty:
Next Term Offered: 2018 Fall

This interdisciplinary course will examine the process of drug discovery and development through disease-driven examples. Topics include: the efficacy/toxicity balance, the differences between drugs and inhibitors, and the translation of cellular biochemistry to useful medicine.

SCRB 197 Frontiers in Therapeutics
CourseID: 204358
Faculty:
Next Term Offered: 2021 Fall

How realistic are promises to "eliminate" diseases and to "personalize" medicine? This course looks at biological principles underlying therapeutics, ranging from those described first in Egyptian papyri to those under development today (using chemicals, proteins, cells, and genetic manipulations) and based on traditional philosophies and on science. As part of the class, students will have the opportunity to design novel approaches to diseases today without cure.

SCRB 297 Frontiers in Therapeutics
CourseID: 218466
Faculty:
Next Term Offered:

How realistic are promises to "eliminate" diseases and to "personalize" medicine? This course looks at biological principles underlying therapeutics, ranging from those described first in Egyptian papyri to those under development today (using chemicals, proteins, cells, and genetic manipulations) and based on traditional philosophies and on science. As part of the class, students will have the opportunity to design novel approaches to diseases today without cure.
Social Studies

SOC-STD  68CT The Chinese Immigrant Experience in America
CourseID: 159824
Faculty:
Next Term Offered: 2022 Spring

Uses the history of Boston's Chinatown as a case study to examine the experiences of Chinese immigrants in the U.S. from the 1880s until the present. Employs historical, anthropological, and sociological perspectives to examine major themes related to the social and economic development of U.S. Chinatowns and Chinese immigrant communities throughout the 20th and 21st centuries. This course is an Engaged Scholarship course, limited to students who are concurrently participating in a Harvard-affiliated service program in or around Boston's Chinatown. Class discussions and assignments will make active links with students' service work. Open to students in all concentrations.

SOC-STD  68HJ Justice in Housing
CourseID: 205517
Faculty:
Next Term Offered: 2022 Spring

How do theories of justice deal with the problem of housing? What use does American housing policy and politics make of ideas about "fairness" and "justice"? This course will juxtapose contemporary philosophical debates about distributive justice with current concrete problems in housing policy, using the Boston/Cambridge area as a case study. Seminars will feature guests from a number of local housing-focused organizations, and students' final papers will assess real housing policy examples in light of a chosen framework of justice. As this is an Engaged Scholarship course, preference will be given to students involved in direct service to housing-insecure populations (whether in shelters, the public schools, urban summer camps, etc.).

SOC-STD  96SD The Crisis of Social Democracy: Its History and its Future
CourseID: 213283
Faculty:
Next Term Offered:

Social democracy, which in the US has been associated with the left-wing of the Democratic Party, has attracted non-communist leftists around the world for over a century. Securing equal participation for all persons in political, economic, and social decision-making has been the aim of social democrats. Will social democracy and the regulated capitalist welfare states it created survive, or give way to autocracy, ethnic and
national exclusion, and/or neoliberal globalism? Students will read and discuss primary and secondary sources and write research papers on the past or the present of social democracy.

SOC-STD  98JL Global Social Movements
CourseID: 123874
Faculty:
Next Term Offered: 2021 Spring

Social movements are often considered a driving force behind political, social, and cultural change. This course explores the major conceptual models and empirical approaches used in the social sciences to understand social movements. The course will examine a range of case studies from around the globe, including movements dealing with human rights, economic and environmental justice, and armed revolutions. Particular attention will be paid to transnational activism. This is a junior tutorial.

SOC-STD  98MF Liberalism and Its Critics
CourseID: 126840
Faculty:
Next Term Offered:

Since the term "liberalism" appeared roughly two hundred years ago, it has meant different things to different people. It can mean that consent forms the basis of a limited government, or that individual rights ? instead of notions of virtue or the common good ? forms the basis of society; it can mean that an emphasis on individual liberty, or cultural pluralism, or secular reason organizes political life. Depending on your point of view, you can be a social liberal, a liberal egalitarian, a conservative liberal, or a libertarian liberal. This course in intellectual history and the history of political thought examines the various meanings of liberalism since the seventeenth century as an optic to make sense of the complex world we live in. Our focus will be primarily on the articulation of liberal ideas by intellectuals in the Trans-Atlantic West, though we will attend carefully to the historical entanglements of liberalism with global empire and colonialism. We will examine the political and philosophical claims by intellectuals for and against liberalism in four time periods: the late eighteenth and nineteenth centuries; the early twentieth century; the post-WWII / Cold War period; and the 1990s to the present. Together, we will grapple with the questions that have concerned liberal intellectuals and their critics. Who is the liberal subject? Can we reconcile individual freedom and collective stability? How should we live together? Who decides, and how? This is a junior tutorial.

SOC-STD  98NB Inequality and Social Mobility in America
CourseID: 127817
Faculty:
Next Term Offered:
The United States is currently experiencing high levels of income and wealth inequality and stagnant social mobility. This course will ask why this is and what, if anything, should be done about it. We will consider both social and individual explanations for inequality and social mobility, and we will examine efforts to decrease inequality and increase social mobility through educational and legal means. This is a junior tutorial.

SOC-STD  98OC Humans, Technology, and Biopolitics
CourseID: 109964
Faculty:
Next Term Offered: 2018 Fall

Recent scientific and technological advances are increasingly questioning what it means to be human. Debates on life extension, gene editing, and artificial intelligence regularly appear in the media, with views ranging from techno-optimism—the idea that such breakthroughs will deliver us from suffering—to the warnings that technoscience is advancing at such a rapid pace, that there is not enough time for ethical guidelines to be developed. Some argue that science is increasingly delivering on the promises traditionally made by Judeo-Christian religions, while others assert that such techno-optimist thinking is a kind of new religion in and of itself. Debates around emerging technologies cut across traditional political lines, making them specifically biopolitical, where such issues as human enhancement, control of reproduction, genetic engineering, and many others, create new types of political positions and actors. This course will examine these issues, focusing specifically on what concepts of "the human" emerge from these debates, and how certain ideas about the future affect how we live and manage our time now, as futurist discourses are producing affective states of both hope and fear. Among the case studies for this course, we will look at the cultural and philosophical movements of transhumanism and posthumanism, new utopian and eschatological imaginaries, as well as ethical and legal questions of developing and using biomedical technologies, including their non-therapeutic use. As we proceed, we will pay particular attention to the shifting relations between body and person, human and time, transcendence and corporality, and technology and biology, while discussing how they contribute to the rethinking of the human condition in the technological age. Materials for the course will include academic pieces from a range of disciplines: STS, anthropology, philosophy, bioethics, as well as non-academic media sources, documentaries, and science fiction films. This is a junior tutorial.

SOC-STD  98OW Crime and Security in Latin America
CourseID: 203415
Faculty:
Next Term Offered: 2019 Fall

This course examines crime and security in Latin America (and their relation to the United States). We'll focus on the following questions: What is the logic behind naming some but not other things and practices criminal? How does the act of outlawing stem from and feed into anxieties over safety? To what extent does crime produce insecurity,
and how does insecurity create crime? Particular attention will be paid to the power asymmetries that underlie legal and political construction of threats and the significance of an ethnographic approach to understanding these dynamics and their effects. This is a junior tutorial.

SOC-STD  98OX Fascism and the Far Right in Europe and Beyond
CourseID: 203438
Faculty:
Next Term Offered: 2021 Spring

What is fascism? How did fascists come to power in some states in interwar Europe? What are the legacies of fascism? Who are Europe’s radical right parties today, and what explains the appeals of a new wave of radical right politics that appears to be sweeping advanced democracies? These are the core questions we will address in this course. This is a junior tutorial.

