

Bracketed Courses 2017-2018

The courses were not offered during the 2017-2018 academic year, but were displayed as expected to be offered during 2018-2019.

African and African American Studies

AFRAMER 16 Sociology of the Black Community

CourseID: 125925

Faculty:

Next Term Offered: 2018 Fall

This course examines issues of race, class, gender, and identity in the Afro-American community. Topics of special emphasis include the contemporary situation of the black family, class stratification and the conditions and prospects of the modern black middle class, black feminist thought, black educational performance, and the dynamics of race. Our objective is to arrive at a deeper sociological analysis and appreciation of the changing life experiences awaiting African Americans.

AFRAMER 111 Spectral Fictions, Savage Phantasms: Race and Gender in Anti-Racist South African & African America

CourseID: 126698

Faculty:

Next Term Offered: 2018 Fall

Why have social orders like Apartheid South Africa and White Supremacy in segregated America that are based on extreme racial, gender and national oppression always generated often violent, hallucinatory fictions of the racial and gender identities of the oppressed? And why have the oppressed in turn often internalized these sorts of fictions and also produced counter-fictions that more or less conform to the same violent, phantasmic logic? In this course, we will explore how these fictions and counter-fictions are reproduced and challenged in some of the most powerful, canonical works of drama, fiction and cinema by South African and African American authors and filmmakers. As the Nigerian author, Chinua Achebe once famously remarked: "where one thing stands, another thing will stand beside it." To this end, we will pay special attention in the course to how, both in form and in content, race and gender always seem, constitutively, to intersect in these fictions and counter-fictions. The course is thus a study in the dark, violent but generative cultural unconscious of modern racialized and gendered identities.

AFRAMER 116 Autobiography and Memoir: Remembering the Self

CourseID: 156935

Faculty: Jamaica Kincaid

Next Term Offered: 2019 Spring

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

AFRAMER 123X Mass Incarceration in Historical Perspective

CourseID: 156254

Faculty:

Next Term Offered: 2018 Fall

Today 1 in 3 African American boys will spend part of their lives behind bars, a profound reflection of the limitations of law and democracy in the United States. By examining the connections between race and the development of legal and penal systems over time, this course investigates the historical process that eventually gave rise to the mass incarceration of black and Latino Americans in the late twentieth century. The course is structured according to the major punitive changes that often emerged after the expansion of constitutional and civil rights for African Americans. Our historical consideration will provide us the necessary background to address the ongoing consequences of racial disparities in the criminal justice system and the momentous public policy implications of this dynamic.

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 145X The Hiphop Cipher: "These are the Breaks"

CourseID: 108837

Faculty: Marcyliena Morgan

Next Term Offered: 2020 Spring

The Hiphop Cipher is an in-depth look at aspects of hiphop. It is for students who have taken courses on hiphop and popular music and culture. It closely examines a particular issue and topic and includes guest lecturers and master classes on areas or issues in hiphop culture, art, scholarship and performance. These are the Breaks: The connection between vinyl from the 60's, 70's and 80's and birth of what we now know as hip-hop music, is a connection that is known by producers, DJ's and collectors of music, but not

to academia. Various political, cultural, and social movements of the 1960's created an environment for the stories of soul, jazz, and funk produced in the 1970's, which in turn created the platform for our most treasured hip-hop albums (Illmatic, The BluePrint, The Chronic, College Dropout, The Minstrel Show). "Diggers" from around the world travel from country to country, from record shop to basement, in search of the original "breaks" used for these albums, in some cases for 10+ years. This course examines the important break beats in hiphop and the cultural, political and social movements and contexts that the beats, songs and production represented.

AFRAMER 145Y Hiphop Theory & Philosophy: Black Comix & Imagining the Real World of Badass Superheroes

CourseID: 204503

Faculty:

Next Term Offered: 2019 Spring

This course examines the symbolic meaning of the black superhero and how novels, graphic comics, and film are influenced by the language ideology and symbolism of the social and political black imaginary. This imaginary is constructed through social, philosophical and theorizing analyses of social class, gender and sexuality, racism and bigotry as cultural practice in the black community in general and hiphop in particular. The course is meant to provide cultural and philosophical insight into present and futuristic representations of worlds that assume the presence of diverse and shifting communities and conflicts. In doing so, it addresses why superheroes require the African American designation of badass to defend. The course includes various media, readings, films, and guest speakers.

AFRAMER 165 Anthropology of the Black Community

CourseID: 126725

Faculty:

Next Term Offered: 2020 Spring

This reading seminar examines anthropological theory, descriptions and research about practices of African American culture as well as African-diasporic identities. This course will also consider previous, recent and future debates within anthropology about African American communities and culture. The focus will be on institutions like family, the church, organizations, practices such as play, performance and the arts and social and political issues of black identity and racism. Among the topics we will address are: the black community, language and discourse, religion, social and cultural beliefs and practices, education, gender and sexuality, humor and satire and music. This course is meant to consider how popular culture, the social sciences, linguistics and socio-cultural anthropology have tried to understand and represent the complex and changing African American culture.

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

CourseID: 108678
Faculty: John Comaroff
Next Term Offered: 2019 Spring

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

AFRAMER 192X Religion and Society in Nigeria

CourseID: 122498
Faculty: Jacob Olupona
Next Term Offered: 2019 Spring

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

AFRAMER 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: 2019 Spring

CAPEVERD AA Cape Verdean Creole

CourseID: 206836
Faculty:

Next Term Offered:

A study of Cape Verdean Creole the language of national identity in Cape Verde 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. Elementary Cape Verdean Creole course credit.

CAPEVERD BA Intermediate Cape Verdean Creole

CourseID: 206862

Faculty:

Next Term Offered:

A study of Cape Verdean Creole the language of national identity in Cape Verde 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 encouraged to complete both parts of this course (parts AA and AB) within the same academic year. Students taking Cape Verdean Creole BA in the Spring must note that Cape Verdean Creole BB is offered only in the Spring and must therefore wait for Spring to complete the course.

CAPEVERD BB Intermediate Cape Verdean Creole

CourseID: 206863

Faculty:

Next Term Offered:

A study of Cape Verdean Creole the language of national identity in Cape Verde 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 encouraged to complete both parts of this course (parts AA and AB) within the same academic year. Students taking Cape Verdean Creole BA in the Spring must note that Cape Verdean Creole BB is offered only in the Spring.

CAPEVERD 101AR Advanced Cape Verdean Creole

CourseID: 206864

Faculty:

Next Term Offered:

A study of Cape Verdean Creole the language of national identity in Cape Verde at the Advanced level in the Fall semester. As needed, successive advanced readings in Cape Verdean Creole may be taken under Cape Verdean Creole 101ar every Fall.

CAPEVERD 101BR Advanced Cape Verdean Creole II

CourseID: 206865

Faculty:

Next Term Offered:

A study of Cape Verdean Creole the language of national identity in Cape Verde at the Advanced level in the Spring semester. As needed, successive advanced readings in Cape Verdean Creole may be taken under Cape Verdean Creole 101br every Spring.

CHICHEWA AA Elementary Chichewa

CourseID: 206867

Faculty:

Next Term Offered:

A study of Chichewa the language of national identity in Malawi 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.

CHICHEWA AB Elementary Chichewa

CourseID: 206868

Faculty:

Next Term Offered:

A study of Chichewa the language of national identity in Malawi 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.

CHICHEWA BA Intermediate Chichewa

CourseID: 206869

Faculty:

Next Term Offered:

A study of Chichewa the language of national identity in Malawi 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 encouraged to complete both parts of this course (parts AA and AB) within the same academic year. Students taking Chichewa BA in the Spring must note that Chichewa BB is offered only in the Spring and must therefore wait for Spring to complete the course.

CHICHEWA BB Intermediate Chichewa

CourseID: 206870

Faculty:

Next Term Offered:

A study of Chichewa the language of national identity in Malawi 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 encouraged to complete both parts of this course (parts AA and AB) within the same academic year. Students taking Chichewa BA in the Spring must note that Chichewa BB is offered only in the Spring.

CHICHEWA 101AR Advanced Chichewa

CourseID: 206871

Faculty:

Next Term Offered:

A study of Chichewa the language of national identity in Malawi at the Advanced level in the Fall semester. As needed, successive advanced readings in Chichewa may be taken under Chichewa 101ar every Fall.

CHICHEWA 101BR Advanced Chichewa II

CourseID: 206872

Faculty:

Next Term Offered:

A study of Chichewa the language of national identity in Malawi at the Advanced level in the Spring semester. As needed, successive advanced readings in Chichewa may be taken under Chichewa 101br every Spring.

DINKA AA Elementary Dinka

CourseID: 206873

Faculty:

Next Term Offered:

A study of Dinka the language of the largest group of agripastoral people in Sudan 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.

DINKA AB Elementary Dinka

CourseID: 206874

Faculty:

Next Term Offered:

A study of Dinka the language of the largest group of agripastoral people in Sudan 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.

DINKA BA Intermediate Dinka

CourseID: 206875

Faculty:

Next Term Offered:

A study of Dinka the language of the largest group of agripastoral people 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 encouraged to complete both parts of this course (parts AA and AB) within the same academic year. Students taking Dinka BA in the Spring must note that Dinka BB is offered only in the Spring and must therefore wait for Spring to complete the course.

DINKA BB Intermediate Dinka

CourseID: 206876

Faculty:

Next Term Offered:

A study of Dinka the language of the largest group of agripastoral people 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 encouraged to complete both parts of this course (parts AA and AB) within the same academic year. Students taking Dinka BA in the Spring must note that Dinka BB is offered only in the Spring.

DINKA 101AR Advanced Dinka

CourseID: 206877

Faculty:

Next Term Offered:

A study of Dinka the language of the largest group of agripastoral people in Sudan at the Advanced level in the Fall semester. As needed, successive advanced readings in Dinka may be taken under Dinka 101ar every Fall.

DINKA 101BR Advanced Dinka II

CourseID: 206878

Faculty:

Next Term Offered:

A study of Dinka the language of the largest group of agripastoral people in Sudan at the Advanced level in the Spring semester. As needed, successive advanced readings in Dinka may be taken under Dinka 101br every Spring.

EGYPTARB AA Elementary Egyptian Arabic

CourseID: 206879

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 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 BA Intermediate Egyptian Arabic

CourseID: 206881

Faculty:

Next Term Offered:

A study of Egyptian Arabic the de facto national working language in Egypt 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 encouraged to complete both parts of this course (parts AA and AB) within the same academic year. Students taking Egyptian Arabic BA in the Spring must note that Egyptian Arabic BB is offered only in the Spring and must therefore wait for Spring to complete the course.

EGYPTARB BB Intermediate Egyptian Arabic

CourseID: 206882

Faculty:

Next Term Offered:

A study of Egyptian Arabic the de facto national working language in Egypt 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 encouraged to complete both parts of this course (parts AA and AB) within the same academic year. Students taking Egyptian Arabic BA in the Spring must note that Egyptian Arabic BB is offered only in the Spring.

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.

EGYPTARB 101BR Advanced Egyptian Arabic II

CourseID: 206884

Faculty:

Next Term Offered:

A study of Egyptian Arabic the de facto national working language in Egypt at the Advanced level in the Spring semester. As needed, successive advanced readings in Egyptian Arabic may be taken under Egyptian Arabic 101br every Spring.

FON AA Elementary Fon

CourseID: 206885

Faculty:

Next Term Offered:

A study of Fon a major language spoken in Benin and Togo 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.

FON AB Elementary Fon

CourseID: 206886

Faculty:

Next Term Offered:

A study of Fon a major language spoken in Benin and Togo 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.

FON BA Intermediate Fon

CourseID: 206887

Faculty:

Next Term Offered:

A study of Fon a major language spoken in Benin and Togo 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 encouraged to complete both parts of this course (parts AA and AB) within the same academic year. Students taking Fon BA in the Spring must note that Fon BB is offered only in the Spring and must therefore wait for Spring to complete the course.

FON BB Intermediate Fon

CourseID: 206888

Faculty:

Next Term Offered:

A study of Fon a major language spoken in Benin and Togo 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 encouraged to complete both parts of this course (parts AA and AB) within the same academic year. Students taking Fon BA in the Spring must note that Fon BB is offered only in the Spring.

FON 101AR Advanced Fon

CourseID: 206889

Faculty:

Next Term Offered:

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

FON 101BR Advanced Fon II

CourseID: 206890

Faculty:

Next Term Offered:

A study of Fon a major language spoken in Benin and Togo at the Advanced level in the Spring semester. As needed, successive advanced readings in Fon may be taken under

Fon 101br every Spring.

GEEZ BA Intermediate Geez

CourseID: 206901

Faculty:

Next Term Offered:

A study of Geez the liturgical language of the Ethiopian Orthodox Church 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 encouraged to complete both parts of this course (parts AA and AB) within the same academic year. Students taking Geez BA in the Spring must note that Geez BB is offered only in the Spring and must therefore wait for Spring to complete the course.

GEEZ BB Intermediate Geez

CourseID: 206902

Faculty:

Next Term Offered:

A study of Geez the liturgical language of the Ethiopian Orthodox Church 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 encouraged to complete both parts of this course (parts AA and AB) within the same academic year. Students taking Geez BA in the Spring must note that Geez BB is offered only in the Spring.

GEEZ 101AR Advanced Geez

CourseID: 206903

Faculty:

Next Term Offered:

A study of Geez the liturgical language of the Ethiopian Orthodox Church at the Advanced level in the Fall semester. As needed, successive advanced readings in Geez may be taken under Geez 101ar every Fall.

GEEZ 101BR Advanced Geez II

CourseID: 206905

Faculty:

Next Term Offered:

A study of Geez the liturgical language of the Ethiopian Orthodox Church at the Advanced level in the Spring semester. As needed, successive advanced readings in

Geez may be taken under Geez 101br every Spring.

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.

HASSANIY AB Elementary Hassaniyah

CourseID: 206907

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 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.

HASSANIY BA Intermediate Hassaniyah

CourseID: 206908

Faculty:

Next Term Offered:

A study of Hassaniyah a Maghrebi Arabic language in several west African countries including Mali, Algeria, Libya, Mauritania 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 encouraged to complete both parts of this course (parts AA and AB) within the same academic year. Students taking Hassaniyah BA in the Spring must note that Hassaniyah BB is offered only in the Spring and must therefore wait for Spring to complete the course.

HASSANIY BB Intermediate Hassaniyah

CourseID: 206909

Faculty:

Next Term Offered:

A study of Hassaniyah a Maghrebi Arabic language in several west African countries including Mali, Algeria, Libya, Mauritania 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 encouraged to complete both parts of this course (parts AA and AB) within the same academic year. Students taking Hassaniyah BA in the Spring must note that Hassaniyah BB is offered only in the Spring.

HASSANIY 101AR Advanced Assaniyah

CourseID: 206910

Faculty:

Next Term Offered:

A study of Hassaniyah a Maghrebi Arabic language in several west African countries including Mali, Algeria, Libya, Mauritania at the Advanced level in the Fall semester. As needed, successive advanced readings in Hassaniyah may be taken under Hassaniyah 101ar every Fall.

HASSANIY 101BR Advanced Assaniyah II

CourseID: 206911

Faculty:

Next Term Offered:

A study of Hassaniyah a Maghrebi Arabic language in several west African countries including Mali, Algeria, Libya, Mauritania at the Advanced level in the Spring semester. As needed, successive advanced readings in Hassaniyah may be taken under Hassaniyah 101br every Spring.

IBIBIO AA Elementary Ibibio

CourseID: 206912

Faculty:

Next Term Offered:

A study of Ibibio a major language spoken in Southern Nigeria 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.

IBIBIO AB Elementary Ibibio

CourseID: 206913

Faculty:

Next Term Offered:

A study of Ibibio a major language spoken in Southern Nigeria 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.

IBIBIO BA Intermediate Ibibio

CourseID: 206914

Faculty:

Next Term Offered:

A study of Ibibio a major language spoken in Southern Nigeria 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 encouraged to complete both parts of this course (parts AA and AB) within the same academic year. Students taking Ibibio BA in the Spring must note that Ibibio BB is offered only in the Spring and must therefore wait for Spring to complete the course.

IBIBIO BB Intermediate Ibibio

CourseID: 206915

Faculty:

Next Term Offered:

A study of Ibibio a major language spoken in Southern Nigeria 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 encouraged to complete both parts of this course (parts AA and AB) within the same academic year. Students taking Ibibio BA in the Spring must note that Ibibio BB is offered only in the Spring.

IBIBIO 101AR Advanced Ibibio

CourseID: 206916

Faculty:

Next Term Offered:

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

IBIBIO 101BR Advanced Ibibio II

CourseID: 206917

Faculty:

Next Term Offered:

A study of Ibibio a major language spoken in Southern Nigeria at the Advanced level in the Spring semester. As needed, successive advanced readings in Ibibio may be taken under Ibibio 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.

KAMBA BA Intermediate Kamba

CourseID: 206922

Faculty:

Next Term Offered:

A study of Kamba a major language spoken by the Kamba people of Kenya 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 encouraged to complete both parts of this course (parts AA and AB) within the same academic year. Students taking Kamba BA in the Spring must note that Kamba BB is offered only in the Spring and must therefore wait for Spring to complete the course.

KAMBA BB Intermediate Kamba

CourseID: 206923

Faculty:

Next Term Offered:

A study of Kamba a major language spoken by the Kamba people of Kenya 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 encouraged to complete both parts of this course (parts AA and AB) within the same academic year. Students taking Kamba BA in the Spring must note that Kamba BB is offered only in the Spring.

KAMBA 101AR Advanced Kamba

CourseID: 206924

Faculty:

Next Term Offered:

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

KAMBA 101BR Advanced Kamba II

CourseID: 206925

Faculty:

Next Term Offered:

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

KIKONGO AA Elementary Kikongo

CourseID: 206926

Faculty:

Next Term Offered:

A study of Kikongo a major language spoken in DRC, Congo, and Angola 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.

KIKONGO AB Elementary Kikongo

CourseID: 206927

Faculty:

Next Term Offered:

A study of Kikongo a major language spoken in DRC, Congo, and Angola 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.

KIKONGO BA Intermediate Kikongo

CourseID: 206930

Faculty:

Next Term Offered:

A study of Kikongo a major language spoken in DRC, Congo, and Angola 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 encouraged to complete both parts of this course (parts AA and AB) within the same academic year. Students taking Kikongo BA in the Spring must note that Kikongo BB is offered only in the Spring and must therefore wait for Spring to complete the course.

KIKONGO BB Intermediate Kikongo

CourseID: 206931

Faculty:

Next Term Offered:

A study of Kikongo a major language spoken in DRC, Congo, and Angola 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 encouraged to complete both parts of this course (parts AA and AB) within the same academic year. Students taking Kikongo BA in the Spring must note that Kikongo BB is offered only in the Spring.

KIKONGO 101AR Advanced Kikongo

CourseID: 206932

Faculty:

Next Term Offered:

A study of Kikongo a major language spoken in DRC, Congo, and Angola at the Advanced level in the Fall semester. As needed, successive advanced readings in Kikongo may be taken under Kikongo 101ar every Fall.

KIKONGO 101BR Advanced Kikongo II

CourseID: 206933

Faculty:

Next Term Offered:

A study of Kikongo a major language spoken in DRC, Congo, and Angola at the Advanced level in the Spring semester. As needed, successive advanced readings in Kikongo may be taken under Kikongo 101br every Spring.

KRIO AA Elementary Krio

CourseID: 206934

Faculty:

Next Term Offered:

A study of Krio the major lingua franca of Sierra Leon 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.

KRIO AB Elementary Krio

CourseID: 206935

Faculty:

Next Term Offered:

A study of Krio the major lingua franca of Sierra Leon 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.

KRIO BA Intermediate Krio

CourseID: 206936

Faculty:

Next Term Offered:

A study of Krio the major lingua franca of Sierra Leon 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 encouraged to complete both parts of this course (parts AA and AB) within the same academic year. Students taking Krio BA in the Spring must note that Krio BB is offered only in the Spring and must therefore wait for Spring to complete the course.

KRIO BB Intermediate Krio

CourseID: 206937

Faculty:

Next Term Offered:

A study of Krio the major lingua franca of Sierra Leon 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 encouraged to complete both parts of this course (parts AA and AB) within the same academic year. Students taking Krio BA in the Spring must note that Krio BB is offered only in the Spring.

KRIO 101AR Advanced Krio

CourseID: 206938

Faculty:

Next Term Offered:

A study of Krio the major lingua franca of Sierra Leon at the Advanced level in the Fall semester. As needed, successive advanced readings in Krio may be taken under Krio 101ar every Fall.

KRIO 101BR Advanced Krio II

CourseID: 206939

Faculty:

Next Term Offered:

A study of Krio the major lingua franca of Sierra Leon at the Advanced level in the Spring semester. As needed, successive advanced readings in Krio may be taken under Krio 101br every Spring.

OSHIKWAN AA Elementary Oshikwanyama

CourseID: 206940

Faculty:

Next Term Offered:

A study of Oshikwanyama a national language of Angola and Namibia 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.

OSHIKWAN AB Elementary Oshikwanyama

CourseID: 206941

Faculty:

Next Term Offered:

A study of Oshikwanyama a national language of Angola and Namibia 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.

OSHIKWAN BA Intermediate Oshikwanyama

CourseID: 206942

Faculty:

Next Term Offered:

A study of Oshikwanyama a national language of Angola and Namibia 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 encouraged to complete both parts of this course (parts AA and AB) within the same academic year. Students taking Oshikwanyama BA in the Spring must note that Oshikwanyama BB is offered only in the Spring and must therefore wait for Spring to complete the course.

OSHIKWAN BB Intermediate Oshikwanyama

CourseID: 206943

Faculty:

Next Term Offered:

A study of Oshikwanyama a national language of Angola and Namibia 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 encouraged to complete both parts of this course (parts AA and AB) within the same academic year. Students taking Oshikwanyama BA in the Spring must note that Oshikwanyama BB is offered only in the Spring.

OSHIKWAN 101AR Advanced Oshikwanyama

CourseID: 206944

Faculty:

Next Term Offered:

A study of Oshikwanyama a national language of Angola and Namibia at the Advanced level in the Fall semester. As needed, successive advanced readings in Oshikwanyama may be taken under Oshikwanyama 101ar every Fall.

OSHIKWAN 101BR Advanced Oshikwanyama II

CourseID: 206945

Faculty:

Next Term Offered:

A study of Oshikwanyama a national language of Angola and Namibia at the Advanced level in the Spring semester. As needed, successive advanced readings in

Oshikwanyama may be taken under Oshikwanyama 101br every Spring.

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.

PULAAR BA Intermediate Pulaar

CourseID: 206948

Faculty:

Next Term Offered:

A study of Pulaar the most widely spoken international language in West Africa 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 encouraged to complete both parts of this course (parts AA and AB) within the same academic year. Students taking Pulaar BA in the Spring must note that Pulaar BB is offered only in the Spring and must therefore wait for Spring to complete the course.

PULAAR BB Intermediate Pulaar

CourseID: 206949

Faculty:

Next Term Offered:

A study of Pulaar the most widely spoken international language in West Africa 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 encouraged to complete both parts of this course (parts AA and AB) within the same academic year. Students taking Pulaar BA in the Spring must note that Pulaar BB is offered only in the Spring.

PULAAR 101AR Advanced Pulaar

CourseID: 206950

Faculty:

Next Term Offered:

A study of Pulaar the most widely spoken international language in West Africa at the Advanced level in the Fall semester. As needed, successive advanced readings in Pulaar may be taken under Pulaar 101ar every Fall.

PULAAR 101BR Advanced Pulaar II

CourseID: 206951

Faculty:

Next Term Offered:

A study of Pulaar the most widely spoken international language in West Africa at the Advanced level in the Spring semester. As needed, successive advanced readings in Pulaar may be taken under Pulaar 101br every Spring.

RUTOORO AA Elementary Rutooro

CourseID: 206952

Faculty:

Next Term Offered:

A study of Rutooro a 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 encouraged to complete both parts of this course (parts AA and AB) within the same academic year.

RUTOORO AB Elementary Rutooro

CourseID: 206953

Faculty:

Next Term Offered:

A study of Rutooro a major language spoken in Uganda 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.

RUTOORO BA Intermediate Rutooro

CourseID: 206954

Faculty:

Next Term Offered:

A study of Rutooro a 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 encouraged to complete both parts of this course (parts AA and AB) within the same

academic year. Students taking Rutooro BA in the Spring must note that Rutooro BB is offered only in the Spring and must therefore wait for Spring to complete the course.

RUTOORO BB Intermediate Rutooro

CourseID: 206955

Faculty:

Next Term Offered:

A study of Rutooro a major language spoken in Uganda 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 encouraged to complete both parts of this course (parts AA and AB) within the same academic year. Students taking Rutooro BA in the Spring must note that Rutooro BB is offered only in the Spring.

RUTOORO 101AR Advanced Rutooro

CourseID: 206956

Faculty:

Next Term Offered:

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

RUTOORO 101BR Advanced Rutooro II

CourseID: 206957

Faculty:

Next Term Offered:

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

SESOTHO AA Elementary Sesotho

CourseID: 206958

Faculty:

Next Term Offered:

A study of Sesotho the major language spoken in Lesotho 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.

SESOTHO AB Elementary Sesotho

CourseID: 206959

Faculty:

Next Term Offered:

A study of Sesotho the major language spoken in Lesotho 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.

SESOTHO BA Intermediate Sesotho

CourseID: 206960

Faculty:

Next Term Offered:

A study of Sesotho the major language spoken in Lesotho 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 encouraged to complete both parts of this course (parts AA and AB) within the same academic year. Students taking Sesotho BA in the Spring must note that Sesotho BB is offered only in the Spring and must therefore wait for Spring to complete the course.

SESOTHO BB Intermediate Sesotho

CourseID: 206961

Faculty:

Next Term Offered:

A study of Sesotho the major language spoken in Lesotho 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 encouraged to complete both parts of this course (parts AA and AB) within the same academic year. Students taking Sesotho BA in the Spring must note that Sesotho BB is offered only in the Spring.