SOC-STD  98PF Rethinking Transnational Feminism
CourseID: 160159
Faculty:
Next Term Offered:

While some claim that global feminism is made possible by a shared common condition among women, others argue that power differentials make such claims nonsensical. What does transnational feminism mean for politics today? Can it be democratic? How have historical figures attempted to think and act on a world stage? This course offers a broad overview of transnational feminism through one genealogy of its appearances in theoretical, social movement, and institutional forms. This is a junior tutorial.

SOC-STD  98QA Rawls & the Moral Feelings
CourseID: 205452
Faculty:
Next Term Offered: 2019 Fall

This tutorial will use the Harvard archive of the philosopher John Rawls to uncover his work on a complex theory of moral feelings in the 1950s. This moral theory would come to underpin Rawls’s political philosophy in his famous text A Theory of Justice, yet most of the relevant documents are unpublished. After learning approaches for archival research from this case study, students will write a historical research paper using other materials in the Rawls archive -- or another archive, with permission of the instructor. This is a junior tutorial.

SOC-STD  98QB Democracy and Education in America
CourseID: 205453
Faculty:
Next Term Offered:

This course explores the political dimensions of education policy in the United States. It examines the various political factors that have contributed to modern battles over education policy making. The course draws from political science scholarship as well as other disciplines to explore how race, the courts, unequal political participation, interest group advocacy, social movements, as well as local, state, and federal institutions have impacted education in the U.S. The last few weeks are spent applying these ideas to the case of school choice and charters. Throughout, the course considers the normative implications of education policies and battles, asking how particular education proposals and the behavior of the actors pushing them impact the health of democracy. This is a junior tutorial.

SOC-STD 98QJ Secularism and Its Critics
CourseID: 205481
Faculty:
Next Term Offered: 2022 Spring

Often heralded as the antidote to religious conflict, "secularism" has come under attack in recent years by scholars across the political spectrum. This course explores these debates as they have taken shape around reappraisals of the "secularization thesis" - a once-dominant theory asserting the declining importance of religion in the modern world - since the Cold War. Our goal will be to explore the relation of religion to democratic thought and practice by reading both recent critics and defenders of secular modernity in the fields of history, philosophy, anthropology, and political theory. While the course will focus on Europe and the United States, it will also seek to understand how the legacies of colonialism and globalization have shaped the face of religion and the secular today. Two central questions of the course will be: Is secularism dead as a political program? If so, what ought to replace it? This is a junior tutorial.

SOC-STD 98QK The Ideal of the Open Mind
CourseID: 205483
Faculty:
Next Term Offered:

We commonly consider an open mind as essential to fair-minded moral, political, and legal judgment. If you are called for jury duty, for example, you will likely be asked whether you are confident you can judge the case with an open mind. If you answer "no," you will be dismissed from the jury. To have a closed mind is to resist the possibility of persuasion, to be dogmatic, recalcitrant, even bigoted. But what exactly is an open mind?

This course will examine and assess the ideal of the open mind as it has emerged in the Western philosophical tradition. In the first half of the course, we will consider the ideal of detachment and impartiality that emerged during the Enlightenment and remains
influential today. In the second half of the course, we will examine various attempts to recast and revive the case for tradition, partial association, and interpretive prejudgments that emerged in reaction to the Enlightenment, some of which harken back to ancient political thought.

Throughout the course, we will address questions of contemporary relevance, drawn from the realms of law, politics, culture, history, and philosophy. For example: Is an impartial jury the same as a fair jury? Is political rhetoric invariably a form of manipulation and deceit, or is it a way of persuading people by appealing to them from within their own perspectives? Is one's own upbringing and linguistic background a regrettable limitation to the understanding of other cultures, or a resource for mutual understanding? Should we try to understand the past by setting aside our contemporary views and assumptions, or by drawing upon them? In what sense should a liberal arts education aim at cultivating an open mind? This is a junior tutorial.

**SOC-STD 98RA Topics in African American Political Thought**

CourseID: 207900
Faculty:
Next Term Offered: 2022 Fall

This tutorial will closely examine influential figures and texts in the history of African-American political thought from the immediate post-emancipation period to the present. We will critically evaluate, assess, and constructively critique a range of African American authors and their interlocutors across genres (e.g., philosophy, literature, music, etc.) to better understand the development of key traditions, themes, and concepts. This year's seminar will focus especially on African American accounts of "nationalism" and "crime" as problems for politics, ethics, and social theory. This is a junior tutorial.

**SOC-STD 98RB Theorizing the Postcolony**

CourseID: 207901
Faculty:
Next Term Offered: 2021 Spring

This course investigates what is distinctive about postcolonial political theory and what lessons it holds for political and social theory in general. We will revisit authors from Social Studies 10a and 10b, reading them alongside recent work in postcolonial thought. In so doing, we will ask: What are the different ways in which the postcolony has been understood? Does postcolonial politics display any particular characteristics? Can the extant idiom of political theory capture the varieties of postcolonial political imaginaries? How does postcolonial thought problematize our reading of the canonical history of political thought? Salient themes of the course include modernity, nationalism, democracy, religion, and questions of authority and freedom. Several weeks will be devoted to understanding the postcolonial experience of South Asia, the Caribbean,
North Africa, and Latin America. This is a junior tutorial.

SOC-STD 98RD The Problem of Work  
CourseID: 207903  
Faculty:  
Next Term Offered: 2022 Spring  

We are often told that the nature of work is changing. But how should we think about it? From the work ethic to emotional labor, housework to service work, welfare to the strike, this tutorial will explore the history of political ideas about work in the twentieth century. We will combine readings in classic texts in the history of social and political theory, intellectual history and feminism to provide students with the major conceptual tools for understanding the transformation of work in the twentieth century, and in our own. This is a junior tutorial.

SOC-STD 98RF Neoliberalism and Its Discontents in the Middle East and North Africa  
CourseID: 207914  
Faculty:  
Next Term Offered:  

This course offers students a theoretical and empirical understanding of neoliberalism - understood, inter alia, as a form of governance that approaches all spheres of life through the lens of the market. The course explores neoliberalism not merely as economic policy but as a set of transformations, roughly since the 1970s, in class relations, everyday life and politics; these transformations speak to broad social-science questions about society, power and politics. The course thus examines neoliberalism from theoretical, political-economic, historical and anthropological perspectives, and students practice associated research methods through assignments. Readings range from key expositions and critiques of neoliberal thought, including F.A. Hayek and Wendy Brown, to empirical studies of neoliberalism in the realms of development initiatives, urban life, war and colonialism, and the recent Arab Uprisings. Empirical materials come largely though not entirely from the Middle East and North Africa. Prior knowledge of the Middle East is not required, and research papers need not focus on the region. This is a junior tutorial.

SOC-STD 98SA Constitutional Theory and the American State  
CourseID: 213279  
Faculty:  
Next Term Offered:  

This junior tutorial introduces students to American constitutionalism and explores its relationships with the American state, American democracy, and American history. The syllabus consists of four distinct, but interconnected modules. The first module is an
introduction to constitutional theory: it explores theories of judicial review, constitutional
interpretation, and constitutional change. The second module situates constitutionalism
in the American political tradition, teasing out its intertwining with liberal, republican, and
racist threads of thought. The third module provides a theoretically informed survey of
representative topics in American constitutional history: economic regulation in the early
twentieth century 'Lochner era', the arc from 'Jim Crow' to civil rights, the breakdown of
the postwar liberal consensus, and democratic constitutionalism in the women's rights
movement. The fourth module takes up major theoretical issues alive in contemporary
constitutional debates: the administrative state, inequality, and campaign finance. The
tutorial is intended to be accessible and interesting to a wide range of students with
interests in any of the following: political theory, constitutional law, American political
thought, American history, and contemporary legal controversies. This is a junior tutorial.