SESOTHO 101AR Advanced Sesotho

CourseID: 206962

Faculty:

Next Term Offered:

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

SESOTHO 101BR Advanced Sesotho II

CourseID: 206963

Faculty:

Next Term Offered:

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

SETSWANA AA Elementary Setswana

CourseID: 206980

Faculty:

Next Term Offered:

A study of Setswana the major language spoken in Botswana 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.

SETSWANA AB Elementary Setswana

CourseID: 206981

Faculty:

Next Term Offered:

A study of Setswana the major language spoken in Botswana 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.

SETSWANA BA Intermediate Setswana

CourseID: 206984

Faculty:

Next Term Offered:

A study of Setswana the major language spoken in Botswana 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 encouraged to complete both parts of this course (parts AA and AB) within the same academic year. Students taking Setswana BA in the Spring must note that Setswana BB is offered only in the Spring and must therefore wait for Spring to complete the course.

SETSWANA BB Intermediate Setswana

CourseID: 206985

Faculty:

Next Term Offered:

A study of Setswana the major language spoken in Botswana 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 encouraged to complete both parts of this course (parts AA and AB) within the same academic year. Students taking Setswana BA in the Spring must note that Setswana BB is offered only in the Spring.

SETSWANA 101AR Advanced Setswana

CourseID: 206986

Faculty:

Next Term Offered:

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

SETSWANA 101BR Advanced Setswana II

CourseID: 206987

Faculty:

Next Term Offered:

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

TSHILUBA AA Elementary Tshiluba

CourseID: 206988

Faculty:

Next Term Offered:

A study of Tshiluba one of the four lingua Franca languages of the Congo 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.

TSHILUBA AB Elementary Tshiluba

CourseID: 206989

Faculty:

Next Term Offered:

A study of Tshiluba one of the four lingua Franca languages of the Congo 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.

TSHILUBA BA Intermediate Tshiluba

CourseID: 206990

Faculty:

Next Term Offered:

A study of Tshiluba one of the four lingua Franca languages of the Congo 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 encouraged to complete both parts of this course (parts AA and AB) within the same academic year. Students taking Tshiluba BA in the Spring must note that Tshiluba BB is offered only in the Spring and must therefore wait for Spring to complete the course.

TSHILUBA BB Intermediate Tshiluba

CourseID: 206991

Faculty:

Next Term Offered:

A study of Tshiluba one of the four lingua Franca languages of the Congo 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 encouraged to complete both parts of this course (parts AA and AB) within the same academic year. Students taking Tshiluba BA in the Spring must note that Tshiluba BB is offered only in the Spring.

TSHILUBA 101AR Advanced Tshiluba

CourseID: 206992

Faculty:

Next Term Offered:

A study of Tshiluba one of the four lingua Franca languages of the Congo at the Advanced level in the Fall semester. As needed, successive advanced readings in Tshiluba may be taken under Tshiluba 101ar every Fall.

TSHILUBA 101BR Advanced Tshiluba II

CourseID: 206993

Faculty:

Next Term Offered:

A study of Tshiluba one of the four lingua Franca languages of the Congo at the Advanced level in the Spring semester. As needed, successive advanced readings Tshiluba may be taken under Tshiluba 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.

XHOSA AB Elementary Xhosa

CourseID: 206995

Faculty:

Next Term Offered:

A study of Xhosa a major language spoken in South 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.

XHOSA BA Intermediate Xhosa

CourseID: 206996

Faculty:

Next Term Offered:

A study of Xhosa a major language spoken in South Africa 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 encouraged to complete both parts of this course (parts AA and AB) within the same academic year. Students taking Xhosa BA in the Spring must note that Xhosa BB is offered only in the Spring and must therefore wait for Spring to complete the course.

XHOSA BB Intermediate Xhosa

CourseID: 206997

Faculty:

Next Term Offered:

A study of Xhosa a major language spoken in South Africa 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 encouraged to complete both parts of this course (parts AA and AB) within the same academic year. Students taking Xhosa BA in the Spring must note that Xhosa BB is offered only in the Spring.

XHOSA 101AR Advanced Xhosa

CourseID: 206998

Faculty:

Next Term Offered:

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

XHOSA 101BR Advanced Xhosa II

CourseID: 206999

Faculty:

Next Term Offered:

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

American Studies

AMSTDIES 200 Major Works in American Studies

CourseID: 113328

Faculty: Joyce Chaplin

Next Term Offered: 2018 Fall

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

AMSTDIES 271 Hyphen-Nation: Multidisciplinary Approach to Ethnicity/Race in U.S. (Graduate Seminar in Gen. Ed.)

CourseID: 203327

Faculty:

Next Term Offered: 2018 Fall

"Hyphen-Nation" will explore the interactions of ethnicity/race, migration, and human rights in shaping twenty-first century United States, with particular attention to the past and present experiences of Latina/o, Asian American, Native American, and African American communities. Students will design case studies from the perspective of their particular disciplines to help fashion a multi-disciplinary approach to the social, cultural, and ethical processes that define nationhood.

Near Eastern Languages and Civilizations

ANE 209 Biographies in the Hebrew Bible

CourseID: 207757

Faculty:

Next Term Offered:

The Hebrew Bible's historiography is designed as a series of life stories. From Abraham to Isaac, from Jacob to Joseph, Moses, Joshua and on to the judges, prophets, and kings, this is a long-distance relay race in which the baton is being passed from one character to his successor, from the beginning of history till the expulsion of Israel from its Land. Some of these life stories, like Moses's, are rather complete, starting with pre-birth traditions and ending with death; others, such as Joshua, are only partial.

In this course, we will conduct a close reading of some of the Bible's biographies, noting and explaining the relationships, similarities and differences between them. Since we deal with religious literature, special attention will also be given to each character's relationship with God and its significance. All the while, we will question the biblical writers, their motivations, who they were supporting and who they were criticizing, what their ideological motivations were, and noticing and enjoying their literary techniques.

Finally, we will also be looking at how some biographies came to be retold in Second Temple Period literature as well as rabbinic literature, and question the varying motives, literary tastes and modes of interpretation of the different eras and socio-political contexts.

ARABIC 245R Classical Arabic Literature Seminar: Medieval Arabic Writings on Literary Theory

CourseID: 114291

Faculty:

Next Term Offered: 2019 Fall

A survey of medieval Arabic writings on literary theory, from the early proponents of the Qa??da form and ?am?d al-shi?r to selected writings on mu?dath poetry. Works on both poetry and prose will be considered. Authors included: Ibn al-Mu?tazz, Ibn Qutayba, al-Marz?q?, al-Jurj?n?, ??zim al-Qar?ajann?, etc. Topics include: Qa??da form, Eloquence (fa???a and bal?ghah), poetics (bad??, maj?z, etc.) Qur??n and inimitability.

ARMEN BB Intermediate Modern Armenian II

CourseID: 207660

Faculty:

Next Term Offered:

ISLAMCIV 146 al-Ghazali: Theologian and Mystic

CourseID: 123196

Faculty: Khaled El-Rouayheb

Next Term Offered: 2018 Fall

Al-Ghazali (d.1111) is generally recognized to be one of the most influential of all Muslim religious thinkers. A prominent theologian and jurist, he experienced a spiritual crisis at the height of his career, and as a consequence explored mysticism (Sufism) and worked out a powerful synthesis between respect for the externals of the Islamic religion and the mystics' stress on the interior life. In this course, we will look in particular at his account of his spiritual crisis; his critical engagement with the Islamic Philosophers; and some of the more mystical works that he wrote toward the end of his life, including his theodicy, his meditations on the Qur'anic dictum that "God is the Light of the Heavens and the Earth", and select chapters from his great summa "The Revival of the Religious Sciences". All readings will be in English.

JEWISHST 111 Modern Jewish Thought

CourseID: 116199

Faculty:

Next Term Offered:

A study of significant Jewish thinkers in the modern period and their reflections on the past and present meaning of Judaism. All thinkers studied against the background of premodern Jewish thought and the challenges posed by modern Western philosophical systems.

TURKISH 130A Advanced Turkish I

CourseID: 109281

Faculty:

Next Term Offered: 2018 Fall

Gaining and improving advanced language skills in Modern Turkish through reading, writing, listening, and speaking with special emphasis on the proper usage of vocabulary and idiomatic expressions.

Anthropology

ANTHRO 92ZR Social Anthropology Research Methods in Museum Collections

CourseID: 123455

Faculty:

Next Term Offered: 2018 Fall

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

ANTHRO 1080 American History Before Columbus

CourseID: 125588

Faculty: Matt Liebmann

Next Term Offered: 2018 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.

ANTHRO 1130 Archaeology of Harvard Yard

CourseID: 121141

Faculty: Diana Loren

Next Term Offered: 2018 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 1182 People of the Sun: The Archaeology of Ancient Mexico

CourseID: 109568

Faculty: William Fash
Next Term Offered: 2019 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 Encountering the Conquistadors

CourseID: 125450
Faculty: Matt Liebmann
Next Term Offered: 2018 Fall

This course examines the effects of the Spanish Conquest on indigenous peoples of the Americas between the fifteenth and eighteenth centuries, providing an introduction to the archaeology of first encounters in the Caribbean, Southeast and Southwest US, Central Mexico, highland and lowland Mesoamerica, the Amazon basin, and in the Andes. Topics addressed include the roles of disease, indigenous politics, native rebellions, and ecological change in the colonization of the 'New' World.

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

CourseID: 127050
Faculty: Peter Der 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 1634 Indigeneity, Rights, and the Politics of Identity

CourseID: 207709
Faculty:
Next Term Offered:

It has been more than a half-century since the concept of 'indigenous peoples' became an international legal category that opened space for the social justice claims of peoples

as individuals and collectivities with a common experience of marginalization, dispossession, discrimination, and contested cultural differences. This course will familiarize students with the key issues, concepts, and methods of anthropology as they relate to indigenous peoples. It will pay particular attention to the common challenges faced by indigenous peoples and discuss how indigenous peoples and organizations are using the institutions and mechanisms of NGO advocacy and law in their attempts to achieve equal access to the benefits of political recognition, development in their own terms, and a broader respect for collective human rights. Case studies will be drawn from Canada, Africa, Northern Europe, Latin America, Australia and the South Pacific.

ANTHRO 1645 Exploring Culture Through Film

CourseID: 120570

Faculty:

Next Term Offered: 2019 Spring

This course will provide an introduction to the history and theory of documentary and ethnographic film with a focus on the politics of representation and the challenges made to the canonical mainstream. We will discuss the changing paradigms of "ethnographic" film, situating these debates within their historical film contexts and explore how new digital media technologies effect the politics of representation. A variety of cinematic styles from essay films and new media to observational cinema will be screened and discussed.

ANTHRO 1682 Gangsters and Troublesome Populations

CourseID: 128063

Faculty: Laurence Ralph

Next Term Offered: 2018 Fall

The term "gang" has been used to describe all kinds of collectives, from well-dressed mobsters to petty criminals to juvenile delinquents. About the only thing that has remained consistent about gangs is their characterization as the internal Other. This class will investigate how the category of "the gang" serves to provoke discourses of "dangerous" subjects in urban enclaves. More broadly, we will examine the methods and means by which liberal democratic governments maintain their sovereign integrity through the containment of threatening populations.

ANTHRO 1686 The Anthropology of Energy: Power, Politics and Infrastructures

CourseID: 207821

Faculty:

Next Term Offered:

This class will investigate how humans engage with their envioning worlds (and each other) in the context of energy exploration, production, consumption and distribution.

Drawing from a range of energy ethnographies (e.g. fracking, nuclear power, clean energy, the commodities market, etc.), students will be able to assess a wide range of cultural ecologies and 'realities'. Students will learn some of the emergent concepts driving contemporary anthropology theory-building including infrastructures, crisis anthropology, the Anthropocene, energopolitics and energopower. One of the major aims of the course is to uncover how ideologies and the politics of energy and energy discourse continue to shape people's histories and futures in dynamic and uneven ways.

ANTHRO 1715 Revolutionary Violence: An Anthropology of a Concept

CourseID: 204020

Faculty:

Next Term Offered: 2019 Fall

The concept of revolution has been central to political philosophy from its inception. This centrality derives from its threat to disrupt political order and to destroy the very structures it seeks to inaugurate. This seminar is motivated by the question of revolution and revolutionary violence ?its forms, provocations, and temporalities. We will read texts in political theory ?from canonical European liberal thought to Haitian and Algerian anti-colonial revolt ?alongside anthropological interrogations of their limits, particularly as they become evident from the spaces of the medical and psychiatric clinic. Foregrounding figurations of the state and historical change, we will attend to notions of time and how they underwrite divergent representations of progress, order, justice, and violence. We will engage in close readings of philosophical texts on their own terms and will then put to work an anthropological mode of reading to bring out the elisions performed by the movement of theory abstracted from lived experience. Alongside theoretical texts, we will consider anthropological accounts of violence, (post)colonial subjectivity, and the contemporary poor by Biehl, Comaroff and Comaroff, Farmer, and Good. With the ethnographic as conceptual pivot, we will turn from canonical works in political theory ? Hobbes, Kant, Hegel, Weber ?to counterhegemonic traditions arising from Marxism, anti-colonialism and black radical thought, political psychiatry, and deconstruction. Readings may include texts by Marx, Sorel, Schmitt, Benjamin, Fanon, Sartre, Arendt, Guattari, Derrida, Mbembe, Chakrabarty, and Berlant

ANTHRO 1750 Policing and Militarization Today

CourseID: 203536

Faculty: Laurence Ralph

Next Term Offered: 2018 Fall

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

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

ANTHRO 1785 Law and Violence in Latin America

CourseID: 203531

Faculty: Ieva Jusionyte

Next Term Offered: 2019 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 1850 Ethnography as Practice and Genre

CourseID: 121146

Faculty: Mary Steedly

Next Term Offered: 2018 Fall

For sociocultural anthropologists, ethnography is both a way of studying human communities and a way of writing about them. Ethnographic fieldwork raises issues of participation, power, and perspective; cultural relativism; the nature of evidence; and the ethics of engagement. Writing ethnography highlights other issues, such as the politics of representing "others." This course explores these and related issues through close reading and intensive discussion of selected texts.

ANTHRO 1936 Anthropology of Religion

CourseID: 109570

Faculty: Anya Bernstein

Next Term Offered: 2019 Spring

What happened to religion in the modern world? We start off by exploring traditional anthropological themes, such as animism, magic, and ritual, while paying particular attention to the classic secularization thesis advanced by social scientists. We will then focus on the crucial contemporary issues, such as debates on secularism, globalization and commodification of religion, body and sexuality, secular eschatologies, such as transhumanism, and the emergence of "new age" spirituality. This course is not a survey of specific religions, but a theoretical introduction to the main themes in the anthropological study of religion.

ANTHRO 1988 Kinship, Citizenship, and Belonging

CourseID: 156380

Faculty:

Next Term Offered: 2018 Fall

The domains of family life, kinship, and intimacy represent central sites for the construction and contestation of social and political belonging. This course introduces students to classic and contemporary theories of society, kinship, and citizenship by way of theorizing how economic production, sovereignty, and everyday life emerge through the regulation of relatedness. Anthropologists of the late nineteenth century and of the first half of the twentieth century turned kinship into a key domain for understanding social cohesion and political organization. In the past three decades -- following feminist, Marxist, and queer critiques -- anthropologists explored how discourses about kinship and the family anchored the ideologies and practices of modernity, colonialism, nationalism, and globalization. In this course, we ask: What can various forms of kinship teach us about the politics of social reproduction and the making of citizenship -- its modes of belonging and exclusion -- in the contemporary world?

ANTHRO 1995 Food Culture and Society

CourseID: 118218

Faculty: Theodore Bestor

Next Term Offered: 2019 Spring

Food is an entirely mundane but simultaneously elaborate aspect of human life, both pragmatic necessity and symbolic statement. This course examines how cultural systems of meaning and belief interact with social institutions and material reality. Lectures, films, discussions, fieldtrips, and ethnographic research assignments focus on the myriad ways in which food shapes (and reflects) identity (national, ethnic, religious, gendered, class-based), and how in turn how social institutions (from domestic units to the global food system) shape and transform food and its meanings, drawing on examples from many parts of the globe, both historically and contemporaneously.

ANTHRO 2000 Osteoarchaeology Lab

CourseID: 113280

Faculty: Richard Meadow

Next Term Offered: 2018 Fall

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

ANTHRO 2100 Archaeological Site Formation Processes

CourseID: 207822

Faculty:

Next Term Offered:

Archaeologists study 'sites' to understand what life was like in the past as well as to understand how things have changed over time. But what are these things we call sites? How were they formed, and why do we have them to study in the first place? What happens to 'things' buried in the ground for thousands of years, and how does the fragmentary nature of what preserves at these sites skew our interpretations of the past? In this course we will focus on an understanding of the many natural and cultural processes that affect the formation of the archaeological record. These range from geological studies of events such as floods and erosion and learning to recognize their distinctive stratigraphic signatures, neotaphonomic and biogeochemical studies of the life history of a animals from death and disarticulation to fossilization and recovery, ethnoarchaeological and experimental observations of how, where, and how many humans discard refuse (a.k.a. 'artifacts'), and theoretical approaches to how our perceptions of something as basic as 'time' fundamentally alters how we can use the archaeological record. Every archaeological interpretation must begin with an understanding of how the record came to exist, and this course provides students an essential foundation to independently arrive at that understanding.

ANTHRO 2110R Issues in Mesoamerican Archaeology

CourseID: 144159

Faculty: William Fash

Next Term Offered: 2018 Fall

Considers current topics and debates in the archaeology of Mesoamerica, with special emphasis on ancient Maya civilizations. Readings and discussions focus on aspects of social process, political history, and their interplay with ritual and ideology.

ANTHRO 2177 South American Archaeology

CourseID: 128017

Faculty: Gary Urton

Next Term Offered: 2019 Spring

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 2250A Proseminar in Archaeology

CourseID: 125614

Faculty: Christian Tryon

Next Term Offered: 2018 Fall

This graduate seminar reviews critical issues in archaeological approaches to small-scale societies, including methods and interpretations relating to the study of mobility, sedentism, seasonality, plant and animal exploitation, and migration.

ANTHRO 2744 Madness and Globalization

CourseID: 207648

Faculty:

Next Term Offered:

While the term 'mental illness' evokes aseptic technical categories and medical nosologies, 'madness,' in its deliberate murkiness, embraces broader and deeper meanings, including 'post-colonial disorders' of individuals and societies. This course will analyze the ways in which diverse aspects of globalization impact, intersect and shape personal experiences of 'madness' ?both mental illnesses and social disorders. Largely based on readings of ethnographic and cross-cultural literature, the course will examine, among other issues: the process of colonization, which racialized psychiatric interpretations of the individual's behavior and suffering; colonial and postcolonial engagements with psychoanalysis; the postcolonial standardization of nosologies and treatments, based mostly on biomedical categories, and the complex negotiations of the meanings of modernity; the resulting cases of 'globalization' of approaches to mental health/illness in non-Western contexts; the attempt at the decolonization of anthropology and psychiatry alike; the impact of violence, forced migration and displacement on the the psychological equilibrium and mental health of individuals, and the globalization of PTSD; and the impact of neoliberal economic policies and ideologies, as well as the global mental health movement, on the world of the mentally ill.

ANTHRO 2745 Psychological Approaches to the Anthropology of Subjectivity

CourseID: 109020

Faculty:

Next Term Offered:

This course will trace the history of psychological theories in anthropological studies of

subjectivity and their influence on ethnographic writing. Although more general topics in the history of psychological anthropology will be considered, the course will give particular focus to the relevance of diverse psychoanalytic theories and clinical writing for anthropology. The course will include recent writings on topics such as violence, post-colonialism, and affect, and the place of contemporary theorists within and influenced by psychoanalysis for an anthropology of the subject and subjectivity. Theoretical, methodological and interviewing issues, as well as approaches to writing, will be considered.

ANTHRO 2796 Medical Anthropology: Advanced Topics

CourseID: 160441

Faculty: Arthur Kleinman

Next Term Offered: 2019 Spring

A review of the latest and most advanced contributions to theory, methods, especially ethnography, findings, as well as policy contributions in medical anthropology.

ANTHRO 2800 Social Theory, In and Out of Africa

CourseID: 160345

Faculty: Jean Comaroff

Next Term Offered: 2018 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.

ANTHRO 2976 Society, Culture, and Modernity in Greece

CourseID: 207620

Faculty:

Next Term Offered:

Greece today is a country of revealing paradoxes: touted as the home of modern European philosophical and political ("democratic") culture yet often relegated to the margins of European geo-politics, Greece has in recent years been known more for its economic crisis than for its cultural contributions. Yet the country continues to serve as a symbol of those institutions ?notably the European Union ?that treat it with the least respect. What are the reasons behind this paradox? What can a careful reading of the state of culture in Greece today tell us about the country's "real" history and about its wider significance?

Answering such questions via a "quick and dirty" shortcut offers no real answers at all. To understand the situation of modern Greece requires a careful assessment of its traditional culture and values, its beholden ("crypto-colonial") relationship to the Western powers (including the dominant members of the E.U. as well as the United States), and the complex intersection of gender, politics, and social attitudes (including those prevalent in communities regarded as lawless by the Greek state, from social bandits to student rebels).

In this course, therefore, we will explore the Greek enigma "from the bottom up"?from the perspective of unarguably "traditional" rural societies to the crisis-ridden modern nation-state as experienced by a wide range of its citizens. Much journalistic coverage of the crisis is informed by a remarkable ignorance of, and inattention to, the values and concepts that have shaped present-day Greek attitudes over many centuries. A great deal of the media coverage from within Greece represents the perspectives of particular ideologies and parties. We will devote some time to considering how the representations of responsibility and obligation affect the way the present crisis is playing out.

Applied Computation

APCOMP 221 Critical Thinking in Data Science

CourseID: 207093

Faculty:

Next Term Offered: 2019 Spring

This course examines the wide-ranging impact data science has on the world and how to think critically about issues of fairness, privacy, ethics, and bias while building algorithms and predictive models that get deployed in the form of products, policy and scientific research. Topics will include algorithmic accountability and discriminatory algorithms, black box algorithms, data privacy and security, ethical frameworks; and experimental and product design. We will work through case studies in a variety of contexts including media, tech and sharing economy platforms; medicine and public health; data science for social good, and politics. We will look at the underlying machine learning algorithms, statistical models, code and data. Threads of history, philosophy, business models and strategy; and regulatory and policy issues will be woven throughout the course.

APCOMP 272 Kinetic Methods for Fluids: Theory and Applications

CourseID: 127562

Faculty:

Next Term Offered: 2021 Spring

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

APCOMP 290R Extreme Computing: Project-based High Performance Distributed and Parallel Systems

CourseID: 160444

Faculty:

Next Term Offered: 2020 Fall

Predictive computer simulations will play a critical role in scientific discoveries, national competitiveness, and in solving societal problems. For such predictions of real problems, the ability to scale the solution techniques, algorithms, and software to large-scale is necessary. This course will explore the techniques used for extreme computing (distributed cloud computing, scaling, performance, etc), supporting infrastructure (distributed file systems, replication, web services etc) and algorithms (MapReduce,

Graph Methods, Kinetic Monte Carlo etc). Specifically, the course will identify three areas from physical, natural and social sciences that could be addressed by these techniques. The social sciences module will focus on customer reviews and influencing; the bio/health module will focus on cancer modeling; the materials module will focus on battery modeling. The faculty from Harvard, in collaboration with the visitors from National Cancer Institute and Argonne National Laboratories, will conduct the lectures and computer labs. Computing resources will be provided for the class projects.

Applied Mathematics

APMTH 126 Statistics and Inference in Biology

CourseID: 110059

Faculty:

Next Term Offered: 2021 Spring

We often deal with incomplete information when going about our lives: recognizing a friend's face covered by a shadow, having a phone conversation where the reception is poor, reading a document with lots of spelling and grammatical errors. In such circumstances, we make good guesses to process and understand the data. How do we do this? What kind of mathematical framework do we need to interpret noisy and incomplete data? This course will develop a set of statistical tools that will help us solve such poorly posed problems. We will draw on examples from primary literature in biology to study optical illusions, text recognition, sequence alignment, decoding cryptographs, processing of chemo-attractive signals to find food, and survival strategies of bacteria in unpredictable environments to motivate the underlying mathematical framework.

APMTH 140R Computational Geometry

CourseID: 110063

Faculty:

Next Term Offered: 2020 Fall

An inquiry based and hands on exploration in computational geometry. Topics include: projective geometry (duality between points/lines, symmetry among spheric/planar/hyperbolic geometry), linear algebra (vectors, matrices, symmetry groups) and recursion. We will draw pretty pictures (fractals, tessellations, algebraic curves, etc.). We will write computer programs in Mathematica (and possibly Java, if time permits).

APMTH 141R Computational Music Theory

CourseID: 110333

Faculty:

Next Term Offered: 2021 Spring

An inquiry based and hands on exploration in computational music theory, combining mathematics, computer programming and aesthetics. Math topics: vector space model of music theory, binary tree model of scale theory. Programming in Mathematica: converting between notes and numbers, output to music notation, input from audio. Aesthetics: build your own musical instruments, invent your own music notation, compose pieces. You need to bring your laptop to class every day. Be sure to install & register Mathematica before the first class. Generally, we will program on Mondays and Wednesdays, and build/test instruments on Fridays. Grading based on final project, in-class assignments, in-class participation. No written exams or written homework outside

class. You will present your finished programs, instruments and beautiful music to the class.

APMTH 206 Advanced Applied Algebra

CourseID: 121467

Faculty:

Next Term Offered: 2020 Fall

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; selected readings.