SOC-STD  98SM American Social Movements
CourseID: 213296
Faculty:
Next Term Offered:

The world we live in is the product of social movements of all kinds. Yet the means by
which they have succeeded in reshaping the world are poorly understood. Even when
movement strategies are clear ? which they often are not ? they are controversial, with
activists, academics, and the broader public debating the efficacy and ethics of various
protest tactics. This course aims to make sense of these debates by studying a selection
of U.S. social movements from the mid-20th century to the present. We will examine
movements across the ideological spectrum, focusing on the conditions which gave rise
to them, how they mobilized, the strategies each adopted, and the dilemmas they
encountered in the course of political action. The course will move roughly
chronologically from the Civil Rights Movement through SDS, second- and third-wave
feminisms, the Moral Majority, the Tea Party, Occupy Wall Street, Black Lives Matter
and Antifa to the Alt-Right. This is a junior tutorial.

SOC-STD  136 Character and Social Structure in America
CourseID: 218563
Faculty:
Next Term Offered:

Created to support student import.
Sociology

SOCIOL 90W Research Lab: Work and Family
CourseID: 212662
Faculty:
Next Term Offered: 2021 Fall

Students will read articles about the different ways that highly-educated young people in four societies make decisions about marriage, work, and children, and will then learn to analyze in-depth interview materials on these topics from each society.

The four societies are the U.S., Japan, Sweden, and Spain, all of which have different social policies and gender-role ideologies. Students will develop a research question that can be addressed by comparing the interview data from at least two of these countries, and will learn how to code and interpret these qualitative materials.

SOCIOL 98DA Jr Tut: Collective Identity
CourseID: 205091
Faculty:
Next Term Offered:

Blue collar and middle class, Blacks and Latinx, Christians and Muslims, Americans and French, Harvardians and Yalies?groups have, by their very definition, some criteria to discern those who belong from those who do not, whether they are as large as whole nations, or as small as a group of friends. But what does it mean for a group to have a collective identity? This course will examine what collective identity is and how we can study it sociologically. It will ask questions such as Does a collective identity rely on group members sharing the same past experiences, or does it rely on them facing similar present circumstances? To what extent do group members have to agree on what their collective identity is, and how are disagreement and conflicts managed? How do group members engage in identity politics, and how do they compare their groups to others?

The course will begin with a review of sociological literature that addresses some of the key debates on this topic. Moving forward, students will design and complete their own research projects. Each student will choose a group in the Boston area or on campus, formulate a research question, and conduct participant observations and / or interviews. The course will cover the various steps of the research process, from formulating a research question through collecting and analyzing data and reviewing existing literature, to constructing the final paper.

SOCIOL 98M Junior Tutorial: Social Class
Class, one of the most basic analytical concepts in sociology, structures our social world in fundamental ways. Nevertheless, the extent to which social class is salient to people, and the specific content of class-based identities and class cultures, varies widely. This course is rooted in a comparison of the working class versus professionals and the upper middle class. The focus is on the United States while maintaining a comparative perspective on other national, historical, and cultural contexts. Reviewing a variety of contemporary studies and theoretical perspectives, we will pursue the following questions, among others: How do class-based identities relate to class structure? How are boundaries drawn between classes and among people of the same social class? What might undermine?or bolster?class consciousness in different contexts? And how is social class reproduced? In the U.S. case, how does class intersect with other aspects of American culture? Are class-based identities racialized? Throughout the course we will be attentive to the variety of research agendas on the topic and the various kinds of data that are brought to bear on these questions. After reviewing the relevant literature students will then design and execute their own original research projects that seek to elucidate some aspect of class identity or class culture. Students will have the opportunity to engage in each step of the research process, from question formulation and data collection to analysis and write-up. Along the way we will have workshops on the process of conducting primary research and on each student's project. The methodological focus will be on interviewing, with an attention to how ethnographic data and surveys might also shed light on the subject.

SOCIOL 98ME Junior Tutorial: Sports and Violence
CourseID: 212667
Faculty:
Next Term Offered: 2022 Spring

How are sports and violence related? What role does sports play in especially-violent communities and societies? How come athletes are so often connected to violent behavior? Why are some sports more violent than others? Students will explore familiar and strange sports connections to activism, poverty, gangs, hooliganism, rioting, nationalism, war, international politics, and organized crime. We will learn why sport elicits such emotional fervor, and how that fervor is transmitted into good and bad social channels. A variety of case studies across the globe and history - from Brazilian soccer, to Cold War chess, to cricket under the British Empire - will be analyzed. This tutorial, aimed at junior concentrators, requires students to produce an original research project on a sport of their choosing (not necessarily one covered in the syllabus), addressing a particular case of sports-related violence. In addition to learning about the topic, students are expected to master skills in sociological methods and writing. Two concluding weeks will be devoted to presentations and workshopping, as students develop an independent research project with original data collection.

SOCIOL 1046 Life and Death by Design
CourseID: 212727
In this course, we will study health differences between social groups. We will begin by examining the extent to which health is unevenly distributed across groups defined by nationality, neighborhood, race, gender, and class. We will then seek to pinpoint the reasons for these disparities with a detailed analysis of the pathways through which these factors are linked to health status. Finally, we will discuss new research on the sociology of population health that shows how health disparities depend on meso- and macro-scale causes like neighborhoods, social policy arrangements, global organizations, and climate change.

**SOCIOL 1058 Sex, Gender, Sexuality**  
CourseID: 110507  
Faculty:  
Next Term Offered: 2016 Fall

Male/Female, Man/Woman, Masculine/Feminine, Straight/Gay. Where do these consequential categories come from? How do they generate inequalities? Why are they so easily reproduced? And what, if anything, should we do about it? Combining real-world applications with academic analyses, this course encourages you to think about how sexuality and gender have shaped the social world, as well as our own place within it.

**SOCIOL 1105 Sports and Society**  
CourseID: 109896  
Faculty:  
Next Term Offered: 2022 Spring

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 1112 Men, Women, and Work**  
CourseID: 141657  
Faculty:  
Next Term Offered:  

Why do men and women tend to cluster into different occupations? Why do they earn different wages? Is there a certain path that all countries follow as they become more
economically prosperous, or do issues concerning men's and women's work differ dramatically across countries because of cultural reasons? This course provides an overview of key issues and perspectives in the study of men, women, and work in contemporary society.

SOCIOL 1114 Racial Inequality and Public Policy
CourseID: 211146
Faculty:
Next Term Offered:

The course examines the complex interplay between racial inequality and public policies in the United States and other Western countries. The course will blend together insights from the general literature on policy-making with the specific study of racial politics and policy. Students will learn how to view racial inequality as a political process that shapes public policy through its impact on everything from cultural beliefs, to political parties, public opinion, political representation, social movements, and interest groups. With these concepts in their grasp, students will then examine how these dynamics play out in different areas of public policy, including welfare, criminal justice, housing, health, affirmative action, immigration, and detention. Students should walk away from the course with an understanding of how to connect racial inequality and politics with the content and outcomes of public policy.