APMTH 215 Fundamentals of Biological Signal Processing

CourseID: 127196

Faculty:

Next Term Offered: 2021 Spring

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

APMTH 222 Stochastic Modeling

CourseID: 109344

Faculty:

Next Term Offered: 2021 Spring

The course covers the modeling, analysis, and control of stochastic systems. Topics include Bernoulli and Poisson processes, Markov chains and Markov decision processes, optimization under uncertainty, queuing theory, and simulation. Applications will be presented in healthcare, inventory management, and service systems.

APMTH 232 Estimation and Control of Dynamic Systems

CourseID: 161259

Faculty:

Next Term Offered: 2020 Fall

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: 2018 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 217 Foundations of Modern Optics

CourseID: 121975

Faculty:

Next Term Offered: 2020 Fall

Optical systems and lasers have recently revolutionized both technology and basic research. We cover the fundamental physics of light and of light-matter interactions, including optical wave-propagation, ray optics, optical imaging and Fourier optics, quantization of electromagnetic fields, and nano-optics.

APPHY 226 Introduction to Soft Matter - Capillarity and Wetting

CourseID: 125449

Faculty:

Next Term Offered: 2021 Spring

Consider phenomena strongly influenced by surface tensions, high curvatures, thin films, diffusion, adsorption, wetting, which are variously mobile, dynamic, polymeric, transient, and fragile. Emphasis on the physics, thermodynamics, rheological, and scaling laws that govern bulk behavior.

APPHY 227 Landmark Papers in Soft Matter

CourseID: 109668

Faculty:

Next Term Offered: 2018 Fall

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

APPHY 284 Statistical Mechanics

CourseID: 131392

Faculty:

Next Term Offered: 2018 Fall

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

APPHY 292 Kinetics of Condensed Phase Processes

CourseID: 134488

Faculty:

Next Term Offered: 2019 Spring

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

APPHY 293 Dislocations and Deformation Behavior of Materials

CourseID: 143807

Faculty:

Next Term Offered: 2020 Fall

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

Astronomy

ASTRON 189 Exoplanet Systems

CourseID: 108130

Faculty:

Next Term Offered: 2018 Fall

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 201 Stellar Astrophysics

CourseID: 118266

Faculty: Alicia Soderberg

Next Term Offered: 2018 Fall

Stars are the basic building blocks of the universe, and they are responsible for the production of most elements via nucleosynthesis. This course covers the energy generation and transport in stars, stellar atmospheres and radiative transfer, stellar evolution, and asteroseismology. The Sun and its heliosphere are also studied as the closest and best-studied examples of a star and its circumstellar plasma. This course also provides a brief survey of planetary astrophysics, including the dominant processes acting in the interiors and atmospheres of planets in our own solar system and in others.

ASTRON 203 Interstellar Medium and Star Formation

CourseID: 118138

Faculty:

Next Term Offered: 2019 Spring

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

ASTRON 251 Quantum Mechanics for Astrophysics

CourseID: 118140

Faculty:

Next Term Offered: 2019 Fall

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

Medical Sciences

BCMP 213 Behavioral Pharmacology

CourseID: 141859

Faculty:

Next Term Offered: 2019 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: 2018 Fall

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

CELLBIO 212 Biology of the Cancer Cell: From Molecular Mechanisms to Therapeutic Implications

CourseID: 125825

Faculty: David Frank

Next Term Offered: 2019 Spring

This semester long course takes a molecular approach to examine the basis of human cancer. The main concepts that we will cover include: cancer genetics and epigenetics, tumor suppressor genes and oncogenes, signal transduction, DNA damage and repair, angiogenesis, metastasis and invasion, apoptosis, cancer stem cells, and tumor immunology and immunotherapy. Lectures will be delivered by experts in the various fields to provide an integrated perspective on past, current and future approaches in cancer biology research. In addition, students will participate in workshops in which they will delve more deeply into the primary literature of several of these topics.

CELLBIO 302QC Advanced Experimental Design for Biologists

CourseID: 127479

Faculty: Randall King

Next Term Offered: 2019 Spring

This course will focus on both the theory and practice of experimental design. The emphasis is on project planning and vetting, individual experimental design, and troubleshooting. Special focus will be placed on methods to avoid experimental bias, and potential sources of inappropriate interpretation. Also the importance of system validation is especially emphasized.

CELLBIO 310QC Current Topics in Cancer Biology Research

CourseID: 109381

Faculty: Alex Toker

Next Term Offered: 2018 Fall

This course is designed for early- to mid-year graduate students that are interested in exploring current topics related to the Hallmarks of Cancer. Leading and cutting edge technologies in Cancer Biology Research are explored in-depth using recent papers of high profile in a round-table discussion format. Course sessions consist of a short lecture led by a postdoctoral discussion leader to review background information, followed by discussion of the literature selected for that session. Topics include: Metastasis and EMT, Tumor Microenvironment and Metabolism, Cancer Genomics, Cancer and microRNAs, and Cancer Stem Cells.

IMMUN 306QC Systems Immunology

CourseID: 146654

Faculty: Nir Hacohen

Next Term Offered: 2019 Spring

Our focus in this course is on the emerging field of systems immunology. Each session will review a class of experimental approaches, followed by a critical discussion of illustrative papers. Hands-on workshops will introduce students to computational tools for analyzing large-scale datasets, focusing on gene expression.

IMMUN 308QC Transformational Immunology

CourseID: 159944

Faculty: Shiv Pillai

Next Term Offered: 2019 Spring

This is a reading course with central themes on advances in immunology that created new paradigms and changed the field. There will be a reading requirement of 2-3 relevant papers on the topics of discussion for each week. Each session will consist of a student-led presentation of background on the topic (which will consist of a brief introduction followed by a discussion involving the whole class) followed by another student's presentation of the key points of the papers and how the new findings transformed the field. Each student is expected to make two presentations during the seven-week course. Evaluation is based on presentations and class participation.

NEUROBIO 307QC Molecular Causes of Congenital Defects of the CNS

CourseID: 109113

Faculty: Mary Loeken

Next Term Offered: 2019 Spring

Congenital defects can be caused by inheritance of a defective gene, maternal infection, or prenatal exposure to environmental teratogens. Use of mutant mouse strains and genomic sequencing have been particularly useful in the rapid proliferation of our understanding of the cellular and molecular mechanisms by which congenital defects of the brain or nervous system arise, and how they lead to functional consequences that range from biochemical abnormalities to gross structural defects.

NEUROBIO 309QC The Molecular Pathology and Current Therapies for Retinal Diseases

CourseID: 109255

Faculty: Dong Chen

Next Term Offered: 2018 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.

VIROLOGY 302QC Viruses of Nonvertebrate Eukaryotic Hosts

CourseID: 161290

Faculty: Max Nibert

Next Term Offered: 2019 Spring

In this course, we will expand our view, commonly focused on viruses of humans and sometimes other vertebrates, to viruses of more evolutionarily distant eukaryotic hosts including protozoa, fungi, plants, & arthropods. Emphasis will be placed on alternative means of transmission and spread exhibited by these viruses, but other distinctive aspects of their life cycles will be considered as well. Active student participation will be expected and essential for the success of this readings- and discussions-based course, which is intended for more advanced students who have some previous background in virology.

Biomedical Engineering

BE 125 Tissue Engineering

CourseID: 121282

Faculty:

Next Term Offered: 2019 Spring

Fundamental engineering and biological principles underlying field of tissue engineering, along with examples and strategies to engineer specific tissues for clinical use. Students will prepare a paper in the field of tissue engineering, and participate in a weekly laboratory in which they will learn and use methods to fabricate materials and perform 3-D cell culture.

BE 128 Introduction to Biomedical Imaging and Systems

CourseID: 204470

Faculty:

Next Term Offered: 2019 Spring

The course is designed as an introduction for students who want to gain both hands on training as well as an introduction to the physics and image reconstruction techniques involved in generating images. The course will introduce the fundamentals of the major imaging modalities including, but not limited to: electron microscopy, optical microscopy, x-ray, computed tomography, ultrasound, MRI, and nuclear imaging, as well as an overview of in vivo imaging and molecular imaging. This course also includes a lab section every other week.

BE 153 Bioelectromagnetics

CourseID: 156945

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. The content and course requirements are similar to Engineering Sciences153. Students may not take both courses for credit. Basic electromagnetism (Applied Physics 50b, Physics 11b or 15b, Physical Sciences 12b, or equivalent), basic vector calculus (Applied Math 21a or equivalent), basic differential equations (Applied Math 21bor equivalent).

BE 160 Chemical Kinetics and Reactor Design

CourseID: 156207

Faculty:

Next Term Offered: 2020 Fall

Introduction to chemical kinetics and reactor design with applications to bioengineering, chemical engineering, environmental sciences and other areas.

Biophysics

BIOPHYS 204 Structural Biology From Molecules to Cells

CourseID: 119219

Faculty: Stephen Harrison

Next Term Offered: 2019 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.

Biostatistics

BIOSTAT 238 Principles and Advanced Topics in Clinical Trials

CourseID: 125262

Faculty:

Next Term Offered:

This course focuses on selected advanced topics in design, analysis, and interpretation of clinical trials, including study design; choice of endpoints (including surrogate endpoints); interim analyses and group sequential methods; subgroup analyses; and meta-analyses.

BIOSTAT 312 Consultation

CourseID: 119862

Faculty:

Next Term Offered: 2019 Fall

Work on current statistical consultation activities.

Biological Sciences in Public Health

BPH 206 Advanced Respiratory Physiology

CourseID: 108448

Faculty: James Butler

Next Term Offered: 2018 Fall

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

BPH 301QC Molecular Basis for Nutritional & Metabolic Diseases

CourseID: 127598

Faculty: Chih-Hao Lee

Next Term Offered: 2019 Spring

Students have an opportunity to review and analyze key papers that provide physiological and molecular evidence that bears on a topic of current interest in human nutrition and related disorders. Additionally, students learn skills necessary for critical thinking, and oral and written presentations.

BPH 319QC Biology and Control of Insect Vectors in Human Health

CourseID: 156653

Faculty: Flaminia Catteruccia

Next Term Offered: 2019 Spring

The course will provide an introduction to the biology, genetics and control of insect vectors of infectious diseases that are relevant for Public Health. The focus will be on the mosquito vectors of human malaria, however students will study other vector-borne diseases including African Trypanosomiasis, Dengue and Yellow Fever. The course will address the major biological components shaping vectorial capacity: vector/parasite interactions; immunity; host seeking behavior, reproduction; chemoreception. The role of symbionts and microbiota in insect physiology and disease transmission will also be discussed. Strengths and limitations of current control strategies based on the use of insecticides (bednets and sprays), traps, larvicidal compounds, biological agents and environmental strategies will be discussed, as well as novel strategies based on genetically modified organisms and paratransgenic control (bacteria/fungi). Students will also learn current methods for functional and comparative genomics of principal disease vectors.

Celtic Languages and Literatures

CELTIC 105 The Folklore of Gaelic Ireland

CourseID: 160495

Faculty:

Next Term Offered: 2018 Fall

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 106 The Folklore of Gaelic Scotland

CourseID: 127369

Faculty: Natasha Sumner

Next Term Offered: 2019 Spring

An introduction to the traditional stories, lore, customs, and music of Gaelic Scotland and Nova Scotia. Scottish Gaelic folklore exploded onto the world stage in the 1760s with the publication of Macpherson's 'Ossianic' epics, which he alleged to have translated from Gaelic originals. The ensuing controversy motivated scholars to seek out and record Gaelic folklore. The treasure trove they discovered has amazed those interested in traditional cultures ever since. This course introduces prominent collectors, tradition bearers, and their traditions. Issues of collecting are considered, and theoretical approaches are explored to gain a deeper understanding of the material. All texts are available in English translation.

CELTIC 120 Food and Fantasy in Irish Tradition

CourseID: 203245

Faculty:

Next Term Offered: 2019 Spring

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 137 Celtic Mythology

CourseID: 111202

Faculty:

Next Term Offered: 2018 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.

CELTIC 187 Literature of the Dispossessed: Gaelic Ireland, c.1600-1900

CourseID: 203293

Faculty:

Next Term Offered: 2019 Spring

An introduction to Irish Gaelic poetry and prose of the seventeenth to nineteenth centuries, this course explores poets' preoccupations and creative impulses in a time of regular conflict and drastic sociopolitical change. Critical issues we will consider include, but are not limited to, the role(s) of the poet in society, tradition and innovation, orality, and intertextuality. All texts will be read in English translation.

CELTIC 194 The World of the Celtic Bard

CourseID: 126775

Faculty: Catherine McKenna

Next Term Offered: 2019 Spring

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

IRISH 160R Advanced Modern Irish

CourseID: 120282

Faculty: Natasha Sumner

Next Term Offered: 2018 Fall

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

IRISH 161R Continuing Advanced Modern Irish

CourseID: 113909

Faculty: Natasha Sumner

Next Term Offered: 2019 Spring

Continuation of the fall term course.

IRISH 204R Readings in Early Irish Poetry

CourseID: 123862

Faculty:

Next Term Offered: 2019 Spring

Readings in selected texts.

IRISH 205R Readings in Early Irish Prose

CourseID: 111898

Faculty:

Next Term Offered: 2018 Fall

Readings in selected texts.

WELSH 225A Medieval Welsh Language and Literature

CourseID: 113537

Faculty: Catherine McKenna

Next Term Offered: 2018 Fall

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

Chemistry and Chemical Biology

CHEM 106 Physical-Organic Chemistry

CourseID: 108840

Faculty:

Next Term Offered: 2019 Spring

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 110 Small Molecules and Biological Processes

CourseID: 110241

Faculty:

Next Term Offered: 2018 Fall

Small molecules are extraordinarily useful tools to investigate biological processes, perturb cell states and treat human diseases. They are complementary to many biological techniques (e.g. expression of mutant proteins, RNAi, genome editing and antibodies) in that they are fast-acting, typically cell permeable, easily reversible, and they can engage multiple targets simultaneously. In this course, we will discuss how these useful small molecules are discovered, how they have revealed deep insights into biological processes, and how they are employed as therapeutics.

CHEM 115 Advanced Organic Chemistry: Synthesis of Complex Molecules

CourseID: 114209

Faculty: Andrew Myers

Next Term Offered: 2018 Fall

An integrated course in complex synthetic problem solving that focuses on the development of principles and strategies for synthesis design with a concurrent, comprehensive review of modern synthetic transformations.

CHEM 155 Advanced Inorganic Chemistry II

CourseID: 156395

Faculty:

Next Term Offered: 2018 Fall

Transition element chemistry will be discussed with an emphasis on synthesis, structure, bonding, and reaction mechanisms. Connections between molecular structure and electronic structure and how that parlays into reactivity will be emphasized throughout. Advanced problems of interest to inorganic chemistry will be discussed in the context of catalysis, organometallics, and bioinorganic processes. The course will be discussion driven with a heavy reliance on the current literature.

CHEM 156 Materials Chemistry

CourseID: 207680

Faculty:

Next Term Offered:

Inorganic title.....

CHEM 171 Biological Synthesis

CourseID: 107702

Faculty:

Next Term Offered: 2017 Fall

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.

CHEM 190 Statistical Mechanics in Chemistry and Biology

CourseID: 128016

Faculty:

Next Term Offered: 2018 Fall

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

CHEM 210 Mechanistic Molecular Electrochemistry

CourseID: 204520

Faculty:

Next Term Offered: 2019 Spring

The goal of this course is to provide a description of the useful electrochemical tools (mainly through cyclic voltammetry and rotating disc voltammetry techniques) to

investigate the mechanism of chemical reactions as well as electrochemical processes such as charge storage and small molecule activation. The course will begin with a review of these subjects and then lectures will move to more advanced topics, beginning with the coupling of electron transfer and different types of chemical reactions, including the electrochemical characteristics of cyclic voltammograms and rotating disk profiles when there are bond breaking and making processes accompanying electron and proton coupled electron transfers. Redox catalysis and chemical catalysis will be distinguished, and formalisms for catalytic reactions will be developed including "catalytic Tafel plots" to allow for benchmarking activity for catalysts in solution supported on electrodes. Case studies from the literature will be presented to illustrate the concepts developed in the lectures.

CHEM 242 Quantum Mechanics for Physical Chemistry

CourseID: 112103

Faculty:

Next Term Offered: 2019 Fall

This course describes the quantum mechanics, dynamics and vibronic spectroscopy of molecules as well as scattering theory including chemical reactions. Born-Oppenheimer theory, time dependent quantum mechanics. Powerful and intuitive semiclassical approximations are developed starting from the Feynman path integral. Decoherence and its crucial role in many experiments is discussed.

CHEM 255 Practical Crystallography in Chemistry and Materials Science

CourseID: 107709

Faculty:

Next Term Offered: 2019 Spring

Due to great technical advances, crystal structure analysis plays an increasingly important role in the structure determination of complex solids. This course involves the basic principles of crystallography and covers advanced aspects of practical crystal structure refinement. Topics include crystal symmetry, space groups, geometry of diffraction, structure factors, and structure refinement. Students will gain a working knowledge of x-ray crystallographic techniques, including how to: grow quality crystals, collect data, reduce data, determine a structure, visualize structure, utilize structural databases, publish crystallographic results. Watch [Learning Crystal Structure Analysis at Harvard](#).

East Asian Languages and Civilizations

CHNSE 280 Teaching Chinese as a Foreign/Second Languages

CourseID: 109520

Faculty:

Next Term Offered: 2019 Spring

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

CHNSHIS 224 Introduction to T'ang and Sung Historical Sources

CourseID: 119134

Faculty: Peter K. Bol

Next Term Offered: 2018 Fall

Introduction to the reading and interpretation of sources useful in the study of T'ang and Sung history. Recent scholarship and methodological issues are also discussed.

CHNSHIS 233R Sources of Early Chinese History

CourseID: 114370

Faculty: Michael J. Puett

Next Term Offered: 2018 Fall

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 235R Topics in Warring States History: Seminar

CourseID: 110786

Faculty: Michael J. Puett

Next Term Offered: 2018 Fall

Close reading of texts from the Warring States period.

CHNSHIS 253 Topics in Late Imperial History

CourseID: 125694

Faculty: Mark Elliott

Next Term Offered: 2019 Spring

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.

CHNSHIS 270B Research Methods in Late Imperial Chinese History II: Seminar

CourseID: 126542

Faculty: Michael Szonyi

Next Term Offered: 2018 Fall

Continued training in sources and methods for research in the history of late imperial China. Students will use original sources to write a research paper on a topic of their choosing.

CHNSLIT 115 Gender and Power in Chinese Literature: Seminar

CourseID: 124530

Faculty: Wai-Yee Li

Next Term Offered: 2020 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 201A History of Chinese Literature: Beginnings through Song

CourseID: 114373

Faculty: Xiaofei Tian

Next Term Offered: 2018 Fall

In-depth, scholarly introduction to history of Chinese literature and literary culture from antiquity through 1400. Also examines state of the field and considers issues for future research. Includes bibliography. Essential for general preparation.

CHNSLIT 211R Poetry, Self and Nation in the Nineteenth Century

CourseID: 203468

Faculty: Xiaofei Tian

Next Term Offered: 2018 Fall

In this course we will read late Qing or nineteenth-century poetry, especially poetry written around and during the Opium Wars and the Taiping Rebellion. The poets examined include, among others, Yao Xie (1805-1864), Huang Xieqing (1805-1864), Zheng Zhen (1806-1864), Bei Qingqiao (1810-1863), Jiang Shi (1818-1866), and Jin He

(1818-1885). This is a much understudied area in Chinese literary studies. The pedagogical goal of the course is thus to offer students a point of entry into the overwhelmingly voluminous material of late Qing poetry beyond a few canonical figures (such as Gong Zizhen or the later Huang Zunxian), to examine how, and why, poetry in classical forms continued to play a crucial role in thinking through complex issues and painful crises of personal life and national life.

Note: The "r" (repeatable) in the course number indicates that the content and focus of the course may change from year to year.

CHNSLIT 227R Early Chinese Historical Writings: Zuo zhuan and Related Materials

CourseID: 114804

Faculty: Wai-Yee Li

Next Term Offered: 2019 Fall

We will study canonical works in early Chinese historical writings and explore questions of ideology, rhetoric, and narrative?the conceptions of time, change, and causation; modes of reasoning, argument, and observation; forms of speech and narrative. The purpose is to introduce seminar participants to these materials and their exegetical traditions.

CHNSLIT 248 Modern Chinese Literature: Theory and Practice: Seminar

CourseID: 124652

Faculty: David Der-Wei Wang

Next Term Offered: 2019 Fall

Survey of the concepts, institutions, canons, debates, experiments, and actions that gave rise to, and continually redefined, modern Chinese literature. Equal attention given to theories drawn from Chinese and Western traditions.

CHNSLIT 272 The Legacy of the May Fourth: A Critical Survey of Modern Chinese Literary Culture

CourseID: 207563

Faculty:

Next Term Offered:

On May 4, 1919, thousands of students in Beijing took to the streets to protest the resolution of the Peace Conference in Paris that concluded the First World War. Though China had been on the side of the Allies against Germany, the Treaty of Versailles arranged for the German-held concessions in China to be handed over to Japan, another supporter of the Allies. The Allies' disregard of China's sovereignty and the Chinese government's weak response to the handover aroused nationwide indignation. Patriotic protests soon spread to all the major cities, culminating in a national campaign for

sociopolitical reform and cultural renovation.

Since the early 1920s, the May Fourth Movement has been presented as the harbinger of modern China in almost all domains. It has taken on a mythopoetic dimension, signaling the magical beginning of Chinese modernity. In particular, literature was celebrated as the cultural and sociopolitical institution through which the nation would be reformed and the Chinese mind re-formed. This approach is subject to review in the new millennium. The seminar seeks to take issue with the "legacy of May Fourth" by rethinking the conventional wisdom regarding the movement, from "enlightenment" to "revolution," from "Mr. De" (democracy) to "Mr. Sai" (science), from nationhood to selfhood. Literature in a broad sense—fiction, poetry, biography, manifestos and political treatises, etc.—will be the avenue for our inquiry and contestation. We will also take into account issues related to the use and abuse of the May Fourth in terms of the Foucauldian production of the "truth regime." Loosely following a chronological order, the seminar will focus on three thematic modules: "a revolution of the mind"; "the politics of enlightenment"; and "re-enlightenment and re-enchantment." Meanwhile, questions will be raised as to the "repressed modernities"—genres, figures, discourses, and movements that have been obscured or even denigrated as a result of May Fourth's calls for revolution and enlightenment.

Students are expected to submit weekly reading responses prior to class meeting and a research paper at the end of the semester. In view of the workload of weekly assignments, we will provide both the Chinese texts and English translations (whenever available) for the class.

CHNSLIT 280 Shanghai and Beijing: A Tale of Two Cities: Seminar

CourseID: 109512

Faculty: Jie Li

Next Term Offered: 2019 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.

EABS 245R Ritual and Text in Japanese Buddhist Literature

CourseID: 119754

Faculty: Ryuichi Abe

Next Term Offered: 2018 Fall

Examines the way in which rituals are approached, described, and interpreted in primary

Japanese Buddhist texts. Students will acquire skills allowing them to move freely in their reading of texts from diverse literary genres.

EABS 255 Readings on Chinese Religions: Recent Scholarship on Chinese Buddhism and Daoism: Seminar

CourseID: 125640

Faculty: James Robson

Next Term Offered: 2018 Fall

This seminar aims to discuss significant new works in the field of Chinese Religions by focusing on the historical, doctrinal, and philosophical development of the Buddhist tradition in China.

EABS 256R Chinese Buddhist Texts - Readings in Medieval Buddho-Daoist Documents: Seminar

CourseID: 125643

Faculty: James Robson

Next Term Offered: 2019 Spring

This seminar focuses on the careful textual study and translation of a variety of Chinese Buddho-Daoist texts through the medieval period.

EAFM 112 Global Japanese Cinema

CourseID: 159550

Faculty: Alexander Zahlten

Next Term Offered: 2019 Fall

This course introduces Japanese cinema and its key works, styles and history as a highly influential part of global film culture. From the use of slow-motion in action scenes to the role of robots in Star Wars, cinema from Japan has left its mark on film as we know it today. Indeed Japanese film has influenced not only the history of film itself, but also the very way we think about film and film aesthetics. The course examines major historical developments in the cinema of Japan and surveys many of its most important films and their historical contexts. It explores some of the major questions that cinema from Japan has raised for thinking about the cinematic form and moving images. Through engaging with some of the masterpieces of Japanese cinema participants will acquire tools and methods for analyzing film. In the context of Japanese film history they will interrogate terms such as "national cinema", "humanism", "film auteur", "gender" or "modernism" and explore how cinema in Japan itself actively wrestled with such concepts. The course will center around questions such as: Is there such a thing as "Japanese" cinema? What kind of influences and counter-influences were exerted between cinema in Japan and the global context? How has cinema from Japan changed how we think about film and moving images? Which potential does it hold for radically

changing our thinking about film and moving images even today?

In addition to class meetings on Wednesday 2-4, there are film screenings on Monday 5-7.

EAFM 127 Frames in Time: Korean Cinema as History and Filmmaking

CourseID: 207561

Faculty:

Next Term Offered:

This course will trace the development of Korean cinema from the 1930s to the present, approaching the subject through two alternating lenses: One focuses on cinema as depicting and reflecting historical moments and changes in Korean society, and the other focuses on the transformations of Korean filmmaking and its interactions with national, regional, and global cinemas. During the semester the course will introduce students to a diverse array of key Korean films, including North Korean cinema. Arranged both thematically and diachronically, the films will shed light on both of these perspectives and allow the course to consider how the art and technology of filmmaking in each case has been applied to enhance and explore the subject matter of the film.

EAFM 151 Documenting China in Film and Photography

CourseID: 204991

Faculty: Jie Li

Next Term Offered: 2018 Fall

How have cameras borne witness to modern Chinese history and contemporary China's transformations? In this course, we will analyze documentary photography and cinema taken in China from the early 20th century to the present day, through the lenses of both Chinese and foreigners. 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 representation. Although we will give special focus to major historical events such as the Second Sino-Japanese War, the Cultural Revolution, and the 1989 Tiananmen protests, we will also examine visual documents of contemporary Chinese society such as migrant labor, demolitions, the One Child Policy, and environmental issues. Audiovisual texts will be complemented by theoretical and contextual readings, and the final project for the course will be writing a proposal for a documentary project of one's own.

EAFM 201 Media Mix: Representations and Meaning Between Media in Japan: Seminar

CourseID: 108471

Faculty: Alexander Zahlten

Next Term Offered: 2019 Spring

This course will explore different histories of the interconnection of media in Japan, from the early ties between theater, literature and cinema to the popularization of the media mix by the company Kadokawa and the current routes between manga, anime, light novels, films and games.

For Fall 2015, classes will meet Thursday 2-4:29 and film screenings on Tuesday 6-7:59.

EAFM 202 Rip and Tear--The Body as Moving and Moved Image in Japanese Film: Seminar

CourseID: 108472

Faculty: Alexander Zahlten

Next Term Offered: 2019 Fall

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 204 Three Times + 1. Transitional Moments in Film and Media Culture in Japan: Seminar

CourseID: 109513

Faculty: Alexander Zahlten

Next Term Offered: 2018 Fall

This seminar will focus on transitional moments in the history of film and media culture in Japan, all of them embedded in decisive socio-political shifts. It will explore the deep transformations manifesting around the years 1927, 1963, and 1995, with an additional focus on 1973.

EAFM 220 Topics in Chinese Film and Media Studies: Seminar

CourseID: 109511

Faculty: Jie Li

Next Term Offered: 2018 Fall

This course addresses the question "What was/is cinema in China?" from shadow puppets to DV documentaries. Topics include cinema's arrival in China, silent film stars, sound film sing-alongs, wartime collaborations, mobile projection teams, revolutionary model operas, and Chinese cinema's transnational connections.

EASTD 98I Junior Tutorial: State and Society in Contemporary China

CourseID: 205171

Faculty: Nara Dillon

Next Term Offered: 2018 Fall

Junior Tutorial for students with an interest in China Social Sciences. This course introduces students to social science research on contemporary China by exploring the transformation of China's social structure and institutions in the wake of the market reforms. After examining key state institutions in the Mao era, including schools, factories, and communes, we will turn to their contemporary counterparts. In addition, we will study the role of ethnic minorities and religion in Chinese politics.

EASTD 140 Major Religious Texts of East Asia

CourseID: 143833

Faculty: Ryuichi Abe

Next Term Offered: 2019 Fall

This course aims at enabling students to read and analyze in depth major religious texts of East Asia, representing diverse traditions and genres. The course encourages students to take up their reading of texts not only as ways to acquire knowledge on Asian religious traditions, but as practice, labor, and play in which their ordinary way of understanding/experiencing the world and themselves will be challenged, reaffirmed, and renewed.

EASTD 220R Medieval Japanese Picture Scrolls

CourseID: 144504

Faculty: Melissa M. McCormick

Next Term Offered: 2019 Spring

Examines the rich tradition of medieval Japanese picture scrolls (*emaki*). Provides training in the reading of scroll texts (*kotobagaki*), the analysis of paintings, and the examination of the production contexts of important scrolls from the 12th to the 16th century. Aims to make picture scrolls available as a primary source for graduate research in many different disciplines within Japanese studies.

JAPAN 106B Kambun

CourseID: 111790

Faculty: Edwin Cranston

Next Term Offered: 2019 Spring

The goal of this course is to acquire skills to read and analyze Kambun (Sino-Japanese scripts used in Premodern Japan). Despite its antiquated and difficult character, Kambun is still important; without mastering it, we will never be able to thoroughly understand Japanese culture and society. After consolidating our foundational skills to analyze Kambun, we will read various Kambun texts organized by certain themes?significant events, historical figures, gender roles, religious ideas, and material goods?in order to advance our knowledge about premodern Japanese history, culture, and society. For example, we will explore the lives of courtiers, warriors, religious followers, and female

landlords, such as Heian courtier official Fujiwara no Munetada and royal princess Hachij?-in. By reading records on piracy, diplomacy, and natural disasters, we will also learn about different historical phenomena. The significance of Kambun training is to not only acquire an understanding of the grammatical rules and vocabulary; the real challenge and excitement of Kambun learning is to understand the society that developed the language, and to see how the language in turn shaped the society.

JAPAN 106C Later Classical Japanese

CourseID: 121032

Faculty: Edwin Cranston

Next Term Offered: 2019 Fall

Post-Heian writings in Classical Japanese.

JAPAN 210A Reading Scholarly Japanese for Students of Chinese and Korean

CourseID: 125813

Faculty:

Next Term Offered: 2018 Fall

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.

JAPAN 210B Reading Scholarly Japanese for Students of Chinese and Korean

CourseID: 124650

Faculty:

Next Term Offered: 2019 Spring

Continuation of Japanese 210a.

JAPNHIST 214R Major Issues in the Study of Japanese Religions

CourseID: 159553

Faculty: Helen Hardacre

Next Term Offered: 2019 Fall

This seminar is primarily for graduate students preparing for research and teaching in Japanese religions. Because it will have a different focus each time it is offered, students may take it more than once. The topic for Fall 2015 will be ethnographic studies of Shinto. Future offerings of the course will focus on such topics as shrine festivals (*matsuri*), religion in the Japanese empire, and Japanese new religious

movements. Most readings will be in English, but Japanese-language readings will also be included.

JAPNHIST 260R Topics in Japanese Cultural History

CourseID: 120567

Faculty: Shigehisa Kuriyama

Next Term Offered: 2019 Fall

The course will focus on the interplay of pictures and texts in Edo Japan in a wide variety of genres, including natural history, shunga, popular literature, how-to manuals, and advertisements. In addition to training students in the cultural analysis of printed illustrations, the course will also help students develop facility in reading *hentaigana* materials.

JAPNLIT 124 The Tale of Genji in Word and Image: Seminar

CourseID: 123007

Faculty: Melissa M. McCormick

Next Term Offered: 2018 Fall

Introduces students to *The Tale of Genji*, often called the world's first novel, authored by the court lady Murasaki Shikibu around the year 1000 CE. In addition to a close reading of the tale, topics for examination include Japanese court culture, women's writing, and the tale's afterlife in painting, prints, drama, manga, and film.

JAPNLIT 162 Girl Culture, Media, and Japan

CourseID: 125615

Faculty: Tomiko Yoda

Next Term Offered: 2019 Spring

The course examines the ways in which girlhood and girl culture have figured in the construction of gender, nation, and popular medias in modern to contemporary Japan. We will study visual and textual mediums, including novels, magazines, films, manga, and animation, paying attention to principal transformations that have marked the history of modern girl culture in Japan. No prior knowledge of Japanese language or history is expected.

JAPNLIT 233R Nara and Heian Court Literature: Seminar

CourseID: 124081

Faculty: Edwin Cranston

Next Term Offered: 2019 Spring

Topic: *Spring 2019, TBD; Topic Spring 2020, Man'yoshu*

JAPNLIT 270 Topics in Modern and Contemporary Japanese Fiction: Seminar

CourseID: 126923

Faculty: Tomiko Yoda

Next Term Offered: 2018 Fall

A seminar course on the history, theory, and practice of modern to contemporary Japanese fiction. The course will be organized around a specific theme, time period, a cluster of writers, critics, or genres.

JAPNLIT 271 Topics in Gender and Culture in Japan: Seminar

CourseID: 126924

Faculty: Tomiko Yoda

Next Term Offered: 2019 Spring

A seminar course that studies the constructions of gender and gender relations in Japan through the examination of various forms of expressive culture (visual, textual, sonic) in their historical contexts.

KOREAN 150A Readings in Cultural Studies

CourseID: 115517

Faculty:

Next Term Offered: 2018 Fall

Korean 150a is the first half of a content-based Korean language course, designed for promoting language proficiency at the high advanced level. The goal of this course is to achieve critical thinking and a deeper understanding of controversial issues in Korean culture, society, and history through the language. Students are expected to apply advanced language skills in formal settings in analyzing contemporary texts and media, discussing historical and current events, and formulate opinions and arguments on various topics. Texts and media are drawn from authentic sources in various genres such as literary works, editorials, academic essays, films, TV dramas, documentaries, etc. In-class debates, presentations, and academic research writing will be emphasized.

KOREAN 150B Readings in Cultural Studies

CourseID: 115518

Faculty:

Next Term Offered: 2019 Spring

Continuation of Korean 150a.

KORHIST 230R Readings in Premodern Korean History

CourseID: 113964

Faculty: Sun Joo Kim

Next Term Offered: 2020 Spring

A study of social, political, economic, and intellectual history of premodern Korea reviewing major scholarship in the field. Designed primarily for graduate students preparing for the general examination. All readings are in English.

KORHIST 257 Modern Korean History: Special Seminar

CourseID: 156717

Faculty: Carter Eckert

Next Term Offered: 2019 Spring

Readings and research in modern Korean history. Students are required to write a seminar paper based largely on primary materials. Focus in Fall 2016 will be on contemporary (post-1945) Korean history, especially the post-war 1950s and early 1960s.

KORLIT 211 Korea through Ideologies of Languages and Writing: Seminar

CourseID: 156593

Faculty: Si Nae Park

Next Term Offered: 2019 Spring

Koreans before the 20th century used literary Chinese and Chinese characters as the primary means of written expression. Present-day Koreans find this a vexing fact. What ideas of language and writing underpin such collective discomfort? This course examines how discourses on language and writing in Korea have shaped the ways in which Koreans imagined literary practices, cultural identity, power, gender, and literature. Our focus is Korea's long-time participation in and modern abandonment of the Sinographic Cosmopolis, but some of the readings will illustrate parallel cases of language ideologies in Japan, Vietnam, and China.

MANCHU A Elementary Manchu

CourseID: 124837

Faculty: Mark Elliott

Next Term Offered: 2018 Fall

Introduction to Manchu grammar with elementary readings in Manchu script.

MANCHU B Elementary Manchu

CourseID: 110884

Faculty: Mark Elliott

Next Term Offered: 2019 Spring

Readings in a variety of historical and literary texts with emphasis on Manchu documentary sources.

MONGOLN B Elementary Written Mongolian

CourseID: 123855

Faculty: Mark Elliott

Next Term Offered: 2019 Spring

Continuation of Mongolian A.

MONGOLN 120A Intermediate Written Mongolian

CourseID: 117090

Faculty:

Next Term Offered: 2019 Fall

Readings in classical and modern Mongolian texts.

MONGOLN 120B Advanced Written Mongolian

CourseID: 117091

Faculty:

Next Term Offered: 2020 Spring

Continuation of Mongolian 120a.

UYGHUR A Elementary Uyghur

CourseID: 124106

Faculty: Mark Elliott

Next Term Offered: 2018 Fall

Introduction to Uyghur, the Turkic language spoken in China's Xinjiang Uyghur Autonomous Region and throughout Central Asia. Course covers grammar, reading and writing (in the modified Arabic alphabet adopted in the PRC), and conversation practice.

UYGHUR B Elementary Uyghur

CourseID: 124107

Faculty: Mark Elliott

Next Term Offered: 2019 Spring

Continuation of Uyghur A. Completion of basic Uyghur grammar, listening and speaking practice with the aid of audio-visual materials, selected readings from Uyghur literature

and academic prose.

UYGHUR 120A Intermediate/Advanced Uyghur

CourseID: 124525

Faculty: Mark Elliott

Next Term Offered: 2018 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: Mark Elliott

Next Term Offered: 2019 Spring

Continuation of Uyghur 120A.

Classics, The

CLASARCH 162 Symptotic Culture

CourseID: 207664

Faculty:

Next Term Offered:

CLASARCH 225 Hellenistic Sculpture

CourseID: 207705

Faculty:

Next Term Offered:

Hellenistic Sculpture

CLASPHIL 268 Sociolinguistics and the Latin Language

CourseID: 207468

Faculty:

Next Term Offered:

CLS-STDY 222 Regional Study: Macedonia

CourseID: 109565

Faculty:

Next Term Offered:

GREEK K Advanced Greek Prose Composition

CourseID: 113714

Faculty:

Next Term Offered: 2019 Spring

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

LATIN 134 Archaic Latin

CourseID: 110649

Faculty:

Next Term Offered: 2018 Fall

Essentials of Latin comparative and historical grammar, with readings of early Latin inscriptions, legal texts, and selections from Livius Andronicus, Plautus, Ennius, and

Cato.

MODGRK AC Grammar and Reading for Heritage Speakers

CourseID: 160451

Faculty: Calliopi Dourou

Next Term Offered: 2018 Fall

This course is intended for heritage speakers (i.e. those who have learned some Greek at home during childhood) to help them acquire the foundations in morphology and syntax necessary to enable them to take the second half of Intermediate Modern Greek (MODGRK Bb) or the Introduction to Modern Greek Literature (MODGRK 100) in the spring. By combining a fast-paced and comprehensive grammar review with extensive practice in reading students advance their linguistic skills while at the same time they are introduced to Modern Greek literature and culture.

Comparative Literature

COMPLIT 103 Grounds for Comparison

CourseID: 128115

Faculty:

Next Term Offered: 2018 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: 2018 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 109 On Translation

CourseID: 117413

Faculty:

Next Term Offered: 2018 Fall

Examines theories of translation from various periods (Dryden, Schopenhauer, Schleiermacher, Benjamin, de Man, among others). Also looks closely at specific translated texts (e.g., various English translations of *The Thousand and One Nights*), and considers such topics as the notion of "unequal languages," the problem of cultural translation, translation post-9/11, and the possibility of untranslatability. Final project involves an original translation and commentary.

COMPLIT 113 Existential Fictions: From Saint Augustine to Jean-Paul

Sartre and Beyond

CourseID: 122573

Faculty:

Next Term Offered: 2018 Fall

How does one give meaning to life? Examines how great writers grapple with this question from the early days of Christianity to the digital age. Texts by Saint Augustine, Montaigne, Kierkegaard, Dostoyevksy, Nietzsche, Gide, Sartre, Beauvoir, Camus, Scorsese, and others. Special attention will be paid to how writers read and rewrite each other across centuries and borders. Cross-Listed with French.

COMPLIT 114 Mysticism and Literature

CourseID: 203092

Faculty:

Next Term Offered: 2018 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:

Next Term Offered: 2018 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:

Next Term Offered: 2018 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, Barth, Mahfouz, Sebbar, Zimmerman). Also considers the role of the *1001 Nights* in contemporary popular culture.

COMPLIT 123 Island Literature

CourseID: 160882

Faculty: Marc Shell

Next Term Offered: 2018 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:

Next Term Offered: 2018 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 131 The Arab American Experience in Fiction, Film, and Popular Culture

CourseID: 128114

Faculty: Sandra Naddaff

Next Term Offered: 2018 Fall

Since 9/11, there has been a proliferation of work about the Arab-American experience. This course will explore that experience as expressed in various cultural forms-fiction, film, comedy acts, graphic novels, memoirs, art installations, and new media. We will pay particular attention to contemporary works, although we will also consider the work of early 20th-century Arab-American writers. Works to be considered include *The Prophet*, *Syrian Yankee*, *Habibi*, *A Map of Home*, as well as *The Axis of Evil Comedy Tour*, *The Green Lantern* comic book series, and the television show *Make Room for*

Daddy. No knowledge of Arabic is required.

COMPLIT 132 Disability Studies

CourseID: 109664

Faculty:

Next Term Offered: 2018 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 Shakes the Globe

CourseID: 109665

Faculty:

Next Term Offered: 2018 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 134 World Cinema

CourseID: 109666

Faculty:

Next Term Offered: 2018 Fall

What is "world cinema"? How has cinema been responding, since its beginnings in the late 19th century, to global topics and debates that move the world? What contact zones exist between world cinema and world literature? Can we translate films from one culture into another? This course explores films by Georges Méliès, Dziga Vertov, Sergiej Eisenstein, Maya Deren, Wu Yonggang, Fritz Lang, Federico Fellini, Ousmane Sembène, Samira Makhmalbaf, Raoul Walsh, Luis Buñuel, Woody Allen, Pedro Almodovar, Nadine Labaki, and Deepak Rauniyar.

COMPLIT 135 History of Drama

CourseID: 109675

Faculty:

Next Term Offered: 2018 Fall

This course examines the history of drama in Europe, the Middle East, China, and the New World with a focus on early modernity. How can we approach dramatic texts? How does drama relate to representation and performance? How is drama from past centuries translated and staged in a globalized world? We will explore genres such as comedy, tragedy, commedia dell'arte, opera, shadow and puppet theater. Authors include: Muhammad Ibn Daniyal, Gil Vicente, Fernando de Rojas, Machiavelli, Sperone Speroni, Valeria Miani, Monteverdi, Corneille, Racine, Cervantes, Calderón de la Barca, Sor Juana, Louise Geneviève Gillot de Saintonge, Kong Shangren.

COMPLIT 136 The historical novel after modernism

CourselD: 107835

Faculty:

Next Term Offered: 2018 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

CourselD: 156474

Faculty:

Next Term Offered: 2018 Fall

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

CourselD: 160527

Faculty:

Next Term Offered: 2018 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:

Next Term Offered: 2018 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 146 Space and Place: The Environment in Film

CourseID: 124822

Faculty:

Next Term Offered: 2018 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 148 Crisis: Twentieth-Century European Novels

CourseID: 156476

Faculty:

Next Term Offered: 2018 Fall

Examines major twentieth-century novels through the lens of "crisis" understood traditionally as a decisive moment, but experienced catastrophically in the twentieth century as a state of being. Authors include Rilke, Conrad, Joyce, Musil, Breton, Barnes, Valle-Inclan, Schulz, Levi.

COMPLIT 154 Music, Literature, and the Voice

CourseID: 125538

Faculty:

Next Term Offered: 2018 Fall

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.

COMPLIT 155 Furor Poeticus: Madness, Inspiration, Genius

CourseID: 127014

Faculty:

Next Term Offered: 2018 Fall

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.

COMPLIT 157 From Type to Self in the Middle Ages

CourseID: 112654

Faculty: Luis Giron Negrón

Next Term Offered: 2018 Fall

It has been argued that the poetic "I" in premodern literatures is not a vehicle for self-representation, but an archetype of the human. The course will examine this thesis against the rise of autobiographical writing in medieval and early modern Europe. Readings include spiritual autobiographies (Augustine, Kempe, Teresa of Ávila), letter collections, *maqama* literature, troubadour lyric, Hispano-Jewish poetry, pilgrimage narratives, medieval allegories, Dante and the picaresque novel. Theoretical perspectives by Spitzer, Lejeune, Zumthor and DeCerteau.

COMPLIT 163 Jewish Languages and Literature

CourseID: 125260

Faculty:

Next Term Offered: 2018 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 174 Realism, Fantasy, and the Grotesque: Hoffmann and

Balzac

CourseID: 125539

Faculty:

Next Term Offered: 2018 Fall

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 and the uncanny; experience, observation and expression.

COMPLIT 177 Figures of Orpheus: Literature, Music and Visual Arts

CourseID: 160327

Faculty:

Next Term Offered: 2018 Fall

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.

COMPLIT 178 Writing Jewish Modernity

CourseID: 203093

Faculty:

Next Term Offered: 2018 Fall

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.

COMPLIT 179 Ghostwriters and Ventriloquists: Postwar Jewish American Culture

CourseID: 203082

Faculty:

Next Term Offered: 2018 Fall

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 ghosts in order to alternately dazzle and comfort the audiences. This course asks: How does "ghosting" 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, and others.

COMPLIT 193 What's Love Got to Do With It; Love Poetry of the Middle Ages and Early Modernity

CourseID: 108791

Faculty:

Next Term Offered: 2018 Fall

Does love have a history? The course explores the literary history of love poetry in Europe and the Middle East from the Middle Ages through the 17th century. Reading selections from Latin and Romance love lyric (Provençal, Galician-Portuguese, French, Catalan, Spanish, the `jarchas'), Arabic and Hebrew muwashshahat, the Italian dolce stil novo, Sufi and Christian mystical poetry, the Petrarchan sonnet and its heirs (Portugal, England, Spain), Dante's Vita Nuova and erotic narrative verse (Juan Ruiz, Ibn Hazm, `Roman de la Rose'). Discussions framed by overview of premodern theories of love and recent scholarly debates on the origins of amour courtois.

COMPLIT 194 Literary Criticism: Major Approaches and Methods

CourseID: 203216

Faculty:

Next Term Offered: 2018 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 207 Homer and Beyond: Theory and Comparative Methods in

Studying Oral Traditions

CourseID: 148222

Faculty:

Next Term Offered: 2018 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 214 Islands and the World

CourseID: 107411

Faculty:

Next Term Offered: 2018 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 227 Comparative Modernism

CourseID: 127034

Faculty:

Next Term Offered: 2018 Fall

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 230 The Poetics of Empire: Colonization, Translation, and Literary Rewriting

CourseID: 123859

Faculty:

Next Term Offered: 2018 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 242 Germany and the Greeks: Philhellenism from Winckelmann to Heidegger

CourseID: 203231

Faculty:

Next Term Offered: 2018 Fall

Topics include the relation of epic to German national identity; originality; genius and tradition; pedagogy and revolution; the formation of the lyrical subject and concepts of the modern *vates*; representations of the classical body; Dionysus and tragedy; *Mutterrecht*; the rise of Antiquarianism, philology, and classical scholarship.

COMPLIT 244 On Imagination: From Plato to Castoriadis

CourseID: 203240

Faculty:

Next Term Offered: 2018 Fall

This seminar explores the development of the concept of imagination in diverse premodern and modern philosophical/theoretical and literary contexts. Emphasis will be placed on Plato, Aristotle, the Neoplatonic philosophers, medieval Christian readers of antiquity, Kant, Fichte, the Romantics, Lacan, Iser, Todorov, and Castoriadis. This seminar will also develop an interdisciplinary approach to the topic by drawing on cognitive sciences and cognitive anthropology.

COMPLIT 246 The Critic in Culture

CourseID: 125149

Faculty:

Next Term Offered: 2018 Fall

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

COMPLIT 251 Literary Criticism and Theory: Antiquity to the Renaissance

CourseID: 125841

Faculty:

Next Term Offered: 2018 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 255 Dysfunctional Family as National Allegory in the Middle Eastern Novel

CourseID: 109673

Faculty:

Next Term Offered: 2018 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 259 The Bible as a Book (Graduate Seminar in General Education)

CourseID: 203275

Faculty:

Next Term Offered: 2018 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 millenia 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 261 Fragments of a Material History of Literature

CourseID: 120029

Faculty:

Next Term Offered: 2018 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:

Next Term Offered: 2018 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 264 Thinking and Writing Transculturally

CourseID: 123880

Faculty:

Next Term Offered: 2018 Fall

Explores approaches to transculturation in the production and evaluation of literature in light of new understandings of human and textual border-crossings. Topics include the ethics of dividing cultural products along ethnic, linguistic, and national lines on the one hand and classifying phenomena as global on the other, and the ramifications of cross-cultural comparison. We also examine the relationship between creative production and such topics as empire, travel/diaspora, translingualism, and literary reconfiguration.

COMPLIT 266 Irony

CourseID: 118731

Faculty:

Next Term Offered: 2018 Fall

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

COMPLIT 272 Ritual Poetics

CourseID: 203241

Faculty:

Next Term Offered: 2018 Fall

This courses explores the interaction between ritual modes of signification, (written as well as traditional oral) literature, and performance. The seminar proposes an interdisciplinary approach to the topic on the basis of anthropological research and literary and cultural theory. Specific literary examples are discussed in transhistorical and comparative contexts, ranging from ancient Greek tragedy to avant-garde literature.

COMPLIT 275 Theory of Narrative: Conference Course

CourseID: 115759

Faculty:

Next Term Offered: 2018 Fall

Studies of selected narratives (fictional, psychoanalytic, historical, sacred) as semiotic structures, representations, rhetorical gambits, and cultural phenomena. Readings by Jakobson, Barthes, Bakhtin, Iser, Lukacs, Foucault, and others.

COMPLIT 279 What should or could (scholarly) knowledge look like in the 21st Century? A Knowledge Design seminar

CourseID: 203049

Faculty:

Next Term Offered: 2018 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: 2018 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, Hélienne de Crenne, Joachim Du Bellay, Gaspara Stampa, Jan Kochanowski.

COMPLIT 283 Language Differences

CourseID: 108760

Faculty:

Next Term Offered: 2018 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:

Next Term Offered: 2018 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:

Next Term Offered: 2018 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 294 Debating World Literature

CourseID: 108790

Faculty:

Next Term Offered: 2018 Fall

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:

Next Term Offered: 2018 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.

Computer Science

COMPSCI 90NAR The Internet: Governance and Power

CourseID: 203579

Faculty:

Next Term Offered: 2020 Fall

In this course, we study cyberspace governance. Cyberspace is a unique combination of physical and virtual properties. In this course, we view cyberspace as a structure consisting of three layers: the physical layer represented by the global communication infrastructure and two virtual layers, composed by the Internet layer and the social and economic layer. Our focus concentrates on the top two layers. The principles, norms, rules, and procedures that shape the cyberspace are studied in this course through quantitative analysis of data collected from different sources in the digital world. Data-oriented analysis of problems and policies in cyberspace will be illustrated by examining several case studies in the major internet platforms. The case studies will help students to understand the role of social algorithms, programs that rank and classify people and information and services that provide customized experiences. Ultimately, students learn how to use quantitative methods to understand different issues related to digital governance.

COMPSCI 125 Algorithms and Complexity

CourseID: 156210

Faculty:

Next Term Offered: 2020 Fall

An accelerated introduction to theoretical computer science for students with strong mathematical preparation, to be taken in place of both Computer Science 121 and 124. Algorithm design methods, including graph algorithms, approximation algorithms, and randomized algorithms. Models of computation, computability theory, and computational complexity, including the P vs. NP question.