SOCIOL 1116 Sports and Violence
CourseID: 215909
Faculty:
Next Term Offered:

How are sports and violence related? What role does sports play in especially-violent communities and societies? How come athletes are so often connected to violent behavior? Why are some sports more violent than others? Students will explore familiar and strange sports connections to activism, poverty, gangs, hooliganism, rioting, nationalism, war, international politics, and organized crime. We will learn why sport elicits such emotional fervor, and how that fervor is transmitted into good and bad social channels. A variety of case studies across the globe and history - from Brazilian soccer, to Cold War chess, to cricket under the British Empire - will be analyzed. This seminar requires students to produce an original research project on a sport of their choosing (not necessarily one covered in the syllabus), addressing a particular case of sports-related violence. In addition to learning about the topic, students are expected to master skills in sociological methods and writing. Two concluding weeks will be devoted to presentations and workshopping, as students develop the final paper project.
elicits such emotional fervor, and how that fervor is transmitted into good and bad social channels. A variety of case studies across the globe and history - from Brazilian soccer, to Cold War chess, to cricket under the British Empire - will be analyzed. This seminar requires students to produce an original research project on a sport of their choosing (not necessarily one covered in the syllabus), addressing a particular case of sports-related violence. In addition to learning about the topic, students are expected to master skills in sociological methods and writing. Two concluding weeks will be devoted to presentations and workshopping, as students develop an independent research project with original data collection.

SOCIOL 1123 Social Movements
CourseID: 212768
Faculty:
Next Term Offered:

Social movements are powerful engines of social change. Remarkable ordinary people lead them, and outstanding people join their mobilization. But what is a social movement? What do social movements’ protesters rebel against and why? What strategies do they use? Do social movements’ activists achieve the changes they pursue?

Protesters and authorities have long tried to answer these questions in their quest to attain, or even silence, social change. Scholars have approached these questions through social scientific interrogation. In this course, students will read some of the finest sociological scholarship on these debates to examine a variety of movements that range from the U.S. Civil Rights of the 1960s to the latest movements of the 21st century.

Whether one’s purpose is to understand the world or change it, the course will illuminate the real-life implications of social movements for activists, authorities, and bystanders. Through the course, we will come to understand the general processes that underpin collective mobilization, reflect on how collective mobilization drives these efforts, and formulate new ideas for how best to achieve social change.

SOCIOL 1126 Sociology in the Age of Big Data
CourseID: 207631
Faculty:
Next Term Offered:

This course introduces students to how "big data" transforms our understanding of the social world. Focusing on topics like racial bias, partner & friendship choice, public
opinion and polarization, and urban inequality, we explore how the digital age changes sociological research. We discuss transformative contributions to classical sociological questions based on the "new" science of networks, web-based social research, administrative data, and the traces of our digital lives. We explore important advances, the challenges facing the social sciences and consider ethical and privacy concerns raised by "big" data and analytics.

SOCIOL 1143 Just Institutions  
CourseID: 108673  
Faculty:  
Next Term Offered: 2020 Spring

How can and do people build institutions that are just? This course examines the psychological and sociological underpinnings of people's understanding of justice and their motivation to make situations just. The course draws heavily on real world cases from a variety of social, cultural, and historical settings, as well thinking and research from sociology, philosophy, and psychology.

SOCIOL 1144 Economic Sociology  
CourseID: 204172  
Faculty:  
Next Term Offered: 2020 Spring

The field of economic sociology brings our attention to ways that economic priorities and processes reflect social dynamics. From ceremonial exchanges of goods in the South Pacific, to the development of modern capitalism, and from interlocking relationships between large corporations to wages, remittances, and social networks, economic sociology considers the social contexts that influence how individuals, communities, and societies organize their resources and how these processes in turn impact our lives. This course offers an overview of economic sociology's major theories and findings across several major themes. The first part of the course focuses on the theoretical underpinnings of economic sociology, and what characterizes a sociological view of the economy. In the second part of the course, we explore some of the social and cultural forces that have shaped key economic institutions such as corporations, insurance, wages and benefits, and marketplaces. The third part of the course considers the impact that these economic institutions have on the quality of life for individuals, communities, and societies. We conclude by asking how the field of economic sociology approaches issues of inequality and social mobility in the United States and globally.

SOCIOL 1148 Race and Ethnicity in Global and Comparative Perspective  
CourseID: 207630  
Faculty:  
Next Term Offered:
This course provides an introduction to the comparative study of "race and ethnicity" around the world. We focus here not on particular "ethnic" or "racial" groups, but rather, on particular cases which illustrate how "race" is used as a way in which to divide, sort, and rank human beings (i.e. a principle of social vision and division). In particular, we compare and contrast how different societies have constructed ethnoracial boundaries by focusing on several key forms of ethnoracial domination: categorization, discrimination, segregation, ghettoization, and exclusionary violence. Readings include sociological, historical, and anthropological studies of ethnoracial dynamics primarily in the U.S. and Brazil, but also South Africa, Asia, Western Europe, and Latin America.

SOCIOL 1149 Sociology of Science, Technology, and the Body
CourseID: 215989
Faculty:
Next Term Offered:

Why have ancestry tests become popular in the twenty-first century and what do they tell us about the relationships between race and capitalism? How has contemporary knowledge about cancer and radiation relied upon systems of colonialism and racism? What processes lead to revered organizations such as NASA to adopt clearly risky and unsafe practices? This seminar uses a sociological approach to understanding science and technology. The course focuses on social, cultural, and political dimensions of knowledge production, scientific and medical practices, and the body. While examining the roots of sociological science and technology studies (STS) in the United States, we will consider the transnational dimensions of contemporary science and technology issues and how they continue to evolve within a complicated and highly connected global economy. The class will address key questions about power along lines of race and ethnicity, nation, gender, sexuality, class, and ability that underlie structures of science and technology, as well as how science and technology shape the very meanings of these terms. We will study cases including transnational surrogacy, Black activism around sickle-cell anemia, and the biopolitics of medical triage in West Africa, among others. Students will also develop an expertise in a course-related topic of their choice.

SOCIOL 1157 Qualitative Methods in Sociology
CourseID: 205205
Faculty:
Next Term Offered:

What does it mean to "sample"? What is a good research question, and how can you go about answering it? What do we do about bias in our research designs? This seminar offers an introductory overview of qualitative research methods in sociology. Through a series of hands-on, applied exercises and practical case-studies, students will learn what qualitative research looks like in the real world. Students will receive training in the basic instruments, sampling strategies, data collections, practical dilemmas, and common problems of different methodological approaches. We will learn about the advantages and limitations of interview-based, survey, ethnographic, and archival research.
Throughout the semester, students will have weekly applications of methods, including with programs such as Atlas.ti and Nvivo. We will learn how to formulate research questions, conceptualize social phenomena, create research designs, code and operationalize, collect data, and interpret and present findings for different purposes.

**SOCIOL 1161 Big Data: What is it?**
CourseID: 156351
Faculty:
Next Term Offered:

A tremendous amount of data is now being collected through websites, mobile phone applications, credit cards, and many more everyday tools we use extensively. What is currently done and what can we do with this precious resource? This big data course looks under the hood. It explores the logic behind the complex methods used in the field (not the methods itself). We then explore how big data research is designed with real life examples of cutting-edge research and guest lecturers from Facebook, Twitter and Google. By the end of the class students will be competent in the field and be able to conduct a research design using big data.