COMPSCI 146 Computer Architecture

CourseID: 113270

Faculty:

Next Term Offered: 2019 Spring

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

COMPSCI 153 Compilers

CourseID: 131493

Faculty:

Next Term Offered: 2020 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 164 Software Engineering

CourseID: 119247

Faculty:

Next Term Offered: 2021 Spring

An introduction to principles of software engineering and best practices. Students work in teams on the design, implementation, and deployment of a term-long project that solves a problem on campus. Structured as supervised independent study with weekly milestones and weekly meetings for design discussions and code reviews with an advisor.

COMPSCI 187 Computational Linguistics

CourseID: 117372

Faculty:

Next Term Offered: 2020 Fall

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

COMPSCI 209R Advanced Projects in Data Science

CourseID: 160439

Faculty:

Next Term Offered: 2020 Fall

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

COMPSCI 222 Algorithms at the Ends of the Wire

CourseID: 111994

Faculty:

Next Term Offered: 2020 Fall

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

COMPSCI 223 Probabilistic Analysis and Algorithms

CourseID: 114806

Faculty:

Next Term Offered: 2019 Spring

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

COMPSCI 224 Advanced Algorithms

CourseID: 156211

Faculty:

Next Term Offered: 2021 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: 2020 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 242 Computing at Scale

CourseID: 160624

Faculty:

Next Term Offered: 2021 Spring

Scaling computation over parallel and distributed computing systems is a rapidly advancing area of research receiving high levels of interest from both academia and

industry. The objective can be for high-performance computing and energy-efficient computing ("green" data center servers as well as small embedded devices). In this course, students will learn principled methods of mapping prototypical computations used in machine learning, the Internet of Things, and scientific computing onto parallel and distributed compute nodes of various forms. These techniques will lay the foundation for future computational libraries and packages for both high-performance computing and energy-efficient devices. To master the subject, students will need to appreciate the close interactions between computational algorithms, software abstractions, and computer organizations. After having successfully taken this course, students will acquire an integrated understanding of these issues. The class will be organized into the following modules: Big picture: use of parallel and distributed computing to achieve high performance and energy efficiency; End-to-end example 1: mapping nearest neighbor computation onto parallel computing units in the forms of CPU, GPU, ASIC and FPGA; Communication and I/O: latency hiding with prediction, computational intensity, lower bounds; Computer architectures and implications to computing: multi-cores, CPU, GPU, clusters, accelerators, and virtualization; End-to-end example 2: mapping convolutional neural networks onto parallel computing units in the forms of CPU, GPU, ASIC, FPGA and clusters; Great inner loops and parallelization for feature extraction, data clustering and dimension reduction: PCA, random projection, clustering (K-means, GMM-EM), sparse coding (K-SVD), compressive sensing, FFT, etc.; Software abstractions and programming models: MapReduce (PageRank, etc.), GraphX/Apache Spark, OpenCL and TensorFlow; Advanced topics: autotuning and neuromorphic spike-based computing. Students will learn the subject through lectures/quizzes, programming assignments, labs, research paper presentations, and a final project. Students will have latitude in choosing a final project they are passionate about. They will formulate their projects early in the course, so there will be sufficient time for discussion and iterations with the teaching staff, as well as for system design and implementation. Industry partners will support the course by giving guest lectures and providing resources. The course will use server clusters at Harvard as well as external resources in the cloud. In addition, labs will have access to state-of-the-art IoT devices and 3D cameras for data acquisition. Students will use open source tools and libraries and apply them to data analysis, modeling, and visualization problems.

COMPSCI 246 Advanced Computer Architecture

CourseID: 127937

Faculty:

Next Term Offered: 2021 Spring

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

COMPSCI 247R Advanced Topics in Computer Architecture

CourseID: 128149

Faculty:

Next Term Offered: 2021 Spring

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 250 Software Foundations

CourseID: 156204

Faculty:

Next Term Offered: 2020 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: 2019 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 261 Research Topics in Operating Systems

CourseID: 143667

Faculty:

Next Term Offered: 2020 Fall

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

COMPSCI 277 Geometric Modeling in Computer Graphics

CourseID: 116855

Faculty:

Next Term Offered: 2021 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: 2021 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 Advanced Topics in Artificial Intelligence

CourseID: 109283

Faculty:

Next Term Offered: 2018 Fall

Seminar course exploring research directions in artificial intelligence (AI), typically combining two or more of such areas as multi-agent systems, natural-language processing, machine learning, reasoning under uncertainty, representation systems. Topic for Spring 2017: Multi-agent systems: collaboration, coordination and loosely-coupled teamwork.

COMPSCI 285 Multi-Agent Systems

CourseID: 114492

Faculty:

Next Term Offered: 2020 Fall

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

COMPSCI 288R Advanced Topics in Computer Vision

CourseID: 110332

Faculty:

Next Term Offered: 2021 Spring

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

Earth and Planetary Sciences

E-PSCI 107 Evolution of Plant Life in Geologic Time

CourseID: 108748

Faculty: Andrew Knoll

Next Term Offered: 2018 Fall

Origin, evolution, dispersal, paleoecology, and geologic history of the major groups of the plant kingdom. Laboratory study of representative groups, living and fossil.

E-PSCI 109 Earth Resources and the Environment

CourseID: 114664

Faculty: John Shaw

Next Term Offered: 2019 Spring

An overview of the Earth's energy and material resources, including conventional and unconventional hydrocarbons, nuclear fuels, alternative/renewable energy resources, metals, and other industrial materials. The course emphasizes the geologic and environmental factors that dictate the availability of these resources, the methods used to identify and exploit them, and the environmental impacts of these operations. Topics include: coal and acid rain; petroleum exploration, drilling, and production, shale gas/oil, photochemical smog, and oil spills; nuclear power and radioactive hazards; alternative energies (solar, hydroelectric, tidal, geothermal power), metals and mining.

E-PSCI 132 Introduction to Meteorology and Climate

CourseID: 123877

Faculty: Brian Farrell

Next Term Offered: 2018 Fall

Physical concepts necessary to understand atmospheric structure and motion. Phenomena studied include the formation of clouds and precipitation, solar and terrestrial radiation, dynamical balance of the large-scale wind, and the origin of cyclones. Concepts developed for understanding today's atmosphere are applied to understanding the record of past climate change and the prospects for climate change in the future.

E-PSCI 135 Physics and Chemistry: In the Context of Energy and Climate at the Global and Molecular Level

CourseID: 126934

Faculty:

Next Term Offered: 2018 Fall

A solution to the problems set by the intersection of global energy demand and climate feedbacks requires the teaching of physics and chemistry in that context. Core topics include thermodynamics, free energy, entropy, acid-base and oxidation-reduction reactions, electrochemistry, electromagnetic induction, circuit theory, AC and DC circuits, the nature of photons and of electromagnetic radiation, photochemistry, materials, catalysis, kinetics, molecular bonding, and biological processes for energy conversion and storage.

E-PSCI 138 Mysteries of Climate Dynamics

CourseID: 204007

Faculty: Brian Farrell

Next Term Offered: 2019 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.

E-PSCI 160 Space Science and Engineering: Theory and Application

CourseID: 160957

Faculty: Robin Wordsworth

Next Term Offered: 2018 Fall

This course is an introduction to the challenges involved in designing spacecraft for observation of Earth and exploration of other planets. Topics covered include basic atmospheric and planetary science, key principles of remote sensing, telemetry, orbital transfer theory, propulsion and launch system design, and thermal and power management.

E-PSCI 162 Hydrology and Environmental Geomechanics

CourseID: 108750

Faculty: James Rice

Next Term Offered: 2019 Spring

Study of water as a critical resource and as a factor in Earth surface and near-surface processes. Focus on development of relevant mechanics and physics. Hydrologic cycle, surface and groundwater, evapotranspiration, soil physics. Flow in porous media, Darcy law, contaminant transport, remediation strategies. Poroelasticity, subsidence, well hydraulics. Seepage forces, landslides, dam failures, sediment liquefaction. Glacial processes. Stream flows, turbulence concepts. Gravity waves, flood control; tsunamis; erosion and sediment transport.

E-PSCI 182 Stratigraphy and Sedimentology

CourseID: 126103

Faculty: Francis Macdonald
Next Term Offered: 2019 Spring

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

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

CourseID: 126174
Faculty: David Johnston
Next Term Offered: 2018 Fall

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

E-PSCI 189 Analytical and Field Methods in Geobiology

CourseID: 126669
Faculty: David Johnston
Next Term Offered: 2019 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 202 Mechanics in Earth and Environmental Science

CourseID: 124688
Faculty: James Rice
Next Term Offered: 2018 Fall

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

E-PSCI 204 Earthquake Sources

CourseID: 114669

Faculty: Marine Denolle

Next Term Offered: 2018 Fall

Theorems in elastodynamics, Green's functions for body and surface waves, point-source representation with moment tensors, kinematics and dynamics of extended sources, simple dynamic models, earthquake cycles, basic seismic data processing, determination of source parameters from data.

E-PSCI 206 Solid Earth Geochemistry and Cosmochemistry: A Primer

CourseID: 156399

Faculty: Stein Jacobsen

Next Term Offered: 2019 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 231 Climate Dynamics

CourseID: 119890

Faculty: Eli Tziperman

Next Term Offered: 2019 Spring

The course covers climate dynamics and climate variability phenomena and mechanisms, and provides hands-on experience running and analyzing climate models, as well as using dynamical system theory tools. Among the subjects covered: energy balance and greenhouse effect, El Nino, thermohaline circulation, abrupt climate change, millennial variability (DO and Heinrich events), glacial-interglacial cycles, the ocean carbonate system and CO₂ changes, warm past and future climates, and more.

E-PSCI 232 Dynamic Meteorology

CourseID: 115633

Faculty: Brian Farrell

Next Term Offered: 2018 Fall

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

E-PSCI 235 Stochastic Methods in Climate Dynamics

CourseID: 160228

Faculty: Brian Farrell

Next Term Offered: 2019 Spring

Introduction to stochastic methods for studying climate dynamics. Topics will include the Langevin equation, stochastic turbulence modeling, linear inverse modeling, and applications of statistical state dynamics to problems in planetary scale turbulence.

E-PSCI 237 Planetary Radiation & Climate

CourseID: 205144

Faculty: Robin Wordsworth

Next Term Offered: 2019 Spring

Atmospheric radiative transfer, including stellar properties, spectroscopy, gray and real gas calculations, Mie theory and scattering, satellite retrievals, and radiative-convective climate modelling. Climate feedbacks: the runaway greenhouse, volatile cycles on Mars and Titan, and atmospheric collapse around M-stars. Atmospheric evolution and escape (Jeans, diffusion-limited, hydrodynamic), and key processes in planetary atmospheric chemistry.

E-PSCI 241 Isotope Geochemistry and Processes of Planetary Evolution

CourseID: 146721

Faculty: Stein Jacobsen

Next Term Offered: 2019 Spring

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

E-PSCI 252 Global Geophysics: A Primer

CourseID: 107842

Faculty: Jerry Mitrovica

Next Term Offered: 2018 Fall

An introductory treatment of solid Earth geophysics for graduate students in all EPS and SEAS disciplines. The course will cover a sampling of topics that all Earth scientists should have knowledge of, whether to facilitate applications to their own research or to simply follow departmental seminars in geophysics. Topics include: the Earth's composition and internal boundaries; qualitative and quantitative plate tectonics; the Earth's energy budget, isostasy; Earth rheology, with examples from seismology, tides, glacial isostatic adjustment and mantle convection; the Earth's gravity field and geodesy; planetary rotation. Physical concepts will be emphasized over mathematical derivations. While there are no formal pre-requisites for the course, some training in calculus, ordinary and partial differential equations would be helpful. Extra class time and material

will be available for students without this background.

E-PSCI 261 Sea Level Change

CourseID: 126477

Faculty: Jerry Mitrovica

Next Term Offered: 2019 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 266 Computational Tools in Seismology

CourseID: 109414

Faculty: Miaki Ishii

Next Term Offered: 2019 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 270 Advanced Structural Interpretation Methods

CourseID: 108133

Faculty: John Shaw

Next Term Offered: 2018 Fall

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

E-PSCI 272 Topics in Structural Geology

CourseID: 115931

Faculty: John Shaw

Next Term Offered: 2018 Fall

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

topics vary each year offered.

E-PSCI 281 Great Papers in Earth Sciences

CourseID: 111685

Faculty: Peter Huybers

Next Term Offered: 2019 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.

Economics

ECON 980B Education in the Economy

CourseID: 126777

Faculty:

Next Term Offered: 2018 Fall

An exploration of the role of education in the economy using historical, comparative, and current policy perspectives. Topics include the theory of human capital, role of education in economic growth and distribution, the educational production function, vouchers, charter schools, class size, standards, school equalization, for-profit educational institutions, and the gender gap in college completion. A serious research paper is required, as are several short critical essays of the literature. This is a junior tutorial.

ECON 980CC Readings on Market Imperfections and Implications for Government Intervention

CourseID: 156370

Faculty:

Next Term Offered:

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 980F Junior Tutorial: Race in America

CourseID: 122507

Faculty:

Next Term Offered:

Examines the causes and consequences of racial inequality in America and evaluates the efficacy of various market and non-market solutions. Topics include: the racial achievement gap in education, the impact of crack cocaine on inner cities, racial differences in health, crime and punishment, labor market discrimination, social interactions and the effects of peer groups, affirmative action, and more.

ECON 980O Measuring and Modeling Social Networks

CourseID: 160356

Faculty:

Next Term Offered: 2018 Fall

Social networks consist of relationships that carry information, mediate trade, and facilitate cooperation. Online platforms generate "big data" records of what is going on in such networks at unprecedented levels of detail. How do we make sense of the data, and how can we use it to make decisions? as individuals, within companies, and as a society? This seminar teaches models from the economics and statistics of networks that are essential to the task. Topics include ideas going viral, online markets, and social influence. Students will complete a final project that either develops an original model or applies an existing one to analyze real-world data.

ECON 980U Immigration Economics

CourseID: 126771

Faculty:

Next Term Offered: 2019 Spring

There has been a resurgence of large-scale international migration in the past few decades. This course explores the economic determinants and consequences of these population flows. Specific topics include the study of how immigrants are non-randomly selected from the population of the countries of origin, the measurement and implications of economic assimilation in the receiving country, the impact of the flows on the labor markets of both receiving and sending countries, and the calculation of the economic benefits from immigration. This is a junior tutorial.

ECON 980X Economics of Work and Family

CourseID: 108892

Faculty:

Next Term Offered: 2019 Spring

How are the most personal choices and life transitions decided? When and whom do you marry, how many children do you have, how much education should you obtain, and which careers or jobs will you pursue? Much will be explored in terms of change over time, particularly concerning the economic emergence of women and the growing role of government. Readings draw on economic theory, empirical analyses, history, and literature from the 19th century to the present. This is a Junior Tutorial.

ECON 980Y The Psychology and Economics of Beliefs

CourseID: 160328

Faculty:

Next Term Offered: 2019 Spring

This junior seminar focuses on how individuals and groups come to form beliefs about important things in their lives. What medicines are effective? What lifestyles are healthy? What investment strategies make sense? What careers are lucrative and rewarding? What is the right way to raise children? What economic systems are efficient and fair?

We will review theories and evidence about how individuals develop their beliefs from personal observations and experience, and how people learn from each other. The organizing theme will be to compare the assumption of full rationality that is traditional in economic theory to evidence identified by psychologists and others about the types of errors people make. We will also explore what consequences these errors have. When do people become overconfident in their beliefs? Or instead not learn as much as they should? Are people's beliefs internally consistent? When do groups of people all come to the same conclusions, vs. "polarize" into very different beliefs?

Because of the heavy emphasis on rigorous formal theories and measurements along the lines of mainstream economics, the course requires background in microeconomics, mathematics, and statistics.

Required readings for the course will include academic research in psychology, economic theory, empirical economics, and historical and sociological research describing the prevalence and changes in beliefs over time. The core requirement is to develop an independent research project in the tradition of theoretical or empirical economics, but regular reading and participation in will also be required.

ECON 980Z Behavioral Finance

CourseID: 203866

Faculty:

Next Term Offered: 2019 Spring

This junior seminar will provide an overview of theoretical and empirical research on asset pricing that adopts a "behavioral" perspective, i.e. that considers the joint consequences of: (i) investors who have either less than fully rational beliefs or non-standard preferences; and (ii) various impediments to arbitrage. We will also spend considerable time fleshing out the implications of investor sentiment for corporate finance, macroeconomics, and public policy.

ECON 1051 Introduction to Game Theory

CourseID: 121327

Faculty:

Next Term Offered: 2019 Spring

Presents an introduction to the modern game theory, focusing on its use in economics. Main ideas of game theory are introduced and illustrated using examples from industrial organization, labor economics, and macroeconomics.

ECON 1053 Understanding Altruism

CourseID: 160763

Faculty:

Next Term Offered: 2018 Fall

People give a lot: 2% of GDP is donated to charity, 2-4% of hours worked are volunteered, and 50% of Americans vote in National Elections. Yet such giving displays puzzling qualities: for example, giving is often inefficient (consider the efficiency of Habitat for Humanity) and people who would otherwise give will pay to opt out of being solicited.

We use simple game theory models, combined with models of evolution and evidence from experimental economics papers, to better understand our altruistic preferences and their puzzling qualities. In doing so, we gain insight on how to promote more effective giving (should contributions be observable?) and better policy (should the law distinguish between crimes of omission and commission?).

Through the readings, students will gain exposure to relevant literatures in experimental economics, as well as evolutionary biology and social psychology. Students will gain a facility with lab and field experimental methods, as well as the relevant game theory and dynamic models. The class is primarily discussion based; students are expected to read and be prepared to discuss cutting edge research papers each class. There will also be 2-3 problem sets over the course of the semester, and 2-3 writing assignments, including a final project in which students are required to design original research.

This class is a particularly good fit for: students wishing to launch or join non-profits and socially responsible businesses; those who have an interest in politics or policy; and, those wishing to do research--especially experimental or behavioral--related to charity or altruism, perhaps in preparation for their honors theses.

ECON 1059 Decision Theory

CourseID: 124664

Faculty:

Next Term Offered: 2019 Spring

An introduction to formal models of decision making in economics, including both classical and psychologically-motivated approaches. Topics include risk, uncertainty, ambiguity, and temptation. Prerequisites for this course include Economics 1010a1, 1010a2, or 1011a and Mathematics 21a.

ECON 1160 Machine and Human Intelligence

CourseID: 160352

Faculty:

Next Term Offered: 2019 Spring

Algorithms are increasingly successful at vision and language tasks traditionally associated with human intelligence. How can we translate this success to aiding in other forms of human judgment? Can they help employers decide who to hire or judges decide whom to release? When can algorithmic intelligence profitably complement human intelligence? How can we test whether in fact an algorithm does improve on humans? How can we be sure we are not exaggerating human biases and unfairness? This class will combine econometrics and behavioral science with machine learning techniques to encourage students to think more carefully about these questions.

Prerequisites: a basic understanding of machine learning techniques (readily met by anyone who has taken CS181) and a solid understanding of econometrics or statistics (such as Econometrics 1123 or Statistics 139).

ECON 1389 Economics of Global Health

CourseID: 124231

Faculty:

Next Term Offered: 2019 Spring

This course examines health issues in developing countries from the standpoint of applied microeconomic research. Specific topics include: identifying the effect of health on growth and development and identifying the causal relationships between income, poverty, and health. We will also discuss health care delivery and human resource issues, the challenges of healthcare financing and health insurance, and the tension between equity and efficiency in the allocation of health resources.

ECON 1530 International Monetary Economics

CourseID: 111378

Faculty:

Next Term Offered: 2018 Fall

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 topics include exchange rate determination, currency interventions, monetary policy coordination, capital flows and currency crises.

ECON 1542 International Trade Policy

CourseID: 111800

Faculty:

Next Term Offered: 2018 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.

ECON 1544 Foundations of International Macroeconomic Policy

CourseID: 109969

Faculty:

Next Term Offered: 2019 Spring

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 1759 The Financial System and the Central Bank

CourseID: 156356

Faculty:

Next Term Offered: 2019 Spring

This course analyzes the modern financial system. Topics include: (i) the behavior of various types of intermediaries (e.g., banks, broker-dealers, mutual funds, hedge funds); (ii) key elements of the system's plumbing and infrastructure; (iii) sources of systemic risk; and (iv) the multiple roles of the central bank as monetary policymaker, lender of last resort, and regulator.

ECON 1760 Behavioral Finance

CourseID: 107403

Faculty:

Next Term Offered: 2019 Spring

Theory and evidence on mispricing in financial markets due to investor psychology or institutional constraints. Broad themes are the practical limits of arbitrage, models of psychological behavior, and predictability of security returns. Specific topics may include market bubbles and crashes, closed end funds, value vs. growth, momentum, the money management industry, and short sale constraints.

ECON 2034 Networks

CourseID: 204015

Faculty:

Next Term Offered: 2019 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 2082 Social Choice Theory

CourseID: 108965

Faculty:

Next Term Offered: 2019 Spring

A basic course in social choice theory and its analytical foundations. The subject matter will include possibility theorems in voting and in welfare economics. Attention will be paid to implementation theory, the theory of justice, and the analysis of liberties and rights.

ECON 2098 Topics in Economic Theory

CourseID: 156616

Faculty:

Next Term Offered: 2018 Fall

Learn how to model social and economic networks and their impact on human behavior. How do networks form, why do they exhibit certain patterns, and how does their structure impact diffusion, learning, and other behaviors? We bring together models and techniques from sociology, economics, math, physics, statistics, and computer science to answer these questions. The course is aimed at a graduate level, but accessible for advanced undergraduates who are comfortable with matrix algebra and statistics. The course begins with some empirical background on social and economic networks, and an overview of concepts used to describe and measure networks. Next, the course covers a set of models of how networks form, including random network models as well as strategic formation models, and statistical models for working with data. The course then discusses a series of models of how the structure of social networks impacts human behavior, including contagion, diffusion, learning, and peer influences.

ECON 2330 History and Human Capital

CourseID: 124933

Faculty:

Next Term Offered: 2018 Fall

Explores a range of subjects concerning human capital, historically and comparatively. Topics include fertility, mortality, health, immigration, women's work, child labor, retirement, education, inequality, slavery, unionization, and governmental regulation of labor, all within the broader context of economic history.

ECON 2338 Behavioral Development Economics

CourseID: 160359

Faculty:

Next Term Offered: 2019 Spring

This graduate level course will focus on the intersection of two rapidly growing fields in economics - development economics, and behavioral economics. We will study applications of behavioral economics to development questions, and ask whether there is a special behavioral science of poverty and development. Methods covered will include field experiments, lab experiments, tests of theory and combining experiments with structural estimation.

ECON 2350 Workshop in Religion, Political Economy, and Society

CourseID: 116828

Faculty:

Next Term Offered: 2018 Fall

Topics on the interplay between religion and the social sciences.

ECON 2395 Health, Inequality and Development

CourseID: 156372

Faculty:

Next Term Offered: 2018 Fall

The course will be focused on an examination of the constitutive role of health in human development, and its instrumental role in economic development. It will include discussion of the conceptual issues and measurement problems in health studies, and also in assessing inequalities in health and healthcare. The correspondence and dissonance in the links between income inequality and health inequality will be investigated, and the challenge of instituting universal health care in poor countries will be examined.

ECON 2411 Advanced Macroeconomics

CourseID: 207820

Faculty:

Next Term Offered:

ECON 2510 Inside Government: Making Public Policy

CourseID: 110310

Faculty:

Next Term Offered: 2019 Spring

This seminar will explore an assortment of issues, ranging from environmental regulation (including climate change) to financial regulation to public health, at the intersection of theory and practice. Among other things, the seminar will discuss the role of cost-benefit analysis, legal limits on regulation, and both standard and behavioral economics.

ECON 2687 Advanced Economics of the Environment, Natural Resources,

and Climate Change

CourseID: 159770

Faculty:

Next Term Offered: 2018 Fall

Survey of foundations and applications of the modern theory of environmental and natural-resource economics. What are the basic models and what are they suggesting about policy? Externalities, public goods, common property, strategies for controlling pollution. Dynamics of renewable resources (fisheries, forestry) and dynamics of non-renewable resources (minerals like oil). Discounting, uncertainty, cost-benefit analysis, investment criteria for environmental projects, green accounting, sustainability. Basic economic analysis of climate change as prototype example.

ECON 2726 Theoretical and Empirical Perspective on Entrepreneurship: Economics and Finance

CourseID: 124076

Faculty:

Next Term Offered:

Entrepreneurship is a complex phenomenon that has attracted little academic attention. This course explores the emerging work in this area. Students taking the course for credit will be expected to complete two referee reports and a paper.

ECON 2728 Behavioral Finance

CourseID: 115836

Faculty:

Next Term Offered: 2019 Spring

Deals with theoretical and empirical approaches to the study of financial markets using psychological or behavioral ideas. Topics include limited arbitrage, predictability of security returns, and trading volume.

ECON 2810A Labor Market Analysis

CourseID: 114301

Faculty:

Next Term Offered: 2018 Fall

Theoretical and empirical research on labor markets. Wage determination covers equalizing differences, human capital, job mobility, and incentive models. Labor supply covers life-cycle models. Labor demand includes minimum wage and union models.

Ethnicity, Migration, Rights

EMR 120 Encountering the Conquistadors

CourseID: 160749

Faculty: Matt Liebmann

Next Term Offered: 2018 Fall

This course examines the effects of the Spanish Conquest on indigenous peoples of the Americas between the fifteenth and eighteenth centuries, providing an introduction to the archaeology of first encounters in the Caribbean, Southeast and Southwest US, Central Mexico, highland and lowland Mesoamerica, the Amazon basin, and in the Andes. Topics addressed include the roles of disease, indigenous politics, native rebellions, and ecological change in the colonization of the 'New' World. Jointly offered as Anthropology 1190.

EMR 122 Caribbean Poetics

CourseID: 160753

Faculty: Mayra Rivera

Next Term Offered: 2019 Spring

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:

Next Term Offered: 2019 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.