**SOCIOL 1174 Inequality and Society in Contemporary Japan**
CourseID: 205106
Faculty:
Next Term Offered:

Japan is at the forefront of a global trend of population aging and decline. Currently the only large, developed country with a declining population, over the course of the 21st century, dozens of other countries in Europe, Asia, and Latin America are expected to begin shrinking as well. The aims of this course are two-fold: first, to understand how institutions, including the family, the education system, the employment system, the welfare state, and social movements of ordinary citizens have shaped Japanese culture and society in unique ways; and second, to consider what Japan can teach us about the likely trajectory of other countries with declining populations.

Throughout the course we will examine how institutions create or mitigate inequalities across various categories of social difference including family background and social class, gender and sexuality, age, national origin, race and ethnicity, and how these inequities are likely to change under conditions of demographic decline.

**SOCIOL 1177 Nationalism and the Nation State**
CourseID: 218203
Faculty:
Next Term Offered:

**SOCIOL 1181 Social Change in Modern Korea**
CourseID: 109680  
Faculty:  
Next Term Offered: 2020 Fall

This course explores the incredible transformation of Korean society in the modern period. We begin with the demise of the Choson Dynasty at the end of the 19th century before covering the Japanese colonial period (1910-1945), the emergence of two Korean nation-states (1945-1948), the Korean War (1950-53), and the contemporary period (1960-present). The course is divided into two sections: in the first part of the course we will discuss Korea's political and economic transformation, and in the second part we will cover social and cultural change. Upon completion of the course students should have a thorough grasp of the vast social changes Korea underwent in the 20th century.

**SOCIOL 1198 Social Network Analysis**
CourseID: 207219  
Faculty:  
Next Term Offered: 2021 Fall

This course covers foundations for studying networks comprised of social relationships, stressing underlying concepts together with quantitative approaches to representing and understanding patterns in network data. Among the topics treated are visualization, centrality, homophily, identification of subgroups or "communities", "egocentric" or "personal" networks, networks based on individual-group relationships, and the "small world" phenomenon. Students will develop familiarity with software for undertaking basic analyses of network data.

**SOCIOL 2211 Analysis of Longitudinal Data: Seminar**
CourseID: 131333  
Faculty:  
Next Term Offered: 2022 Spring

This course takes an applied approach to the analysis of longitudinal data. Lectures will provide an overview of a variety of techniques, including fixed effects models, multilevel models, and duration models. Students will develop their own empirical projects and receive support as they begin to work with longitudinal datasets.

**SOCIOL 2218 Sociology Research Methods for Social Science Genetics**
CourseID: 213369  
Faculty:  
Next Term Offered:
A growing number of social science data sources are providing molecular genetic data, and social scientists have increasingly become interested in utilizing this information in order to better understand various social and demographic phenomena. In this week-long intensive course, students will learn about the history of behavioral, statistical, and social science genetics, will engage with and discuss the ethics involved in such work, and will become familiar with understanding and applying the cutting-edge research methods in social science genetics on real genetic data. The course will depart from other workshops and courses on this topic in its adherence to understanding the ethics, misinterpretations, and potential social implications of social science genetics. Rather than simply learning and applying a method, we will consider how statistical parameters from genetics research can so easily be misinterpreted or misunderstood.

At the completion of this course, students should expect (1) to have a basic understanding of the fundamental advantages and disadvantages of integrating genetics into social science research; (2) to begin to be able to think about how to incorporate genetic tools like polygenic scores into their own social scientific research within an ethically-straightforward framework; (3) to understand and be able to correctly interpret the basic technical terms from quantitative genetics literature; and (4) to be able to read, interpret, and critique social science genetics studies.

At the beginning of each course day, we will discuss literature relevant to social science genetics methods and research, and then in the afternoon we will transition to hands-on tutorials where students will learn how to clean and analyze genetic data and apply methods from statistic genetics, including genome-wide association studies, heritability and genetic correlation estimation, polygenic score construction and use, etc. We will consider ethics throughout the course and work to build a more ethical framework for social science genetics together. In doing so, we will hear from important scholars working in bioethics and the history of science, and from scholars who have been heavily involved in the communication of social science genetics topics.

Students interested in taking this course should have completed a one-year sequence in statistics and should have some introductory familiarity with statistical software like Stata or R. While we will spend some time at the beginning of the course with introductions to the Linux computing environment, R, and the command line, materials and tutorials will be circulated well before the course. Students should complete these in order to gain familiarity with the computational environment and software we will be working with.

Although the course is intended for sociologists, students from other departments may contact the instructor at rwedow@broadinstitute.org to discuss taking the course.

SOCIOL 2255 Social Stratification: Seminar
CourseID: 118858
Faculty:
Next Term Offered: 2020 Spring

This course examines the dimensions and magnitude of inequality in industrial societies, with a heavy emphasis on the United States since the mid-20th century. The readings
and class discussion are designed to expose students to a broad range of influential pieces in the social stratification literature. In particular, we will study inequality through: pay for work, race, neighborhoods, gender, family, mobility, education, social capital, and rising income inequality since 1980.

**SOCIOL 2272 Computational Sociology**
CourseID: 207693
Faculty:
Next Term Offered:

This course provides an applied introduction to computational methods and data science for sociologists. The first part of the course focuses on programming skills for social scientists. The second part focuses on machine learning and applied causal analysis with concrete exercises that force students to apply the programming skills they learned in the first part of the semester. The course will combine short lectures, with class discussions, hand-on experiences and students own empirical projects.

**SOCIOL 2274 Culture, Inequality, and Black Youth**
CourseID: 139026
Faculty:
Next Term Offered: 2020 Fall

The seminar examines the complex situation of black youth in America with an emphasis on the matrix of cultures that support, enrich and, in conjunction with racial and structural forces, undermine their life chances. We will attempt to unravel the sociological puzzle of the socio-economic disconnection, hyper-segregation, violence, gender conflicts, familial fragility, and high incarceration rate that beset a significant minority of them, on the one hand, and, on the other, their remarkable prominence and integration in the nation's popular culture. We tackle the complex and controversial problem of how best to understand, theoretically and pragmatically, the interactive role of culture in disentangling this conundrum. We conclude with a review of the best policies and practices aimed at improving their condition.

**SOCIOL 2296B Proseminar on Inequality and Social Policy II**
CourseID: 112354
Faculty:
Next Term Offered: 2021 Spring

Deals with causes and possible cures for economic inequality, including skill differences, discrimination, immigration, household composition, residential segregation, and the welfare state.

**SOCIOL 3316 Politics and Social Change**
CourseID: 203921
The Politics and Social Change Workshop promotes the development of a community of scholars interested in how power relations shape social patterns in societies around the world. We define ‘politics’ broadly to include everything from gender politics within the household to state politics within a transnational system. Our participants' interests span a wide range of topics including political sociology, political economy, political violence, political behavior, governance, democracy, state welfare, education, social movements, civil society, NGOs, protest, race, ethnicity, gender, sexuality, class, the media, the environment, and development, among others. We meet twice a week. During most meetings, group participants take turns discussing their works in progress. Once or twice a semester, we also bring in outside speakers to discuss topics of interest to our members.

SOCIOL 3318 Quantitative Methods in Sociology
CourseID: 109750
Faculty:
Next Term Offered: 2020 Fall

This workshop provides a forum in which graduate students and faculty can present in-progress work to a substantively diverse group that shares an interest in quantitative methods. The practice of quantitative social science requires training not only in formal statistical methods but also in research design, model specification, management of complex survey data, and the interpretation of results. While Sociology graduate students receive training in statistical methods, many of the other tools of quantitative research are best taught through example and hands-on experience. This workshop fills a gap in the curriculum, providing an opportunity for students to receive methods-directed feedback on their research projects. Cultivating a sense of the types of concerns that get raised with quantitative social science and good practices for addressing those concerns, this workshop will contribute to building an informal community of quantitative students and faculty who can serve as resources to one another. Although intended primarily for graduate students and faculty in the Harvard Department of Sociology, the workshop is open to faculty, researchers, and students from other disciplines at Harvard and other schools throughout the Boston area.

SOCIOL 3319 Workshop on Mixed Methods of Empirical Analysis
CourseID: 156057
Faculty:
Next Term Offered: 2020 Fall

The graduate workshop on mixed methods is a forum for graduate students and faculty to present their empirical work—qualitative, quantitative, or mixed-methods—and get feedback on the empirical veracity of their claims. Individuals of all methodological persuasions are welcome. We are particularly interested in exploring synergies that can occur across methodological boundaries, either in the context of mixed-methods projects
or in the context of collaboration between qualitative and quantitative researchers.

**SOCIOL 3321 Contemporary Studies of Race & Ethnicity Workshop**  
**CourseID:** 204977  
**Faculty:**  
**Next Term Offered:** 2021 Fall

The Contemporary Studies of Race & Ethnicity (CSRE) workshop’s purpose is to provide a forum to disseminate knowledge and facilitate dialogue among graduate students, faculty, and visiting scholars working on or interested in research about contemporary studies related to race & ethnicity. Though the Sociology department hosts the workshop, we seek to bring scholars together across disciplines to explore topics such as ethno-racial hierarchies, racial attitudes, and intergroup relations, as well as the role of race in institutions, politics, and everyday life. The workshop will foster both a learning and collaborative space in which participants can circulate and garner feedback on works in progress, including dissertation chapters, proposals, journal article submissions, conference papers, and practice job talks.

**SOCIOL 3322 Qualitative Research and Practice**  
**CourseID:** 207242  
**Faculty:**  
**Next Term Offered:** 2020 Fall

Qualitative Research and Practice.

**SOCIOL 3328 Gender Inequality Workshop**  
**CourseID:** 205150  
**Faculty:**  
**Next Term Offered:** 2020 Fall

The Gender Inequality Workshop features presentations by graduate students and faculty on issues related to gender inequality in the workplace, family, economy, and polity in postindustrial societies.
Social Policy

SPOL 303QC Introduction to Social Policy Research
CourseID: 126520
Faculty:
Next Term Offered: 2022 Spring

Required of and limited to first-year PhD students in Social Policy.
Statistics

STAT 100 Introduction to Quantitative Methods for the Social Sciences and Humanities
CourseID: 113431
Faculty:
Next Term Offered: 2021 Fall

"Introduction to key ideas underlying statistical and quantitative reasoning. Topics covered: methods for organizing, summarizing and displaying data; elements of sample surveys, experimental design and observational studies; methods of parameter estimation and hypothesis testing in one- and two-sample problems; regression with one or more predictors; correlation; and analysis of variance. Explores applications in a wide range of fields, including the social and political sciences, medical research, and business and economics."

STAT 109 Intro to Statistical Modelling
CourseID: 205028
Faculty:
Next Term Offered: 2022 Spring

Stat 109 is a second course in statistical inference and is a further examination of statistics and data analysis beyond the introductory course. Topics include t?tools and permutation?based alternatives including bootstrapping, multiple?group comparisons, analysis of variance, linear regression, model checking and refinement. Statistical computing and simulation based emphasis will also be covered as well as basic programming in the R statistical package. Emphasis is made on thinking statistically, evaluating assumptions, and developing tools for real?life applications.

STAT 122 Statistics in the Social Sciences
CourseID: 218561
Faculty:
Next Term Offered:

Course created to support student import

STAT 140 Design of Experiments
CourseID: 116364
Faculty:
Next Term Offered: 2022 Spring
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, inferential adjustments for multiplicity of estimands, balanced incomplete block designs, factorial designs, confounding in blocks, fractional replications, and re-randomization. Each topic motivated by real-life examples.

STAT 160 Design and Analysis of Sample Surveys
CourseID: 112121
Faculty: Alan Zaslavsky
Next Term Offered: 2021 Fall

Methods for design and analysis of sample surveys. The toolkit of sample design features and their use in optimal design strategies. Sampling weights and variance estimation methods, including resampling methods. Brief overview of nonstatistical aspects of survey methodology such as survey administration and questionnaire design and validation (quantitative and qualitative). Additional topics: calibration estimators, variance estimation for complex surveys and estimators, nonresponse, missing data, hierarchical models, and small-area estimation.

STAT 161 Introduction to Nonparametric Methods
CourseID: 212953
Faculty: Zheng Ke
Next Term Offered: 2021 Fall

This is an advanced undergraduate course in modern nonparametric methods for statistical estimation and inference. Nonparametric inference is about statistical methods and models that make weak assumptions. A typical nonparametric approach estimates a nonlinear function from an infinite dimensional space, rather than a linear model from a finite dimensional space. This course gives an introduction to nonparametric statistics, with a focus on density estimation, regression, bootstrap, confidence sets, orthogonal functions, and kernels. The course treats nonparametric methodology and its use, together with theory that explains the statistical properties of the methods.

STAT 260 Design and Analysis of Sample Surveys
CourseID: 126393
Faculty: Alan Zaslavsky
Next Term Offered: 2021 Fall

Meets with Statistics 160, but graduate students will have an extended class period and complete additional assignments for a more theoretical, in-depth treatment of topics.

STAT 316 Big data statistics in genomic and genetic research
As biomedical research community generates more and more high throughput genomic profiles, the need for careful statistical analyses also increases. In this weekly course, we will first introduce the main statistical challenges and basic solutions to big data in genomic and genetic research. We will also ask students to read a selection of methodology and data analysis papers for biomedical big data, and debate about their statistical and computational merits and drawbacks.

STAT  366 Introduction to Research
CourseID: 108851
Faculty: Jun Liu
Next Term Offered: 2021 Fall

Introduction to the process of developing research ideas into publications in Statistics, using case studies and actual research projects. Emphasizes scientific communication in research papers and presentations, deciphering referee reports, and finding the right forum.
Theater, Dance, and Media

TDM 105 Introduction to Dramaturgy (American Repertory Theater 2018-19 Season)
CourseID: 118876
Faculty: Ryan McKittrick
Next Term Offered: 2020 Fall

This course introduces students to the fundamentals of dramaturgy and the role of the dramaturg, with a special focus on the American Repertory Theater's 2018-19 season. Students will analyze a range of plays, musicals, productions, and works in development at the A.R.T.; study theories of adaptation and write their own adaptations for the stage; meet with artists developing work at the theater; and see productions on A.R.T. stages.

TDM 117 Acting Chekhov
CourseID: 123900
Faculty: Remo Airaldi
Next Term Offered: 2021 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 119B Vocal Production For Performers
CourseID: 205358
Faculty: 
Next Term Offered:

For students interested in working in theater, film and television, this course is a continued exploration of vocal production and speech skills. Building on concepts of breath, resonance, and articulation, this course will move on to explore support for vocal extremes, the International Phonetic Alphabet in preparation for dialect work, and the skills necessary for speaking Shakespeare with power and precision. TDM 119 is a suggested but not required prerequisite.

TDM 128X Death of a Salesman (or Two)
CourseID: 203087
This course combines research and practice, offering an introduction to discursive, realist, and devised theater by examining the legacy of Arthur Miller's 1949 play, *Death of a Salesman*. Hailed (by Americans) as an American masterpiece, at once maudlin, mordant, embarrassingly timebound and irritatingly prescient, the play provides a basis for thinking about capitalism, ethics, theater, film, and what it means to "act American." The course is open to specialists and non-specialists alike, and will combine experimental dramaturgy with regular performance and directing assignments. It will culminate in a final project.