General Education

EMREAS 13 Analyzing Politics

CourseID: 113170

Faculty: Kenneth Shepsle

Next Term Offered: 2019 Spring

A commonsensical survey of rational theories of politics comprised of: (1) individual choice, (2) group choice, (3) collective action, and (4) institutions. The underlying theme is that politics may be described and understood as rational, goal-seeking behavior by citizens, politicians, bureaucrats, and interest groups in various settings. Students are encouraged to think deeply about current events, history, and public life generally, as well as to analyze the politics of private life--in families, clubs, firms, churches, universities, even Harvard Houses--since private politics, like public politics, may be understood in terms of rational behavior. Instruction is by lecture, small-group section interactions, and experiments.

ETHRSON 33 Medical Ethics and History

CourseID: 108405

Faculty: David Shumway Jones

Next Term Offered: 2018 Fall

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

ETHRSON 35 Nature

CourseID: 109030

Faculty: Joyce Chaplin

Next Term Offered: 2019 Spring

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

redefinitions of the human place within nature; animal rights; and environmentalism and its critics.

ETHRSON 39 Money, Markets, and Morals

CourseID: 156035

Faculty: Michael Sandel

Next Term Offered: 2018 Fall

What should be the role of money and markets in our society? Are there some things that money should not be able to buy? For example: Should people be permitted to buy sex, votes, babies, citizenship, or college admission? What about buying and selling the right to pollute, procreate, immigrate, discriminate, or to hunt endangered species? Should we use markets to allocate health care, education, and military service?

ETHRSON 41 Economic Justice

CourseID: 159809

Faculty: Mathias Risse

Next Term Offered: 2019 Spring

Capitalism organizes society around individual pursuits of material gain. Capitalism seems to have won the great ideological struggle with other ways of organizing society. But there is much discontent: the Occupy Movement made clear that even Americans now care about excessive inequality, and many worry about the future in an increasingly economically divided society where access to technology richly rewards some to the exclusion of many others. Capitalism is also closely associated with what is arguably the biggest policy problem of the 21st century: climate change. So how can we justify capitalism? And what are feasible alternative ways of organizing society?

ETHRSON 42 Sex and Ethical Reasoning

CourseID: 161179

Faculty: Mark Jordan

Next Term Offered: 2019 Spring

"Immorality" once meant sexual misconduct, especially by women. Now many people are unclear whether ethics can say anything convincing about sex at all. Such rapid change in ethical views makes sex a very good place to think about how ethical reasoning develops and how it might matter to our lives. We will study the historical shifts and current ranges of some American controversies about sex, including sexual identity, rape or assault, adultery or polyamory, prostitution, pornography, and online sex. You will then be encouraged to use these cases to clarify and critique your own sexual ethics.

SCILIVSY 12 Understanding Darwinism

CourseID: 125195

Faculty: Janet Browne
Next Term Offered: 2018 Fall

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

SOCWORLD 33 Tokyo

CourseID: 117529
Faculty: Theodore Bestor
Next Term Offered:

Tokyo has been one of the world's great metropolitan centers since the 17th century, both the urban hub of Japanese society and culture, and the place where Japanese domestic society and global influences have intersected. This course examines trajectories of change in Tokyo's urban culture, lifestyles, social structure, and spatial environment across the city's history, using ethnography, history, literature, diaries, architecture, photography, art, cartography, animation, film and the Internet to explore Tokyo as an urban culture in comparative perspectives drawn from anthropology, history, and other social sciences.

US-WORLD 43 Ancestry

CourseID: 203820
Faculty: Maya Jasanoff
Next Term Offered: 2019 Spring

Everyone comes from somewhere. We carry our ancestries in our DNA, genealogy, family stories, and more. What do these forms of evidence tell us about who we are, as a species, as a social group, or as an individual? This course looks at ancestry from a range of perspectives: biology, anthropology, genealogy, history, law, and memory?from the origins of human populations to the origins of you. Features hands-on assignments and interactive lectures.

Engineering Sciences

ENG-SCI 21 The Innovator's Practice: Finding, Building and Leading Good Ideas with Others

CourseID: 128317

Faculty:

Next Term Offered: 2018 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 109 Earth Resources and the Environment

CourseID: 121463

Faculty:

Next Term Offered: 2019 Spring

An overview of the Earth's energy and material resources, including conventional and unconventional hydrocarbons, nuclear fuels, alternative/renewable energy resources, metals, and other industrial materials. The course emphasizes the geologic and environmental factors that dictate the availability of these resources, the methods used to identify and exploit them, and the environmental impacts of these operations. Topics include: coal and acid rain; petroleum exploration, drilling, and production, shale gas/oil, photochemical smog, and oil spills; nuclear power and radioactive hazards; alternative energies (solar, hydroelectric, tidal, geothermal power), metals and mining.

ENG-SCI 110 Science, Engineering, and the Community

CourseID: 125325

Faculty:

Next Term Offered: 2020 Fall

Activity-based course for beginning/intermediate science and engineering undergraduates. Combines readings and discussions on techniques for learning science and engineering design with implementation in an 8th grade science class in Cambridge. Students work directly with the 8th graders to guide how they learn. Students apply what they discover to improve their own understanding of college-level science and engineering.

ENG-SCI 128 Computational Solid and Structural Mechanics

CourseID: 133525

Faculty:

Next Term Offered: 2019 Spring

Introduction to finite element methods for analysis of steady-state and transient problems in solid, structural, fluid mechanics, and heat transfer. Implementation of simple MATLAB codes and use of existing general-purpose programs (ABAQUS and COMSOL).

ENG-SCI 132 Introduction to Meteorology and Climate

CourseID: 156491

Faculty:

Next Term Offered: 2018 Fall

Physical concepts necessary to understand atmospheric structure and motion. Phenomena studied include the formation of clouds and precipitation, solar and terrestrial radiation, dynamical balance of the large-scale wind, and the origin of cyclones. Concepts developed for understanding today's atmosphere are applied to understanding the record of past climate change and the prospects for climate change in the future.

ENG-SCI 135 Physics and Chemistry: In the Context of Energy and Climate at the Global and Molecular Level

CourseID: 107397

Faculty:

Next Term Offered: 2018 Fall

A solution to the problems set by the intersection of global energy demand and climate feedbacks requires the teaching of physics and chemistry in that context. Core topics include thermodynamics, free energy, entropy, acid-base and oxidation-reduction reactions, electrochemistry, electromagnetic induction, circuit theory, AC and DC circuits, the nature of photons and of electromagnetic radiation, photochemistry, materials, catalysis, kinetics, molecular bonding, and biological processes for energy conversion and storage.

ENG-SCI 159 Introduction to Robotics

CourseID: 131554

Faculty:

Next Term Offered: 2020 Fall

Introduction to computer-controlled robotic manipulators. Topics include coordinate frames and transformations, kinematic structure and solutions, statics and dynamics of serial and parallel chain manipulators, control and programming, introduction to path

planning, introduction to teleoperation, robot design, and actuation and sensing devices. Laboratory exercises provide experience with industrial robot programming and robot simulation and control.

ENG-SCI 160 Space Science and Engineering: Theory and Application

CourseID: 160452

Faculty:

Next Term Offered: 2018 Fall

This course is an introduction to the challenges involved in designing spacecraft for observation of Earth and exploration of other planets. Topics covered include basic atmospheric and planetary science, key principles of remote sensing, telemetry, orbital transfer theory, propulsion and launch system design, and thermal and power management.

ENG-SCI 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.

ENG-SCI 162 Hydrology and Environmental Geomechanics

CourseID: 137573

Faculty:

Next Term Offered: 2019 Spring

Study of water as a critical resource and as a factor in Earth surface and near-surface processes. Focus on development of relevant mechanics and physics. Hydrologic cycle, surface and groundwater, evapotranspiration, soil physics. Flow in porous media, Darcy law, contaminant transport, remediation strategies. Poroelasticity, subsidence, well hydraulics. Seepage forces, landslides, dam failures, sediment liquefaction. Glacial processes. Stream flows, turbulence concepts. Gravity waves, flood control; tsunamis; erosion and sediment transport.

ENG-SCI 164 Environmental Chemistry

CourseID: 125096

Faculty:

Next Term Offered: 2020 Fall

Basic concepts, principles, and applications of environmental chemistry for students in Earth and environmental sciences. We will investigate a variety of chemistry topics relevant for environmental systems, including water chemistry, acids and bases, redox reactions, precipitation/dissolution, sorption, gas solubility, and aqueous and atmospheric reaction rates and mechanisms. The principal goal is to explore and apply the fundamental principles of chemical thermodynamics and kinetics to understand Earth processes and solve complex environmental problems.

ENG-SCI 175 Photovoltaic Devices

CourseID: 110019

Faculty:

Next Term Offered: 2020 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 198R Probability Applications in Social Engineering

CourseID: 109400

Faculty:

Next Term Offered: 2021 Spring

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

ENG-SCI 202 Estimation and Control of Dynamic Systems

CourseID: 142254

Faculty:

Next Term Offered: 2020 Fall

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 introduce the fundamental mathematics of linear spaces, linear operator theory, and then proceed 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: 2021 Spring

Introduction to the theory of stochastic differential equations based on Wiener processes and Poisson counters, and an introduction to random fields. The formulation and solution of problems in nonlinear estimation theory. The Kalman-Bucy filter and nonlinear analogues. Identification theory. Adaptive systems. Applications.

ENG-SCI 209 Nonlinear Control Systems

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: 2021 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 226R Special Topics in Neural Engineering: Learning and Memory in Neural Systems

CourseID: 124391

Faculty:

Next Term Offered: 2019 Spring

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

ENG-SCI 228 Biologically-Inspired Materials

CourseID: 128321

Faculty:

Next Term Offered: 2019 Spring

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

ENG-SCI 230 Advanced Tissue Engineering

CourseID: 119260

Faculty:

Next Term Offered: 2019 Spring

Fundamental engineering and biological principles underlying field of tissue engineering, along with examples and strategies to engineer specific tissues for clinical use. Student design teams prepare a research proposal and participate in a weekly laboratory.

ENG-SCI 237 Planetary Radiation and Climate

CourseID: 156547

Faculty:

Next Term Offered: 2019 Spring

Atmospheric radiative transfer, including stellar properties, spectroscopy, gray and real gas calculations, Mie theory and scattering, satellite retrievals, and radiative-convective climate modelling. Climate feedbacks: the runaway greenhouse, volatile cycles on Mars and Titan, and atmospheric collapse around M-stars. Atmospheric evolution and escape (Jeans, diffusion-limited, hydrodynamic), and key processes in planetary atmospheric chemistry.

ENG-SCI 238 Introduction to Innovation and Entrepreneurship

CourseID: 110345

Faculty:

Next Term Offered: 2021 Spring

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

ENG-SCI 242R Solid Mechanics: Advanced Seminar

CourseID: 142659

Faculty:

Next Term Offered: 2021 Spring

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

ENG-SCI 246 Plasticity

CourseID: 138370

Faculty:

Next Term Offered: 2020 Fall

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

ENG-SCI 247 Fracture Mechanics

CourseID: 144024

Faculty:

Next Term Offered: 2020 Fall

Fundamentals of fracture with applications in materials and structural mechanics. Micromechanics of fracture in ceramics, metals, and polymers. Fracture of composite materials. Interfacial fracture mechanics. Fatigue crack propagation.

ENG-SCI 252R Advanced Topics in Robotics Research

CourseID: 123580

Faculty:

Next Term Offered: 2021 Spring

A graduate seminar course on advanced topics in robotics research. Students read and present research papers and undertake a research project. Spring 2016 will focus on microfabrication and microrobotics.

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: 2018 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 256 Informal Robotics/New Paradigms for Design and Construction

CourseID: 156726

Faculty:

Next Term Offered: 2019 Fall

Today, robotic devices are being made from folded paper, carbon laminates or soft gels. Rather than assembled, they can be formed directly from 2D or 3D printer. These Informal robots are light, flexible, compliant, highly customized, and demonstrate programmable behavior that is closely coupled with material composition. Taught in collaboration with the Wyss Institute, the course will focus on techniques to create original robotic devices. Lectures will be organized along four primary topics: Kinematics, Fabrication, Controls and Applications. There will be assignments to produce test mechanisms and CAD models, followed by semester-long group projects.

ENG-SCI 259 Advanced Introduction to Robotics

CourseID: 134052

Faculty:

Next Term Offered: 2020 Fall

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

ENG-SCI 260 Water and Economic Development

CourseID: 110328

Faculty:

Next Term Offered: 2021 Spring

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

ENG-SCI 267 Aerosol Science and Technology

CourseID: 124746

Faculty:

Next Term Offered: 2020 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 268 Chemical Kinetics

CourseID: 114494

Faculty:

Next Term Offered: 2020 Fall

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

ENG-SCI 269 Environmental Nanotechnology

CourseID: 128163

Faculty:

Next Term Offered: 2021 Spring

Introduces students to the environmental aspects of nanoscience and nanotechnology. We will study the fundamental physical chemical properties, characterization, environmental implications, and environmental applications of nanoparticles and nanomaterials. Case studies from recent publications on engineered carbon nanomaterials such as fullerenes, carbon nanotubes, and graphene will be discussed.

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

CourseID: 122855

Faculty:

Next Term Offered: 2021 Spring

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

ENG-SCI 272 RF and High-Speed Integrated Circuits

CourseID: 118027

Faculty:

Next Term Offered: 2019 Spring

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

ENG-SCI 275 Nanophotonics

CourseID: 120239

Faculty:

Next Term Offered: 2020 Fall

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

ENG-SCI 289 Innovation and National Security

CourseID: 156513

Faculty:

Next Term Offered: 2020 Fall

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

ENG-SCI 298R Mitigating Toxicity through Better Materials Design

CourseID: 107995

Faculty:

Next Term Offered: 2020 Fall

Manufacturing new materials is an important component of the world economy as demand ranges from smart phones and processed food to automobiles and airplanes. Rapid changes in the diversity and uses of materials often occur due to technological needs and economic drivers without consideration of environmental and health impacts. This can lead to large scale, global health and contamination problems such as large quantities of plastic waste in oceans, lead exposures from paint in children's toys, and widespread contamination of drinking water in regions exploited for hydraulic fracturing. The class will explore whether it is possible to use the latest advances in science, engineering, and nanotechnology to chart a sustainable material revolution. Guest lecturers from both industry and environmental regulatory agencies will be invited to speak to the class. Course evaluation will be based on in-class participation, presentations and a final project/review paper.

English

ENGLISH 90CCM Crisis and Criticism in Migration

CourseID: 205129

Faculty:

Next Term Offered:

The "refugee crisis" in Europe and elsewhere has made it abundantly clear that migration is a critical issue in our reflections on the cultural, ethical and political transformations of globalization. However, the conditions of injustice and inequality that beset the lifeworlds of migrants and refugees have privileged the disciplines of law, political theory and anthropology in the study of migration. While fully acknowledging the importance of legal and political discourse, this seminar will emphasize the contribution of writers, critics and philosophers who are deeply engaged with the aesthetic, ethical and existential predicament of the migration of peoples, ideas and cultural forms. Toni Morrison, Ralph Ellison, VSNaipaul, Amitav Ghosh, Arundhati Roy, Claudia Rankine, Viet Than Nguyen and Mohsin Hamid will be amongst the writers who we will study. Theoretical and philosophical texts will be introduced in response to questions and issues raised in seminar discussion. Meticulous, detailed attention to primary texts is an essential requirement of the seminar.

ENGLISH 283 New Research in Theater and Performance Studies: Graduate Seminar

CourseID: 130900

Faculty:

Next Term Offered:

This course will examine major books in the fields of theater and performance studies published in the last five years. We will look closely at their methodology, theoretical contributions, and engagements with earlier critical works. We will begin by discussing the relationship between theater studies and performance studies, key terms and approaches, and new developments in these fields. We will then read five recently published books alongside a selection of the performances and texts considered in these studies. The goals of this course include familiarizing students with debates in theater and performances studies; exploring models of interdisciplinary research; and cultivating strategies for analyzing and writing about theater and performance.

Environmental Science and Public Policy

ESPP 78 Environmental Politics

CourseID: 112610

Faculty: Sheila Jasanoff

Next Term Offered: 2018 Fall

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

Government

FAS GOV 1263 Improving Governance in Developing Countries: What can We Learn from Experiments?

CourseID: 207160

Faculty:

Next Term Offered:

Experimental research is an exciting new part of the political science toolkit. This course will introduce students to a number of field and natural experiments that have been conducted in developing countries to study governance failures. Can such experiments help us to understand how social and ethnic divisions prevent cooperation on problems affecting the common good? how corruption, vote-buying, and diversion of public funds can be overcome? how elites might become more accountable to voters? how opposition parties can be made more effective? how the capacity to deliver public goods might be created in places where it appears that the state has failed? Students will get the chance to collaborate on designing their own experiments to generate insight into these and other urgent issues facing developing countries.

FAS GOV 1263 Improving Governance in Developing Countries: What can We Learn from Experiments?

CourseID: 207163

Faculty:

Next Term Offered:

Experimental research is an exciting new part of the political science toolkit. This course will introduce students to a number of field and natural experiments that have been conducted in developing countries to study governance failures. Can such experiments help us to understand how social and ethnic divisions prevent cooperation on problems affecting the common good? how corruption, vote-buying, and diversion of public funds can be overcome? how elites might become more accountable to voters? how opposition parties can be made more effective? how the capacity to deliver public goods might be created in places where it appears that the state has failed? Students will get the chance to collaborate on designing their own experiments to generate insight into these and other urgent issues facing developing countries.

FAS GOV 1263 Improving Governance in Developing Countries: What can We Learn from Experiments?

CourseID: 207159

Faculty:

Next Term Offered:

Experimental research is an exciting new part of the political science toolkit. This course will introduce students to a number of field and natural experiments that have been conducted in developing countries to study governance failures. Can such experiments help us to understand how social and ethnic divisions prevent cooperation on problems affecting the common good? how corruption, vote-buying, and diversion of public funds can be overcome? how elites might become more accountable to voters? how opposition parties can be made more effective? how the capacity to deliver public goods might be created in places where it appears that the state has failed? Students will get the chance to collaborate on designing their own experiments to generate insight into these and other urgent issues facing developing countries.

GOV 94BH Ethics and Public Policy

CourseID: 203517

Faculty:

Next Term Offered:

GOV 94CP Political Economy of the Environment

CourseID: 207736

Faculty:

Next Term Offered:

GOV 94JS Political Parties and Interest Groups

CourseID: 109877

Faculty:

Next Term Offered:

This course explores the role of political parties and interest groups in the U.S. political system.

GOV 94SP Future of War

CourseID: 114703

Faculty:

Next Term Offered:

Examines the character and implications of political and technological factors that could affect the future conduct of war.

GOV 1189 The Politics of Europe

CourseID: 205245

Faculty:

Next Term Offered:

GOV 1790 American Foreign Policy

CourseID: 123325

Faculty:

Next Term Offered:

Examines and explains the international actions of the US Government. Explanations drawn from history, international relations theory, and from the study of American political and bureaucratic institutions. Emphasis is placed on the recent rise of the US to a position of unprecedented military dominance, how this military power has been used, and how other states, non-state actors, or global governance institutions have responded.

GOV 2127 Popular Protest in Comparative Perspective

CourseID: 108535

Faculty:

Next Term Offered:

This is a graduate seminar which introduces the literature on social movements, revolutions, and contentious politics from a variety of methodological and theoretical perspectives. Cases are drawn from different historical periods and political contexts.

GOV 2131 Comparative Politics of Latin America

CourseID: 132056

Faculty:

Next Term Offered: 2018 Fall

Topics: historical paths, economic strategies, inflation and exchange rates, international explanations of domestic outcomes, authoritarian and democratic regimes, state institutions, the Roman Catholic Church, social movements, parties and party systems, and voters and voting behavior.

GOV 2328 Electoral Politics

CourseID: 126001

Faculty:

Next Term Offered:

This seminar examines the politics of U.S. elections, with emphasis on theoretical models of electoral competition and empirical research of voting behavior and election outcomes. The first third of the seminar examines voter behavior, the second third of the seminar electoral competition among parties and candidates and aggregate election results, and the final third of the seminar examines electoral institutions and laws. Specific topics include party competition, incumbency advantages, electoral districts, campaign finance, issue and economic voting, and electoral accountability. Understanding of statistics strongly recommended. Open to qualified undergraduates with permission of instructor.

Folklore and Mythology

FOLKMYTH 90H Hero and Trickster

CourseID: 126119

Faculty: Deborah Foster

Next Term Offered: 2018 Fall

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

FOLKMYTH 147 Metamorphoses: (Post)human Ontologies and Folk Epistemologies

CourseID: 205310

Faculty:

Next Term Offered: 2019 Spring

This course explores "posthuman" ontologies, epistemologies, and ethics, taking into account of the influence of folkloristics in rethinking "the human." Long before Friedrich Nietzsche declared that God was dead and Martin Heidegger's Letter on Humanism, questions about the "ends" and "nature" of man ran arose in folktales, legends, and epic stories. With a special attention to voice and narrative, we will consider the lived consequences ?be they kinetic, prosthetic, synthetic, and even cosmetic ?of pushing at the boundaries of "the human." From initial categories for separating and delineating life forms along the lines of bios and zoe, form and function, mobility and immobility, this course will move through the making of species classifications, along with arguments for and against human exceptionalism. This approach incorporates nonhuman life as objects of analysis?animals, plants, fungi, bacteria, and viruses ?taking seriously the idea that they have political lives and import. How might destabilizing the idea of "the human" (re)create similar divisions of who and what matters when it comes to race, gender and sexuality? What is the status of "subject rights" for plants, animals, rivers, mountains, that is, for "Mother Earth" as in the cases of Bolivia and Ecuador, when human rights so often do not "hold water," so to speak? How do notions of mobility continue to inform philosophical and political strategies on "sequestering" people as well as carbon? A short list of selected works range from: Aristotle, Friedrich Nietzsche, Martin Heidegger, Michel Foucault, Gilles Deleuze & Felix Guattari, Jacques Derrida to more current critiques by Donna Haraway, Elizabeth Povinelli, Rosi Braidotti, and Karen Barad, Eduardo Viveiros de Castro, Eduardo Kohn, Bruno Latour and more. While we will read "canonical" works, this course will take seriously the effort to "decolonize" the syllabus with attention to scholars whose words often reside at the margins of mainstream intellectual discourse. We will place conceptual works in conversation with current

ethnographies, events and actual fleshy bodies to give grounding to the theory.

FOLKMYTH 157 Plants, Potions and Pharmaceuticals: Ethnobotany and Biopiracy

CourseID: 203877

Faculty:

Next Term Offered: 2018 Fall

With rising pandemics of mosquito-born viruses like zika, malaria, dengue and continuing searches for cures for ebola, cancer and HIV/AIDS, plants (as well as animals) provide insight, inspiration, and often resources /ingredients for possible cures. The World Intellectual Property Organization and the United Nations Educational, Scientific, and Cultural Organization have dedicated special programs for traditional knowledge (folklore) and genetic resources (biological specimens of plants and animals). The high value placed on traditional knowledge, particularly from indigenous communities, has led to vandalism and biopirating of plants and animals across national borders. This course will examine how the category of the plant, not simply the animal, is politically-charged, particularly in terms of biodiversity conservation, indigenous intellectual property rights, and pharmaceutical development. Among our readings and foragings, we will encounter the works of famed Harvard ethnobotanist Richard Evans Schultes and his successors: Wade Davis, Timothy Ploughman, and Michael Balick as well as Brazilian shaman Davi Kopenawa, Native (North) American healers and activists such as Winona LaDuke and female scholar-shamans like Barbara Tedlock.

FOLKMYTH 158 The Eco-Feminist and the Folk

CourseID: 203878

Faculty:

Next Term Offered: 2019 Spring

This course takes eco-feminist and critical race studies approaches to the anthropology of gender and sexuality, taking "eco-feminism" as an identity, an object of analysis, and as a methodological approach. While "Feminism" in practice need not be (though often is) gender-specific, as a political and academic practice it often carries racialized inflections towards its objects of its inquiry as well as its activism. The term, "eco", from the Greek "oikos," means "dwelling," "household," "home," or "family", laying the foundation for examining the roles that gender and sexuality play in changing forms of kinship, citizenship, and (environmental) politics beyond and within the concept of the human. These different meanings of the "eco" in eco-nomy and eco-logy shape scholarly analyses as well as the lived experiences for those do not feel "at home" in a white hetero-normative structure. In investigating the intersections and interconnections of gender and sexuality with race, ethnicity, and class, we will consider "eco's" various forms and how humans come to think about the concept of "home." An overarching question for this course revolves around whether, if, or when, one should separate environmental justice from social justice ?and what the possibilities and limits are to

fusing naturecultures (Haraway). The readings will cover classic folkloristic and anthropological approaches, current critical theory and philosophy, as well as less-often-read scholars whose voices often fall between the lines or at the margins of mainstream academic discourse. This is an attempt both to decolonize the syllabus as well as show how thoughts and bodies, as well as body politics become colonized. What does it mean to decolonize bodies through words? How can language create and maintain (earth) body politics? How has the concept of "home" or the "eco" continued to structure ideas about who and what bodies may choose to, or be let, to live? How do notions of "home" and what is "normal" gain their gendered, sexualized, racialized texture? What does it mean to "be at home in one's own body?" When it comes to people's choices about their bodies, it is crucial to understand how certain human and nonhuman bodies and lives matter, and how others do not. The fundamental anthropological divisions of "nature" and "culture" frame how we think about what it means to be human as well as what it means "to be free to choose" what we do with our bodies. Authors include Audre Lorde, bell hooks, Kimberlé Crenshaw, Gloria Anzaldúa, along with Andrea Smith, and Winona LaDuke. We will read these authors along with Marilyn Strathern, Donna Haraway, Gayle Rubin, Judith Butler, Friedrich Engels, and the Gender Nihilists, to name a few.

Freshman Seminars

FRSEMR 51C Science in the Age of Artificial Intelligence

CourseID: 207514

Faculty:

Next Term Offered:

Science is focused on discovering and explaining the world around and within us. This has been its goal for hundreds of years and has produced astonishing breakthroughs from population genetics, to general relativity, to plate tectonics. Artificial intelligence is touted as a tool for learning about a complex systems in ways that humans can't and has seen exceptional progress in natural language processing and image identification. In this class we explore the emerging linkages between scientific inquiry and artificial intelligence. The central goal of this class is to question the classical role of the scientist as a creator of theories and consider how scientists may become interpreters of theories developed by AI. We do this by developing an understanding of how AI systems actually work (they're astonishingly simple), explain recent success cases, and then consider how we may (or may not rebuild science) in an AI first manner. Examples will be drawn from the earth & planetary sciences as well as the life sciences.

Germanic Languages and Literatures

GERM 233 Pathologies of Description: Adalbert Stifter

CourseID: 205670

Faculty:

Next Term Offered:

GERMAN AX German for Reading Knowledge

CourseID: 120599

Faculty:

Next Term Offered: 2018 Fall

Development of reading proficiency for students with little or no knowledge of German. Emphasizes translation of academic German prose into English.

GERMAN 64 Environment Matters: Green Thought in the German-Speaking World

CourseID: 203479

Faculty:

Next Term Offered: 2019 Spring

The German-speaking world has long been known for its ecological concern and green credentials. Myriad films and novels from the post-1945 period deal with the degradation of the environment and the concomitant threat to human life. In this course we will look at novels from and about the former East Germany, newspaper and journal articles about the Green Party in West Germany, and both German and Austrian fiction films and documentaries dealing with the fragile state of the global environment. What kinds of formal features do these texts evince? Do they at times suggest a counter-argument to the large-scale destruction they depict? Do they actually promote an "ecology of images" (Sontag)? How do these texts relate their narratives of environmental damage to post-colonial politics or to international economic policies? How has the recent rise of "extreme cinema" influenced the kinds of films being made about such topics? Finally, do the films privilege a peripheral perspective and, if so, does this offer certain advantages? Texts by Heidegger, Adorno and Horkheimer, Mitscherlich, Sontag, Johnson, Maron, Wolf; films by Herzog, Wenders, Geyrhalter, Glawogger, Sauper, Maurer, Haneke, Seidl.

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

CourseID: 110103

Faculty:

Next Term Offered: 2019 Spring

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

GERMAN 115 Deutsche Komödie

CourseID: 127724

Faculty:

Next Term Offered: 2018 Fall

What provokes laughter in German culture? This course explores the genre of German-language comedy through major dramatists, satirists, stand-up comedians, and comedic film, and concludes with a performance in German at the end of the semester. Introduction to forms, techniques, and theories of comedy, as well as workshops on techniques of comic performance. Conducted entirely in German.

GERMAN 120 The Age of Goethe

CourseID: 115190

Faculty: Peter Burgard

Next Term Offered: 2019 Fall

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.

GERMAN 140 German Social Thought from Nietzsche to Habermas

CourseID: 203280

Faculty:

Next Term Offered: 2018 Fall

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

GERMAN 147 Nietzsche

CourseID: 115710

Faculty: Peter Burgard

Next Term Offered: 2018 Fall

Readings and discussion of Nietzsche's major works in translation and in chronological

order: *The Birth of Tragedy; On Truth and Lie in an Extra-Moral Sense; Untimely Meditations; Human, All Too Human; The Gay Science; Thus Spoke Zarathustra; Beyond Good and Evil; On the Genealogy of Morals; Twilight of the Idols; The Antichrist; and Ecce Homo.*

GERMAN 164 Memory Wars: Transforming National Identity in Germany and the U.S.

CourseID: 207646

Faculty:

Next Term Offered:

Explores how post-War Germany and the United States, respectively, have been addressing their traumatic past (Holocaust; slavery). What kind of a national memory do they build, and how do these archives shape our present? The course focuses particularly on the recent "ethical turn in memory" in Germany's post-1989 Erinnerungspolitik and on tentative similar movements in the United States, such as the erection of a national lynching memorial in Montgomery, Alabama (2017). Authors include Wolf, Grass, Baldwin, Morrison.

GERMAN 176 Staging War: Representations of Violence and Conflict in Drama and Theater

CourseID: 203279

Faculty:

Next Term Offered: 2018 Fall

Ever since Homer's epic Iliad, war has been a prominent subject of literature. Drama plays a particularly interesting role in this respect as it is faced with the problem of how to represent battle and warfare: to stage it by bodily action or by mere narration. In fact, throughout the centuries the immediate presentation of violence was seen as a threat to theater and its auditorium as it introduces dissent, strife, and violence to the center of the community. This is why Hegel famously sees drama as an ideal medium for (the representation of) domestic wars and civil strife. And it is why the strategies ancient Greek drama developed to keep such dangers at bay have proven so long living. The use of techniques such as the messenger report, teichoscopy or the synecdoche in representative protagonists remains remarkably stable until well into the 20th century -- and that in spite of a great number of technological, aesthetic, political, and social developments. In this class we will pursue the strategies of bringing war on stage and of keeping war off stage in German drama and theater. Before turning to the pivotal years around 1800 (Schiller, Goethe, Kleist, and Grabbe) we will establish the historical background by, firstly, identifying the main strategies in Aeschylus and, then, juxtaposing two early modern models that were highly influential on the later German authors: Racine's and Shakespeare's. With Bertolt Brecht, Heiner Muller, and Elfriede Jelinek we will, finally, discuss how twentieth-century theater positions itself in relation to these classical texts, both German and non-German, and show how the old strategies are put to new

theatrical and ideological uses."

GERMAN 254 The Frankfurt School on Film and Mass Culture

CourseID: 203378

Faculty:

Next Term Offered: 2019 Spring

This seminar considers the Frankfurt School's deliberations on film, radio, television, and mass culture. We will devote the majority of the course to three seminal figures: Siegfried Kracauer, Walter Benjamin, and T. W. Adorno. More generally, we will focus on the debates catalyzed by the emergence of modern mass media and an industrialized visual culture; we will also reflect on the pertinence of these debates for our own contemporary culture of media convergence.

GERMAN 274 Architecture and the Literary Imagination from the 19th to the 21st Century

CourseID: 203294

Faculty:

Next Term Offered: 2019 Spring

In German culture, a rich tradition of thought deals with the importance of architecture and urban planning for human development and growth. This course seeks to retrace the outlines of this tradition, focusing on the 19th century to the present day. How does architecture respond to the pressing demand of housing humans in a manner adequate to the historical moment? How does literature reflect on and expand more abstract ideas on the built environment? After a brief foray into theoretical texts by Goethe and Hegel, we will look at realist works of the 19th century that outline a specific way of living as it is conducive to a young person's *Bildung* or education (Grillparzer, Stifter, Ebner-Eschenbach). At the turn of the 20th century, we will focus on the designs and writings of urban planners and architects such as Camillo Sitte, Otto Wagner, and Josef Hoffmann, as well as texts by Karl Kraus, Adolf Loos, Robert Musil and Arthur Schnitzler. In the 1920s and 1930s, we will turn our attention to the designs and theorizations of the German Bauhaus in conjunction with models and texts by Ludwig Wittgenstein, Adolf Loos, Josef Frank, and Veza Canetti. In the post-World War II period, a new theoretical discourse bemoans the overhasty development of both rural and urban areas. We will examine some of the writings of the neo-avantgardist architects of the "Austrian Phenomenon" (Hans Hollein, Walter Pichler) in conjunction with prose by Thomas Bernhard. Finally, we look at "parametric" architecture (Zaha Hadid) and experimental literature (Brigitta Falkner, Elfriede Jelinek).

GERMAN 295 Rhetoric: Disciplines of Persuasion (Graduate Seminar in

General Education)

CourseID: 159714

Faculty: Peter Burgard

Next Term Offered: 2019 Spring

Examines rhetoric from Aristotle to the present. Addresses rhetoric in literature, philosophy, science, statistics, politics, journalism, art, film, and digital media. Explores how we communicate to and with one another, how we construct and present arguments, how we persuade and are persuaded. Seeks to understand better the rhetoric we use and to which we are subjected as well as the fact that we regularly use and are subjected to rhetoric.

Global Health and Health Policy

GHP 80 Re-imagining Health Care: Effective Altruism and Beyond

CourseID: 204456

Faculty:

Next Term Offered: 2019 Spring

Real-world health systems are a mess. They stem from the successful or failed efforts of multiple constituencies with different medical, political, and economic priorities over many years. But what does an ethical health system aspire to achieve in the first place? Does it, for example, seek only to reduce premature death and disability, or also to distribute these burdens more equally? Does it make economic calculations, or emphatically reject putting a dollar sign over human lives? When resources are scarce, does a fair system prioritize patients in the prime of their lives over ones who have already had their "fair share" of life years? Should extra priority go to those who have suffered from severe disability for years?current practice notwithstanding? Students in this seminar will re-think what a health system should try to achieve?an important input toward reforming real-world health systems.

The seminar will start with a practical decision: an independent donor has offered your group \$25,000 for charity, and you will debate over two sessions which charity will receive it. To reach a decision, you will evaluate arguments for and against "effective altruism." The seminar will then build on these insights to tackle, over ten sessions, a larger question: What are the philosophical contours of an ideal health system? A final meeting will examine how this characterization of ethical health systems may have changed your minds about what charity to support. You will then select the winning charity.

Summer School

GOVT S-1036 GOVT S-1036

CourseID: 207487

Faculty:

Next Term Offered:

History of Art and Architecture

HAA 101 The Making of Art and Artifacts: History, Material and Technique

CourseID: 127621

Faculty:

Next Term Offered: 2018 Fall

To what extent do the availability of materials and development of material technology influence artistic choice and innovation? How was a particular work of art made, and why does it look the way it does? The course will explore these and other questions of materiality through a combination of close looking at objects in the Harvard Art Museums' collections, hands-on experimentation with a range of artist's materials and techniques, and discussions of related readings. Among the goals of the course are for students to gain a better understanding of the dynamic relationship between makers and the materials and techniques they use; to be able to better recognize traces of artistic processes in works of art; and consider the implications of alterations that can occur in objects over time. The course will be taught by the Harvard Art Museums' research curator for conservation and technical studies in collaboration with staff of the Straus Center for Conservation and Technical Studies - professionals who routinely consider questions of materiality and how they effect the way we understand, interpret, preserve and present works of art.

HAA 143R Studies in the Art of the Court of Constantinople

CourseID: 118559

Faculty:

Next Term Offered:

This course will study monuments of the Byzantine Empire from the end of Iconoclasm in 843 to 1204 when Constantinople, the capital city fell to the armies of the Crusaders. It will focus on objects and monuments, which can be linked to individual patrons or institutions. These are primarily the imperial court and the high officials of the government and the church, which together make up only a small but important class of Byzantine society. The material will be studied in relation to historical events, and to court ceremonial and religious feast days. The course will be run in part as a lecture course with ample discussion periods in the form of a seminar.

HAA 240R Topics in Byzantine Art: Illustrating the Word: Manuscripts and their Images from the Byzantine

CourseID: 118341

Faculty:

Next Term Offered: 2018 Fall

The course will concentrate on manuscripts produced after the period of Iconoclasm beginning in the second half of the 9th century. A variety of texts will be examined from courtly as well as monastic environments.

HAA 282K Indian Esoteric Buddhism

CourseID: 207667

Faculty:

Next Term Offered:

Human Evolutionary Biology

HEB 1280 Human Nature

CourseID: 202992

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.

HEB 1290 Cultural Evolution

CourseID: 159565

Faculty: Joseph Henrich

Next Term Offered: 2018 Fall

Unlike other species, humans are heavily reliant on learning from others to acquire many important aspects of their behavior, and this cultural transmission has created a second system of inheritance that has driven much of our species' genetic evolution. In addition to having shaped our species' anatomy and physiology, cultural evolution has important implications for understanding human nature, and for how to tackle basic problems in psychology, economics and anthropology. The first third of this course will develop the basic principles and lines of inquiry while the remainder will apply, hone and refine them by exploring economic development, the history of modern institutions, and global inequality.

HEB 1463 Molecular Evolution of Primates

CourseID: 132169

Faculty:

Next Term Offered: 2018 Fall

Molecular biology, DNA sequencing, and genomics have transformed our knowledge of evolution at the molecular level. This course explores how genetic data inform us about adaptations of humans and other primates. We will explore how natural selection molds primate genomes over time. Topics include the neutral theory of molecular evolution, the molecular clock concept and its applications, evolution of multigene families, relationships between phenotypic and molecular evolution, the evolution of primate color vision genes, and human disease variants in an evolutionary context.

This year features a new small-group format with emphasis on active student participation and skill development including how to think critically about data. Students will have the opportunity to learn how to write a research paper including how to effectively research the scientific literature, develop an outline, avoid inadvertent plagiarism, and present the body of a developing research paper to peers in order to get useful feedback in time to modify their final papers.

HEB 2100 Diet and Exercise

CourseID: 204009

Faculty:

Next Term Offered: 2019 Spring

This seminar considers evolutionary factors underlying how variations in diet and exercise affect the human body. Why do we tend to crave foods rich in fat and sugar? How unhealthful are saturated fats? Why has the prevalence of food allergies skyrocketed? Why are we so susceptible to sports injuries? Is exercise really medicine?

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 2460 Issues in Human Evolution

CourseID: 124008

Faculty:

Next Term Offered:

A discussion course for graduate students in Human Evolutionary Biology. Topics will include origins of hominids, radiation of hominins, origins of the genus Homo, and origins of Homo sapiens.

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.

South Asian Studies

HIND-URD 123 Bollywood and Beyond: Commercial Cinema, Language and Culture in South Asia

CourseID: 123790

Faculty:

Next Term Offered: 2019 Spring

This course examines concepts of personhood, community and culture in South Asia as expressed in contemporary film and literature. Works in Hindi-Urdu and in translation will be examined with emphasis on language as an index of cultural difference and of broad social shifts, notably the transformation of audiences from citizens to culture-consumers. Knowledge of Hindi-Urdu is not required. However, there will be a section for students with intermediate proficiency utilizing language materials.

History

HIST 13D Iran's Revolutions

CourseID: 159592

Faculty: Afsaneh Najmabadi

Next Term Offered: 2020 Spring

Iran witnessed two major revolutions in the twentieth century; the Constitutional Revolution in the first decade of the twentieth Century and the Islamic Revolution of 1979. Starting with the 1979 revolution, this seminar journeys back in time (and then to the present) to offer an overview of modern Iranian history. We will examine the major social, cultural, and political characteristics of the 1979 Revolution in relation to the history of Iran in the twentieth century and from a comparative perspective between the two revolutionary moments. We will then return to the present by examining the nature of the state and society that has resulted from the 1979 revolution.

HIST 13E History of Modern Mexico

CourseID: 159613

Faculty: Kirsten Weld

Next Term Offered: 2019 Spring

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 13J The British: A Cultural History

CourseID: 203056

Faculty: Maya Jasanoff

Next Term Offered: 2018 Fall

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

CourseID: 108058

Faculty: Dimitar Angelov

Next Term Offered: 2018 Fall

The seminar focuses on the eastern Mediterranean in a period of economic integration and political fragmentation marked by the crusades, the expansion of the Italian maritime republics, western colonization, and the conquests of the Turks. How did the Byzantines

react to the new unsettled world around them? What was the role of the newcomers? Special attention will be paid to the crusades, cross-cultural contacts, and the Mediterranean economy.

HIST 72K The Worlds of Joseph Conrad

CourseID: 127715

Faculty: Maya Jasanoff

Next Term Offered: 2019 Fall

Anarchists, asylum-seekers, ivory-traders, gun-runners, sea captains, empire-builders and corporate agents gone rogue: welcome to the world of 1900 as described by Joseph Conrad, the greatest novelist to write about globalization as we recognize it today. Course explores the history of modern globalization using secondary works and Conrad novels including Heart of Darkness. Topics include race, immigration, multinational capitalism, and technological change; we also discuss the relationship between history and literature.

HIST 74L The New Deal and American Liberalism

CourseID: 126678

Faculty: Brett Flehinger

Next Term Offered: 2019 Spring

This course studies the responses to the Great Depression that formed the New Deal. Particular attention will be paid to the connection of between policy development and the rise of American Liberalism. Major topics include Social Security, economic redistribution, Keynesianism, social planning, regulatory reform, conservative critiques of the New Deal and others.

HIST 79E Commodities in International History

CourseID: 125503

Faculty: Alison Frank Johnson

Next Term Offered: 2020 Spring

Introduces students to international history through the study of commodities ranging from oil, coal, and cotton to potatoes, rum, coffee, and sugar. Showcases historical writings that transcend geographic, cultural, and political boundaries between East and West, North and South, Atlantic and Pacific as well as methodological boundaries between cultural, economic, business, and environmental history, the history of food, of technology, and of ideas.

HIST 80A Roman Imperialism

CourseID: 122940

Faculty: Emma Dench

Next Term Offered: 2019 Spring

Whether regarded as a model for European empires or as a precursor of western colonialism and globalization, Roman imperial expansion has captured both popular and scholarly imaginations. We proceed thematically, analyzing a variety of textual and material evidence for the changing nature of Roman imperialism between the mid-Republican and early imperial periods, and its impact on the politics, culture, religion, and society of Roman and local communities alike.

HIST 80G Travelers to Byzantium

CourseID: 108055

Faculty: Dimiter Angelov

Next Term Offered: 2019 Fall

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

HIST 82B Fin-de-Siècle Vienna

CourseID: 120893

Faculty: Alison Frank Johnson

Next Term Offered: 2019 Fall

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

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

CourseID: 121621

Faculty: Emma Rothschild

Next Term Offered: 2019 Fall

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

HIST 83C Care of the Soul

CourseID: 124487
Faculty: James Hankins
Next Term Offered: 2019 Spring

Comparative study of ancient traditions of moral self-cultivation as a way of curing diseases of soul and achieving happiness and moral worth. The traditions considered include Aristotelianism, Stoicism, Confucianism, Mahayana Buddhism, and early Islam. Readings include selections from Aristotle's Ethics, the Meditations of Marcus Aurelius, Confucius' Analects, the Bodhicaryavataara of Santideva with the commentary of the Dalai Lama, and The Refinement of Character by Miskawayh. Modern approaches to character formation from the positive psychology movement will also be considered.

HIST 84G Harvard and Slavery

CourseID: 110365
Faculty: Sven Beckert
Next Term Offered: 2018 Fall

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

HIST 84L Democracy and Education in Modern America

CourseID: 109407
Faculty: James Kloppenberg
Next Term Offered: 2020 Spring

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

HIST 86H Asia after Europe

CourseID: 107926
Faculty: Sugata Bose
Next Term Offered: 2019 Spring

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

HIST 87A Health, Disease, and Ecology in African History

CourseID: 143045

Faculty: Emmanuel Akyeampong
Next Term Offered: 2019 Spring

Examines the history of disease and health in sub-Saharan Africa from the 19th century to recent times, exploring African and western concepts of health, disease and healing. Illustration through discussion of case studies of individual diseases, including malaria/sickle cell trait, trypanosomiasis, tuberculosis, sexually transmitted diseases, alcoholism, AIDS, and onchocerciasis, and the public health policies affecting them.

HIST 88B Medieval History and Cinema

CourseID: 126624

Faculty: Cemal Kafadar

Next Term Offered: 2019 Spring

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 97A "What is the History of Medicine?"

CourseID: 109926

Faculty:

Next Term Offered: 2019 Spring

The emergence of the science of medicine and its professionalization have been integral aspects of human history. The history of medicine allows us to trace the various traditions that have come together to create "modern medicine." In this section, students will examine the human endeavor to be healthy and to cure disease. The practice of medicine draws on changing ideas about the natural world and the body. It also demands interventions in the physical environment so as to maximize public health, and readily incorporates transformative technologies from other sectors of human society. Students will be asked to reflect on the interaction of medicine and culture through questions such as: How did western powers use biomedicine in the context of empire? How do non-western cultures appropriate and indigenize biomedicine?

HIST 97C "What is the History of History?"

CourseID: 109928

Faculty:

Next Term Offered: 2020 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: 2020 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 97E "What is Imperial History?"

CourseID: 109930

Faculty:

Next Term Offered: 2019 Spring

Though empires have recently disappeared from the map, for historians these sprawling multi-ethnic, multi-confessional states remain crucial laboratories for the study of violence, power, ideology, aesthetics, and identity. This section will introduce students to the many ways historians define empires and interpret the experiences of those who inhabited them. How does one write the history of such diverse, expansive entities? How does imperial history incorporate the perspectives of disenfranchised, enslaved, and colonized peoples? What is its scale? How does the work of historians relate to images of empire generated through public commemoration and popular memory?

HIST 97F What is Material History?

CourseID: 109931

Faculty:

Next Term Offered: 2019 Spring

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

with history and historical sources, but also art history, literary studies, archaeology, environmental history, and cognitive neuroscience.

HIST 1002 The American Revolutionary War

CourseID: 203018

Faculty: Jane Kamensky

Next Term Offered: 2019 Fall

This course explores the causes, experience, and consequences of the war known in the United States as the American Revolution. Treating the conflict as a multi-sided struggle, our vantage point will range among the thirteen rebellious colonies of the North American seaboard, the thirteen other colonies that comprised Britain's America, and the vast stretches of the American continent that lay outside Britain's domain, but were nonetheless embroiled in the bloody civil war that reshaped the first British Empire and resulted in the founding of the United States. We will also take in the view from London and elsewhere around the globe, as America's revolution remapped European alliances and colonial relationships among Europe, the Americas, Africa, and Asia. Our focus will largely center on the war itself, with only a brief foray into the politics and society of the early United States. We will try, whenever we can, to view history forward rather than backwards, thus exploring the contingencies, interdependencies, and possibilities that scholars too often flatten into a narrow, smooth road to American Independence.

HIST 1004 Modern Europe, 1789 to the Present

CourseID: 207529

Faculty:

Next Term Offered:

This survey course explores the political, social, economic, and cultural history of Europe from the French Revolution to the present. Topics include agricultural, commercial and industrial development; demographic change and social stratification; mass migration, trade and globalization; religion and political ideology; monarchies, republics and empires; war, peace and revolution. Throughout the period that this course covers, European history became increasingly hard to separate from its global dimensions, and the syllabus reflects that.

HIST 1005 The Early American Republic: The United States from 1783-1873

CourseID: 204982

Faculty: Annette Gordon-Reed

Next Term Offered: 2018 Fall

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 1010 History of the Prison

CourseID: 156019

Faculty: Elizabeth Hinton

Next Term Offered: 2019 Fall

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

HIST 1011 The World of the Roman Empire

CourseID: 125493

Faculty: Emma Dench

Next Term Offered: 2018 Fall

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

HIST 1013 Pacific Crossings: Introduction to Asian American History

CourseID: 159559

Faculty: Genevieve Clutario

Next Term Offered: 2018 Fall

This course examines comparative histories of modern transpacific movement and migration between Asia and the Americas, under the scope of multiple colonizations and imperial expansions. We will study empire and colonialisms impact transnational movements of ideas, commodities, and people, tracing how movements also occur within and between colonial spaces and across hemispheres. By connecting transnational histories of Asia, including the Philippines, as well as Pacific Islands, like Guam, Samoa, and Hawai'i to the "Americas," this course explores how legacies of empire shaped and continue to shape forms of Asian migration, global formations, and

diaspora.

HIST 1014 Gender & Empire

CourseID: 156553

Faculty: Genevieve Clutario

Next Term Offered: 2019 Spring

This course takes a cultural approach to connected histories and more contemporary developments of (post)colonial national identity formations, U.S. empire, and globalization during the nineteenth and twentieth centuries through the lenses of gender, race, and appearance. We will examine visual and performative cultural arenas such as beauty pageants, advertising, mass media, film, and video and investigate how discourses of racial and gendered aesthetics functioned in structuring and maintaining colonial forces and empire.

HIST 1020 A Global History of Modern Times

CourseID: 114893

Faculty: Charles Maier

Next Term Offered: 2018 Fall

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

HIST 1022 The World of States and Empires: International History since 1500

CourseID: 203061

Faculty: Charles Maier

Next Term Offered: 2018 Fall

The World of States and Empires" introduces the classical themes of international relations from the Europeans' arrival in the Americas, Asia, and Africa to the present. State structures, religious and secular ideological conflicts, causes of war and conditions for peace are related to trends in the world economy, ecological and demographic transitions, and the growing sensitivity to human rights and global interconnections.

HIST 1035 Byzantine Civilization

CourseID: 108059

Faculty: Dimiter Angelov

Next Term Offered: 2019 Spring

The Byzantine (Eastern Roman) Empire outlived the fall of Rome by a thousand years. In what ways did Byzantium preserve the institutions and politics of imperial Rome? In what ways was it a medieval civilization? How did Byzantium's professional armies, able diplomats, and brilliant intellectuals ensure its survival and renewed expansion? This course traces the story of the Byzantine Empire between c. 600 and 1453, setting it in the context of medieval and world history.

HIST 1067 An Introduction to the History of Economic Thought

CourseID: 127819

Faculty: Emma Rothschild

Next Term Offered: 2018 Fall

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

HIST 1068 United Nations: A Global History

CourseID: 110511

Faculty: Emma Rothschild

Next Term Offered: 2019 Fall

Explores the history of international organizations, including activities concerned with economic development, security, and environment. Taught in conjunction with the development of new web-based sources on United Nations history.

HIST 1217 U.S. Foreign Policy in a Global Age

CourseID: 160977

Faculty: Fredrik Logevall

Next Term Offered: 2019 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 1281 The End of Communism

CourseID: 109418

Faculty: Terry Martin

Next Term Offered: 2019 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 1300 Western Intellectual History: Greco-Roman Antiquity

CourseID: 119533

Faculty: James Hankins

Next Term Offered: 2018 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: 2019 Spring

A survey of major themes in medieval and early modern intellectual history. Readings in Anselm, Abelard, Thomas Aquinas, William of Ockham, Petrarch, Machiavelli, Thomas More, Martin Luther, Montaigne, Francis Bacon, Descartes, Hobbes.