**TDM 133 Directing Film: Telling the Story and Working with Actors**  
CourseID: 109653  
Faculty: Marcus Stern  
Next Term Offered: 2021 Spring

In this course students will produce short films. Includes the 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.

**TDM 141 Movement Lab**  
CourseID: 161233  
Faculty: Jill Johnson  
Next Term Offered: 2020 Fall

This course explores the practice of choreography in a dynamic research environment. Students will learn interdisciplinary tools for devising, modifying, and editing motion for the stage, screen or site-specific work. Compositional discernment and keen visual evaluation skills will be developed through: extensive studio practice creating and interpreting movement phrases and gestures; discussion and feedback of individual movement composition assignments; viewing and analyzing the structure, dramaturgy, music, set and lighting design in seminal dance and theater pieces from around the world (e.g. Fabre, Naharin, Jones, Graham, Bausch, Goebbels, Petipa, Pite, Kahn); and examining how new media can be utilized for appraising, capturing and documenting motion in the 21st century. Classes will be held in the seminar room and studio.

Class size: 20. No prior dance experience required. Enrollment determined by short interview during the first week of class (shopping week).

**TDM 145A Repertoire for Advanced Dancers**  
CourseID: 205359  
Faculty: Mario Zambrano  
Next Term Offered: 2020 Fall
Over the course of the semester students will learn, study and rehearse excerpts from choreographic works by renowned artists in contemporary dance. Excerpts by Mats Ek, Jiri Kylian, Paul Lightfoot &Sol Leon, William Forsythe, George Balanchine, and Crystal Pite will be covered. Class will begin with a 45-minute technique warm-up designed specifically for the choreographic excerpt scheduled for study. This is an advanced course in practice, with a written component, intended for students with prior dance experience.

TDM 145B Contemporary Repertory: Dance Authorship in the 21st Century
CourseID: 207880
Faculty: Mario Zambrano
Next Term Offered: 2020 Fall

A dance technique and choreographic repertory class that will focus on contemporary traditions and the repertory of three choreographers: Crystal Pite, Peter Chu, and Sidra Bell ? three choreographers engaging in the current discourse of contemporary dance. In several four-week modules, students will learn, study, and practice the technique and choreographic language of these artists. Each choreographer's work will be examined based on specific technical approaches and compositional structure employed in the piece, including: historical context, the derivation of movement language, dramaturgy, and the choreographer's research interests. Each class will begin with a 45-minute class designed to specifically frame the study of each choreographer.

TDM 146 Dance on Camera: In Studio
CourseID: 205367
Faculty:
Next Term Offered:

This course encourages and supports the creation of video projects with the moving body as subject. What does dance mean in this context? Are dance and motion different? How is movement captured, and for what purpose? What role does choreography play in the motion of the subject and the camera? A brief, comprehensive study on the use of editing software (Final Cut Pro) will be covered at the start of the semester, followed by a study on dance film as genre, paying close attention to works by previous dance film awardees from the annual Dance on Camera Film Festival. The course will include storyboarding, shooting, conceptual thinking vs. literal representation, pre/post video editing, and culminate in a final dance film project.

TDM 148 Motion for Performers
For actors, choreographers, dancers, directors, and writers, this course aims to build a skillset in the physicality of roles for stage, screen, and installations. The course considers how and in what ways a performer can capture and inhabit a character, develop embodied stakes, cultivate dexterity and nuance in a role through and with the body. From the pedestrian to highly stylized or improvised movement, students will conduct in-depth research and physical practice in a studio lab environment, focusing on motion expression and physicalizing a role. The course will include a rigorous study in body awareness, task-based improvisation, staging/choreographic exercises, and cultivate communication skills for effective feedback and direction. Professor Mario Zambrano (TDM/Dance) will teach several classes. Guest artists and directors, site-specific research on campus, including in artist Teresita Fernandez's installation *Autumn (...Nothing Personal)*; and several colloquia will be a part of the course.

TDM 153 Introductory Theater Design: Lighting, Audio, and Video
CourseID: 204029
Faculty: Justin Paice
Next Term Offered: 2020 Fall

The process of making theater is a collaboration between different people and different crafts. This course will introduce students to the basics of design and production for three of those crafts: Lighting, Audio, and Video. Through lectures, hands on work, and practical projects, students will explore these three crafts as tools to help tell a story onstage and on screen. Students will learn not only about the technology and methods used in these design fields, but also the underlying principles of design that are universal across these three, and many other crafts.

TDM 168L Tools for Virtual and Real Perceptions
CourseID: 211207
Faculty:
Next Term Offered: 2021 Spring

This class will examine how the current media culture affects the perception of the physical reality, identity, and relationship to other humans as a starting point for individual projects. We will read writings and watch relevant films, artworks in addition to meeting and talking with guest artists/speakers. The tools taught in the class are Unity 3D and After Effects. One or more of these programs should be used to create the final project. Some of the themes to think about in the class are virtual reality, gender and community, dreams as virtual reality, phantom limb, extension of body and sensorial organs. This course is formatted as a seminar and studio class, thus the critique and presentation of students' work are essential.

TDM 173X Acting and Authenticity
This studio-based seminar examines the concept of "building a character" and pushes it towards performance art. While acquiring Stanislavski- and Method-based acting techniques, students will also consider psychological realism in light of philosophical, psychological, sociological and scientific notions of authenticity and falsehood, presence, mimesis, identity, and empathy. What does it mean to turn into someone else? How total is the transformation? What are the implications for our understanding of the individual? What does "realist acting" mean in an era of AI, social media, and motion capture? The seminar involves both readings and exercises, and culminates in a final project where participants turn into each other.

TDM 179P Selfies: Solo and Verbatim Performance

This course will explore performances of the self--both storytelling and the first personal monologue, and documentary theater and third person verbatim performances. Each seminar will be divided between theoretical and critical discussion of plays and performances--with particular attention to themes of gender and sexual identity, race, community building, and US politics--and a studio practicum in which students will perform their own stories and the stories of others. For the final assignment, students will create either a one-act length verbatim/documentary performance or a one-act length solo show. Course materials will include plays and performances by artists including Heidi Schreck, Anna Deavere Smith, Alan Rickman and Katherine Viner, Erin Markey, Diana Oh, Lily Tomlin, Moises Kaufman, Doug Wright, Joe Salvatore/NYU Verbatim Performance Lab, and The Civilians.

TDM 184L Disability, Debility and Performance

This course will serve as an introductory exploration of the intersection between the field of disability studies with theater and performance. We will investigate examples of how disability has been represented on the stage and in expressive culture; how theater, performance, and expressive culture have contributed to notions of which bodies are considered disabled in different contemporary and historical cultures; and how the aesthetics of popular forms of theater and performance have historically invalidated the premise that disabled bodies are rhetorical and virtuosic. Through reading and viewing theater and performance art (both live and digital) that engages with disability and disability culture, we will survey the impact of disability activism on what now constitutes "normal" embodiment and the expansion of who is allowed to flourish in society. We will
consider the contribution of resistant discursive frameworks such as "crip" and "queer." And finally, we will reflect on performances that highlight how liberal frameworks of disability and disability pride have become weaponized by nation-states that have adopted debility as a form of biopolitical oppression. Queer theorist Jasbir Puar distinguishes state-inflicted injury on civilian populations—the state’s assumption of the "right to maim," where the state designates certain populations available for injury and privileges the disabled status of others—as the phenomenon that limits and revises frameworks of disability identity, rights, and culture. By watching, reading, and making theater, dance and performance that intersects with these concerns, we will contend with how disability functions at the intersection of imperialism and racialized capital.

TDM 192 Total Theater
CourseID: 203544
Faculty: James Stanley
Next Term Offered: 2020 Fall

This class will take a space-specific and deeply collaborative approach to theater making. Our goal will be to interrogate, through readings (in history, theory and critique) and through practice (by making our own piece of theater) the contemporary drift toward immersive theatrical forms. Starting with Wagner’s articulation of gesamtkunstwerk—as theater as the Total Work of Art—and Adorno’s blistering critique of it, we will trace thinking on immersive art and cultural forms and responses to them throughout the modern and postmodern periods. Concurrent with our readings, we will discuss contemporary immersive works, including Jim Findlay’s Dream of the Red Chamber, Michael Counts’ escape room Paradiso, and Punch Drunk’s immersive juggernaut Sleep No More.

Meanwhile, employing all of the theatrical tools at our disposal (light, sound, space, song, movement, dance, language) we will come together as a company to create a site specific immersive theater piece of our own. This is a class for performers, directors, designers, dancers, choreographers and media artists who are game to participate across disciplines. Our class will culminate in a public performance of the piece we create.
Women, Gender, and Sexuality, Studies of

WOMGEN 98SA Tutorial - Junior Year: Research and Methods
CourseID: 213677
Faculty:
Next Term Offered:

By application and permission only.

WOMGEN 98SB Tutorial - Junior Year: Research and Methods
CourseID: 213678
Faculty:
Next Term Offered:

By application and permission only.

WOMGEN 98SC Tutorial - Junior Year: Research and Methods
CourseID: 213679
Faculty:
Next Term Offered:

By application and permission only.

WOMGEN 1127 Beyond the Sound Bite: Women, Gender, and Sexuality in The Daily News
CourseID: 108619
Faculty:
Next Term Offered:

We are bombarded by sound bites from all over the globe, moving at disorienting speeds, reorganizing our relationship to time and space with increasingly dystopic results. This course will focus on selected televisual and digital events in "real time" from September-December 2019. We will analyze the embedded bits of gender and sexuality always at work in the representations of those events. Topics include: politics, the environment, military adventures, and popular revolt in dialogue with important texts in WGS Studies.

WOMGEN 1206 Sex, Gender, and Afrofuturism
CourseID: 212895
Faculty:
Next Term Offered:
The explosion of interest in Afroturism in the last two decades speaks to an ever more urgent desire to understand how people of color project themselves into narratives of both the future and the past. Moreover, the work of Afroturist intellectuals has been profoundly concerned with matters of gender and sexuality. Indeed, examinations of inter-racial and inter-species "mixing," alternative family and community structure, and disruptions of gender binaries have been central to Afroturist thought. In this course we will examine these ideas both historically and aesthetically, asking how the large interest in Afroturism developed from the early part of the twentieth century until now. Focusing primarily on science fiction and fantasy literature, the course will treat a broad range of artists including, W.E.B. DuBois, George Schulyer, Marlon James, Octavia Butler, Andrea Hairston; Nalo Hopkinson; N.K. Jemisin, Nnedi Okorafor, and others.

WOMGEN 1210QT Theories of Race and Sexuality
CourseID: 156043
Faculty:
Next Term Offered:

Emphasizing the development of (transgressive) discourses of gender and sexuality within communities of color, this course will examine key contemporary texts addressing transgender identity, H.I.V./A.I.D.S., abjection, queer of color critique, reproduction and pornography. We will explore the work of: C. Riley Snorton, Dagmawi Woubshet, Darieck Scott, Sharon Holland, Roderick A. Ferguson, Jose Munoz, Samuel Delany, Jennifer C. Nash, Jasbir Puar, and more.

WOMGEN 1214 Solidarity: Transnational Women's Rights from Suffrage to NGOs
CourseID: 212893
Faculty: Durba Mitra
Next Term Offered:

"Solidarity" takes an intersectional approach to the study of women's and sexual rights in transnational perspective from the late nineteenth century until today. In this course, we will explore how American feminism, particularly through the fight for women's suffrage, set the agenda for issues of equality and sexual rights around the world, often in complex and contradictory ways. Through a semester-long engagement with Schlesinger Library collections on transnational feminist and women of color feminisms, we will investigate feminist links to and critiques of the imperial project? from anti-trafficking campaigns in colonial and postcolonial India, to transnational feminist labor movements in the Philippines and Bangladesh, to the wars in Vietnam, Afghanistan, and Iraq. Together, we will think about the complex relationship of feminism and war, the place of feminist thought in debates about incarceration and immigration, and the contradictory role of feminism in global movements for rights.

WOMGEN 1239 Plagues, Politics, and Public Health: HIV/AIDS,
Epidemics, and American Culture
CourseID: 203220
Faculty:
Next Term Offered:

This course focuses on the AIDS epidemic in the United States from 1981 to the present as a case study to examine how issues of public health policy, sexuality, race, ethnicity, class, and gender have been at the heart of the nation’s conceptualization of large scale health emergencies and panics, from smallpox in the seventeenth century to COVID-19. The class will explore issues of health care, anti-discrimination law, quarantine, immigration, prevention and education strategies, drug policies, urban planning, social services, LGBTQ rights, the criminalization of sex, and the formation of the grass roots activist groups ACT UP and Queer Nation.

WOMGEN 1273 Black Masculinities
CourseID: 203219
Faculty:
Next Term Offered:

With particular emphasis on mid-twentieth century American culture, this seminar will examine complex - and often contradictory - iterations of race and gender in works of literary and visual culture produced by and about African American men. We will explore the work of: Shirely Clarke, Chester Himes, Iceberg Slim, Alice Walker, Melvin Van Peebles, Samuel Delany, James Baldwin, Robert Deane Pharr, Eldridge Cleaver, Amiri Baraka, and more.

WOMGEN 1283 Love's Labors Found: Uncovering Histories of Emotional Labor
CourseID: 207804
Faculty: Caroline Light
Next Term Offered: 2021 Fall

How do love, care, and desire influence the value of work, and why is emotional labor, which is vital to child or elder care, domestic labor, nursing, teaching, and sex work, often considered to be something other than work? How and why do the racial and gender identities of workers affect the economic, social, and emotional value of their labor? How do political and social arrangements of labor help produce and reinforce racial categories while solidifying the boundaries separating masculinity and femininity? Through a mix of primary and secondary sources, this seminar explores histories of emotional labor and the power structures that give meaning to often taken-for-granted categories of work. These sometimes hidden histories are key to untangling the gender, sexual, and racial implications of the "intimate industries" that populate today's transnational labor economies.
Sexuality has long shaped racial and civilizational assessments of what it means to be modern. In this course, we will investigate the role of colonialism in racial imaginations of gender and sexuality and how these histories shape contemporary understandings of LGBTQ politics, reproductive and sexual rights, and anti-colonial resistance around the world. We will explore histories of sexual control, colonial and racial difference, and marginalized and queer sexualities in colonial and postcolonial spaces, including parts of West Asia, South Asia, and Sub-Saharan Africa. The course will cover many forms of sexuality, including interracial relationships between colonizer and colonized peoples, questions of sexual violence, queer and same-sex desires, sexual outcasts like "prostitutes" and transgender peoples, and the politics of gender difference and LGBTQ rights in the postcolonial world.