HIST 1323 German Social Thought, Nietzsche to Habermas

CourseID: 126545

Faculty: Peter Gordon

Next Term Offered: 2018 Fall

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

HIST 1324 French Social Thought, Durkheim to Foucault

CourseID: 126546

Faculty: Peter Gordon

Next Term Offered: 2019 Spring

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

HIST 1330 Social Thought in Modern America

CourseID: 111490

Faculty: James Kloppenberg

Next Term Offered: 2020 Spring

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

HIST 1390 Understanding Democracy through History

CourseID: 120921

Faculty: Alex Keyssar

Next Term Offered: 2018 Fall

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

HIST 1433 American Populisms: Thomas Jefferson to the Tea Party+Trump

CourseID: 126293

Faculty: Brett Flehinger

Next Term Offered: 2018 Fall

This course studies the American Populist tradition that defines the common "people" as the foundation of American economic and political life and thrives on opposition between the people and "elite" interests. The class places the formal Populist movement of the late nineteenth century in broader context, from Jeffersonian tradition through the rise of anti-elitist and anti-government movements characterized by George Wallace, Sarah Palin, the Tea Parties, and the political rise of Donald Trump.

HIST 1465 The United States in the World since 1900

CourseID: 117932

Faculty: Erez Manela

Next Term Offered: 2018 Fall

A wide-ranging overview of American interactions with the world from the Spanish-American War through 9/11 and beyond. We will consider the changing patterns of international politics, the causes and implications of imperialism and decolonization, the pivotal impact of the world wars and the Cold War, the significance of cultural interactions and social movements, the challenges of globalization, the complexities of international development, and the roots of current world (dis)orders.

HIST 1511 Latin America and the United States

CourseID: 108530

Faculty: Kirsten Weld

Next Term Offered: 2019 Fall

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

HIST 1513 History of Modern Latin America

CourseID: 108533

Faculty: Kirsten Weld

Next Term Offered: 2018 Fall

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: 2019 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 1602 Modern China

CourseID: 109621

Faculty: Arunabh Ghosh

Next Term Offered: 2019 Spring

This lecture course will provide a survey of some of the major issues in the history of post-imperial China (1912-). Beginning with the decline of the Qing and the dramatic collapse of China's imperial system in 1911, the course shall examine how China has sought to redefine itself anew over the past one-hundred years. The revolutionary years of 1911, 1949, and 1978 will serve as our three fulcra, as we investigate how China has tussled with a variety of 'isms' (such as republicanism, militarism, nationalism, socialism, and state capitalism) in its pursuit of an appropriate system of governance and social organization. In so doing, we shall also explore the social, economic, cultural, and scientific changes wrought by these varied attempts at state-building.

HIST 1700 The History of Sub-Saharan Africa to 1860

CourseID: 124404

Faculty: Emmanuel Akyeampong

Next Term Offered: 2019 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 1905 The Mediated Book: Texts, Writers, and Readers in Early Modern Britain and Early America

CourseID: 203460

Faculty: David Hall

Next Term Offered: 2019 Spring

An introduction to book history and its connections with intellectual, cultural, and religious history, this course focuses on popular Protestantism in Britain and early America, together with certain "revolutions" in print in the context of political insurgencies; as well, it deals with the relationships between writers, readers, and the book trades. Apart from weekly readings and brief reports, the principal assignment is a 15-20 page research paper using primary sources.

HIST 1909 East European Identities: Russia and Ukraine

CourseID: 203036
Faculty: Serhii Plokhii
Next Term Offered: 2020 Spring

Discusses the formation of modern national identities in the Slavic world, and traces the development of competing imperial and national projects from the Napoleonic Wars to the collapse of the Soviet Union and the rise of independent successor states. Examines the reflection of growing national awareness in Russian and Ukrainian political writings, historiography, literature, and culture, as well as the role of multiple "others" in the formation of modern East Slavic identities.

HIST 1912 History Design Studio

CourseID: 109422
Faculty: Vincent Brown
Next Term Offered: 2018 Fall

Weekly seminar and studio for multimedia history. The course encourages students to design new modes of historical storytelling by embedding historians' core values and methods in the innovative products of artisanship and craft. Extensive use of primary sources, attention to processes of change over time, keen historiographical awareness, and an overarching respect for evidence will guide a range of multimedia historical projects.

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

CourseID: 108531
Faculty: Kirsten Weld
Next Term Offered: 2020 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 1914 The History of Environmental Activism

CourseID: 159654
Faculty: Joyce Chaplin
Next Term Offered: 2019 Fall

Why do some human beings step forward to defend the non-human? It has been unusual, in human history, to express concern for the non-human parts of nature; to do something politically relevant with that concern is rarer still. In this class, we will

examine the history of why and how people have done both. We will trace the origins of environmental ideas, broadly defined, and then the historical processes by which activism on behalf of the environment has become part of national and global cultures. As well, we will analyze different media and modes for expressing environmentalist action, as they have developed over time. And we will interrogate the character and role of the activist.

HIST 1915 The Nine Lives of Benjamin Franklin

CourseID: 119039

Faculty: Joyce Chaplin

Next Term Offered: 2019 Fall

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

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

CourseID: 109459

Faculty: Andrew Gordon

Next Term Offered: 2019 Fall

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

HIST 1925 Europe and its Other(s)

CourseID: 109437

Faculty: Tamar Herzog

Next Term Offered: 2019 Spring

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

HIST 1929 Slavery, Commerce, and Emancipation in the Age of the French

and Haitian Revolutions

CourseID: 203027

Faculty: Mary Lewis

Next Term Offered: 2020 Spring

Examines the institution of slavery and how it was alternately challenged and reinforced by the tumult of political revolutions in France and Haiti. Major themes will include the legal and economic underpinnings of plantation slavery; the causes and worldwide consequences of the Haitian Revolution (1791-1804); the political economy of counter-revolution, re-enslavement, abolitionism, and new forms of labor coercion such as indentured servitude. Our focus will be primarily on French colonies, with comparisons made to Cuba, the British Caribbean, South America, and the American South where appropriate.

HIST 1930 Literature and Social History: A View from Brazil

CourseID: 159656

Faculty: Sidney Chalhoub

Next Term Offered: 2019 Fall

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: 2020 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 1937 Social Revolutions in Latin America

CourseID: 159555

Faculty: Alejandro de la Fuente

Next Term Offered: 2018 Fall

This course seeks to explain why social revolutions have taken place in Latin America and analyzes their impact on the region. The objective is for students to gain a critical understanding of the origins, development, and impact of revolutionary movements in Latin America during the twentieth century. The course examines several case studies, which may include Mexico, Cuba, Chile, Nicaragua, the Zapatista uprising in Chiapas, and the so-called "Bolivarian revolution" of Venezuela. Our goal is to identify similarities and differences among these cases.

HIST 1964 International History: Empires, State Systems, and International Organizations

CourseID: 119143

Faculty: Charles Maier

Next Term Offered: 2018 Fall

A comparative approach to the history of international relations, including theories of war and peace; imperial, hegemonic and other orders; the protection of minorities and human rights; and the enforcement of transnational norms. Readings will include theoretical as well as historical texts.

HIST 1965 International History: States, Markets, and the Global Economy

CourseID: 120542

Faculty: Charles Maier

Next Term Offered: 2018 Fall

International economic history and political economy, including strategies of economic development, international trade, migration, finance and monetary relations, based on both theoretical works and specific case studies, and focusing on the period from around 1700 to the present.

HIST 2035 Topics in Byzantine History: Seminar

CourseID: 202985

Faculty: Dimiter Angelov

Next Term Offered: 2019 Spring

The seminar introduces graduate students to advanced research in the field of Byzantine history. Special attention is paid to critical methods of historical analysis as well as to new approaches and methodologies.

HIST 2039 History from Things: Seminar

CourseID: 205145

Faculty: Gabriel Pizzorno

Next Term Offered: 2018 Fall

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 2050 Medieval Societies and Cultures: Proseminar

CourseID: 143662

Faculty: Daniel Smail

Next Term Offered: 2018 Fall

Introduction to the study of medieval history and to the literature basic to the examination field. Readings include both canonical works as well as recent studies. Though designed for specialists in medieval European history, the course welcomes all non-specialists interested in exploring large issues of comparative history and chronological depth.

HIST 2060 Topics in High and Late Medieval History: Seminar

CourseID: 121679

Faculty: Daniel Smail

Next Term Offered: 2018 Fall

This course is designed to introduce graduate students to the sources and methodologies necessary to conduct research on medieval Europe.

HIST 2250 Interpreting Europe's Twentieth Century: Seminar

CourseID: 108079

Faculty: Charles Maier

Next Term Offered: 2018 Fall

Historical and theoretical analyses of crises and transformation: critiques of liberalism; fascism and communism; legacies of world war and empire; postwar institutional constructions including the EU; ideological revival from the 1960s to the collapse of communism; the rise and attrition of a European civil society.

HIST 2272 The Soviet Union: Seminar

CourseID: 122848

Faculty: Terry Martin

Next Term Offered: 2019 Spring

Introduction to archival and primary sources, as well as major historiographical debates.
Primary focus on major research paper.

HIST 2320A Foundations of Modern European Intellectual History: Seminar

CourseID: 127616

Faculty: Peter Gordon

Next Term Offered: 2018 Fall

This graduate seminar provides a survey of major themes and controversies in modern European intellectual history from the Enlightenment to the post-war era. The seminar is intended primarily for graduate students who are preparing for the qualifying examination. The course is offered on a yearly basis, and it meets every other week throughout the academic year. Please consult with the instructor for further details. Students must complete both terms of this course (parts A and B) within the same academic year in order to receive credit.

HIST 2320B Foundations of Modern European Intellectual History: Seminar

CourseID: 160385

Faculty: Peter Gordon

Next Term Offered: 2019 Spring

This graduate seminar provides a survey of major themes and controversies in modern European intellectual history from the Enlightenment to the post-war era. The seminar is intended primarily for graduate students who are preparing for the qualifying examination. The course is offered on a yearly basis, and it meets every other week throughout the academic year. Please consult with the instructor for further details. Students must complete both terms of this course (parts A and B) within the same academic year in order to receive credit.

HIST 2326 Adorno's Aesthetic Theory

CourseID: 207527

Faculty:

Next Term Offered:

This graduate-level interdisciplinary seminar will address the philosophical, historical, sociological, and aesthetic questions raised by the Frankfurt School social theorist and philosopher Theodor W. Adorno in his posthumously-published masterpiece *Aesthetic Theory* (1970). Our chief task will be to come to a better understanding of this notoriously difficult work by examining its place in past and present debates over the relationship between art and society. Topics include: the possibility of poetry after Auschwitz, the debate with Walter Benjamin over the status of the "aura", the problem of artistic political engagement, and the dialectic between the culture-industry and "autonomous art."

HIST 2340A Readings in American Intellectual History

CourseID: 111493

Faculty: James Kloppenberg

Next Term Offered: 2019 Fall

This course examines classic texts in American intellectual history from 1630 to the present, both primary and secondary, and surveys recent developments in the field. It is intended for first- and second-year graduate students preparing for general exams in history and for other graduate students in fields such as American Civilization, Government, Law, Literature, Religion, and Education. Students must complete both terms of this course (parts A and B) within the same academic year in order to receive credit.

HIST 2340B Readings in American Intellectual History

CourseID: 160383

Faculty: James Kloppenberg

Next Term Offered: 2020 Spring

This course examines classic texts in American intellectual history from 1630 to the present, both primary and secondary, and surveys recent developments in the field. It is intended for first- and second-year graduate students preparing for general exams in history and for other graduate students in fields such as American Civilization, Government, Law, Literature, Religion, and Education. Students must complete both terms of this course (parts A and B) within the same academic year in order to receive credit.

HIST 2341A American Intellectual History: Seminar

CourseID: 127939

Faculty: James Kloppenberg

Next Term Offered: 2019 Fall

This course is intended for graduate students who wish to supplement the reading of primary and secondary sources in American intellectual history with the preparation of a research paper. Students must complete both terms of this course (parts A and B) within the same academic year in order to receive credit.

HIST 2341B American Intellectual History: Seminar

CourseID: 160384

Faculty: James Kloppenberg

Next Term Offered: 2020 Spring

This course is intended for graduate students who wish to supplement the reading of primary and secondary sources in American intellectual history with the preparation of a research paper. Students must complete both terms of this course (parts A and B) within the same academic year in order to receive credit.

HIST 2350 Research Seminar in the History of Education: Seminar

CourseID: 126517

Faculty: Julie Reuben

Next Term Offered: 2018 Fall

This course offers students the opportunity to conduct original research in the history of education.

HIST 2405 Politics, Social Life, and Law in Jeffersonian America: Seminar

CourseID: 125831

Faculty: Annette Gordon-Reed

Next Term Offered: 2018 Fall

This seminar examines politics, law, and social life in the United States from 1776 to 1828, discussing well-known members of the founding generation while considering the role of women, enslaved people, and the working class.

HIST 2412 Topics in the History of Atlantic Slavery: Seminar

CourseID: 123095

Faculty: Vincent Brown

Next Term Offered: 2019 Spring

Will introduce graduate students to major synthetic works on the history of Atlantic slavery, surveying the period between the mid-15th century and the late 19th, and provide them an opportunity to develop original research projects.

HIST 2419 Vast Early America: Boundaries and Beyonds: Proseminar

CourseID: 204525

Faculty: Joyce Chaplin

Next Term Offered: 2020 Spring

#VastEarlyAmerica is a Twitter hashtag that acknowledges and rejoices in the rapid, recent expansion of the field that once paid attention mostly (or only) to the English-speaking colonies that formed the United States. This course allows graduate students (and selected undergraduates) to explore the new definition of the fruitfully expanded field, either through primary research or historiography.

HIST 2450 History of Schooling in America: Seminar

CourseID: 126559

Faculty: Julie Reuben

Next Term Offered: 2019 Spring

This course examines major issues in the development of schooling from the Colonial period to the present.

HIST 2462 Readings in the U.S. in the 20th Century: Proseminar

CourseID: 112069

Faculty:

Next Term Offered: 2018 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

CourseID: 156896

Faculty: Kenneth Mack

Next Term Offered: 2019 Spring

This course examines the history of capitalism in America, viewed through the lens of debates over regulation of economic activity. Beginning in the early days of the republic, it will examine the role of law in capitalist development, focusing on debates over the regulation of corporations, banking and the financial system, antitrust, and administrative law, continuing through the regulatory reforms of the New Deal. It will then examine movements for deregulation, the roots of the financial crisis, and recent proposals to regulate banks and other financial institutions. The course will examine the social, institutional and intellectual history of economic regulation.

HIST 2485 European Legal History Workshop

CourseID: 203246

Faculty: Tamar Herzog

Next Term Offered: 2019 Fall

Offered jointly with the Harvard Law School, this workshop will examine some of the most innovative research in European Legal history, conducted by both historians and legal scholars. Classes will alternate between in-group discussions of certain fields, questions or methodologies, and presentations by leading scholars.

HIST 2511 Rethinking the Archive: Proseminar

CourseID: 109563

Faculty: Kirsten Weld

Next Term Offered: 2019 Spring

This seminar provides a critical examination of the documentary and archival forms that lie at the heart of historical knowledge production. Readings span disciplinary

boundaries, geographic regions, and time periods.

HIST 2525A Administrating Differences in Latin America: Historical Approaches

CourseID: 203325

Faculty:

Next Term Offered: 2018 Fall

The Latin American History Seminar and Workshop is a yearlong research seminar and workshop that meets every other week to study a central question in Latin American history (in the fall) and provide opportunities for scholars to share their own work and learn about the scholarship of others in a workshop form (in the spring). In 2016-2017 we will discuss how differences were defined, negotiated, represented, and challenged in colonial Latin American, creating both inclusion and exclusion. Among differences considered would be distinctions between local and metropolitan; citizens and foreigners; narratives of origin and ancestry based on racial, ethnic, or religious criteria; and gender distinctions. Students must complete both terms of this course (parts A and B) within the same academic year in order to receive credit.

HIST 2525B Administrating Differences in Latin America: Historical Approaches

CourseID: 203326

Faculty:

Next Term Offered: 2019 Spring

The Latin American History Seminar and Workshop is a yearlong research seminar and workshop that meets every other week to study a central question in Latin American history (in the fall) and provide opportunities for scholars to share their own work and learn about the scholarship of others in a workshop form (in the spring). In 2016-2017 we will discuss how differences were defined, negotiated, represented, and challenged in colonial Latin American, creating both inclusion and exclusion. Among differences considered would be distinctions between local and metropolitan; citizens and foreigners; narratives of origin and ancestry based on racial, ethnic, or religious criteria; and gender distinctions. Students must complete both terms of this course (parts A and B) within the same academic year in order to receive credit.

HIST 2638 Readings in Modern Chinese History: Proseminar

CourseID: 159563

Faculty: Arunabh Ghosh

Next Term Offered: 2018 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 2639 The History of the People's Republic of China: Research Seminar

CourseID: 202996

Faculty: Arunabh Ghosh

Next Term Offered: 2018 Fall

For long, 1949 marked a boundary that historians of China did not transgress. The post-1949 years were almost exclusively the domain of political scientists, sociologists, economists, and anthropologists. But over the last twenty years, spurred by the increasing accessibility of materials inside and outside the archive and by methods such as oral history, historians have offered new and compelling perspectives on the early years of the People's Republic of China. In this research seminar students will explore this history by reading some of the most innovative work in the field and developing and presenting research that will culminate in a 25-35 page research paper. Each week we shall also have the opportunity to discuss a particular kind of source. This will help prepare students for research in China by giving them practical experience of dealing with a variety of materials, textual and non-textual.

HIST 2651 Japanese History: Seminar

CourseID: 115288

Faculty: Andrew Gordon

Next Term Offered: 2019 Spring

Students write research papers on topics of their own choosing drawing on sources in Japanese, and other languages as appropriate.

HIST 2692 Colonial and Post-Colonial Histories of South Asia: Seminar

CourseID: 116677

Faculty: Sugata Bose

Next Term Offered: 2018 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: 2019 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 2805 Gender & Sexuality: Comparative Studies of Islamic Mid. East, N. Africa, & S. Asia: Proseminar

CourseID: 119090

Faculty: Afsaneh Najmabadi

Next Term Offered: 2020 Spring

Informed by theories of gender and sexuality, this seminar investigates how historically notions of desire, body, sex, masculinity, femininity, gender and sexual subjectivities have formed and reformed in Islamicate cultures of the Middle East, North Africa, and South and East Asia.

HIST 2885 Introduction to Archival Research in Ottoman History: Proseminar

CourseID: 120701

Faculty: Cemal Kafadar

Next Term Offered: 2018 Fall

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: 2019 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: 2020 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 2926 Empires Compared: Proseminar

CourseID: 107959

Faculty: Maya Jasanoff

Next Term Offered: 2019 Fall

What do empires have in common, and what makes each distinct? Course undertakes thematic approach to imperial history via culture, economics, governance, and more. Open to students across subfields; emphasis on teaching and exam preparation.

HIST 2951 The Environmental Turn in History: Seminar

CourseID: 128257

Faculty: Ian J. Miller

Next Term Offered: 2018 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.

History and Literature

HIST-LIT 90BY Cold War Cinema

CourseID: 160728

Faculty:

Next Term Offered:

This course examines the history of the United States and the Cold War using popular films made during the conflict as the principal texts. The class is divided into two units -- the first looks at the effects of the "Red Scare" on culture and politics in the United States from the 1940s to the mid-1960s. The second section examines U.S. interventions in the "Third World" from the 1950s to the 1980s and their influences both on countries from Algeria to Afghanistan and domestically.

HIST-LIT 90CF The American Prison & The Literature of Punishment

CourseID: 203218

Faculty:

Next Term Offered:

The United States currently keeps more people behind bars than any other country. While the US's emergence as the leader in incarceration rates is relatively recent, the prison has loomed large in American public life for 200 years. In this class, we will approach the prison not as a marginal phenomenon, but as an institution central to American culture. Readings include works of literature by and about prisoners as well as reformers' pamphlets, sociological studies, government reports, and inmate manifestos. We will trace debates about freedom and captivity from the birth of the penitentiary through the era of mass incarceration.

HIST-LIT 90DF Human Rights and Transitional Justice in Latin America

CourseID: 207845

Faculty:

Next Term Offered:

This course will examine the emergence of the twin phenomenon of human rights advocacy and transitional justice across Latin America, exploring the original debates and major players within the movement, a few of the larger case studies in the past three decades throughout the region, and the central issues now facing the field. We will examine how a human rights discourse emerged in these nations, and how the countries dealt in different ways with the repressive legal, cultural, and political legacies of authoritarianism. We will examine how human rights definitions changed and intersected with calls for justice within the emerging the democratic governments, and how accountability claims evolved in the decades following the military rule based on domestic political battles and changing international norms. As a group, we will focus on

existing literature on justice and truth-telling in the politics of transition, as well as scholarship on social memory and historical commemorations by using literature, film, testimonies, government documents, and scholarly articles.

HIST-LIT 90DG Everyday Life in Cold War Berlin

CourseID: 207846

Faculty:

Next Term Offered:

In this course, we will examine the history of Berlin from the "rubble years" after World War II, through the aftermath of German unification in the 1990s from the perspective of the history of everyday life. Our discussion of diaries, primary source documents, historical studies, literature, films, art, and music produced in divided Berlin will reveal how the divided city shaped individual lives and subjectivities, and how individual Berliners shaped the history of Cold War Berlin.

HIST-LIT 90DH Students at the Barricades: Student Activism in Global Perspective

CourseID: 207847

Faculty:

Next Term Offered:

What is the role of the student in the struggle for global justice? Do students bear particular responsibility in addressing global inequalities? How does student activism differ from other forms of activism, and how do they intersect? Has student activism changed over time, and have different student movements across the world exhibited different characteristics? What are the economic, cultural and political factors that have animated the emergence of vibrant student movements? And how has this particular form of activism been portrayed and fostered through literature and film? This course will explore the role that students have played and continue to play in social justice movements around our world. Throughout our study of student mobilization across time and geographies, we will debate how these movements should be understood, and the role they play in altering social values, practices and institutions. The purpose of this course is to theorize the ways in which these critical movements come into being and their consequences. This course aims to be directly relevant to your lives as students, and to encourage you to think broadly about the struggle to enact change in our world.

HIST-LIT 90DI Speculative Fictions in Multiethnic America

CourseID: 207848

Faculty:

Next Term Offered:

Speculative fiction, especially science fiction, is known to be a predominantly white genre; data from one source, the sci-fi trade journal *Locus*, indicates that less than 5% of

SF and fantasy books published are by writers of color. This course examines in an intentionally multi-ethnic framework speculative fiction written by African American, Asian American, and white authors alike in the 20th and 21st centuries, which opens us up to the diversity of themes, concepts, and settings to be found ?should we be interested in looking for it. From the early Afro-futurism of W.E.B Du Bois's "The Comet," to the techno-orientalism of Paolo Bacigalupi's *The Windup Girl*, to the environmental critique of Karen Tei Yamashita's *Through the Arc of the Rainforest*, contemporary speculative fiction asks us to imagine a world completely alien to us and works to uncover the hidden operations, institutions, and power structures of our own ?often, though not always, at the same time. Yet, some of the authors examined in this course also reveal that their writings are not necessarily dictated or primarily influenced by their identity markers. Ultimately, in this course, we will gain a nuanced appreciation for the breadth of conceptual concerns covered in contemporary speculative fiction. We will also learn to read both with and against the grain of our expectations as readers, and to use this fluidity to reflect on the ethical dimensions of reading and writing.

HIST-LIT 90DJ From Wounded Knee to Standing Rock: Native America in the Twentieth Century

CourseID: 207849

Faculty:

Next Term Offered:

This course will explore various forms of Native American cultural and political production in the twentieth century. Drawing on fiction, film, historical documents, documentaries, photographs, nonfiction, and memoirs, this class will explore the ways in which Indigenous people have articulated both belonging and separateness from the United States. In addition to its focus on key aspects of modern indigenous culture and politics?sovereignty, self-determination, decolonization, anti-racism, gender equality, and land claims, to name a few?we will also consider broader conceptual questions. What, for example, is the relationship between indigeneity and modernity? Does the twentieth century mark a distinct break from the first four hundred years of Native-settler history? How does settler colonialism intersect with other forms of oppression? And, why have events like Wounded Knee II and Standing Rock gained support from wider, non-indigenous publics while issues like police brutality against Native people and the ongoing crisis of Missing and Murdered Indigenous Women (MMIW) have not?

HIST-LIT 90DK Asian/American Graphic Novels

CourseID: 207850

Faculty:

Next Term Offered:

The course on Asian American studies focuses on the genre and form of comics and

graphic novels in the context of histories of migration and diasporas. Through these illustrative and textual works, we will explore the representation of Asian American identity and the experience of racial difference through possible works, such as Adrian Tomine's *Shortcomings*, Mine Okubo's *Citizen 13660*, and Thi Bui's *The Best We Could Do*. The course will also open up to consider the transnational and global literature of Asian/American graphic novels from other sights of Asian migration and diaspora, including Chinese Australian Shuan Tan's *The Arrival* and Japanese British Fumio Obata's *Just So Happens*. As such, this course seeks to examine literary works and cultural productions in the form of comics and graphic novels that engage with and articulate the Asian American experience as well as the sense of being Asian in the world.

HIST-LIT 90DL Global Hollywood

CourseID: 207851

Faculty:

Next Term Offered:

This course charts the development of the American film industry in the context of and in response to the pressures of world capitalism and the shaping forces of geopolitics. "Global Hollywood" begins with the "universal language" hypothesis, the belief among theorists and makers of early cinema that the silent movie functioned as a twentieth-century Esperanto; it proceeds to the problem of sound cinema and the shooting of multiple language versions of movies in the early 30s, and then addresses World War II (*Three Amigos*; *Why We Fight*), the European influence on what would become known as film noir (*Sunset Boulevard*), science fiction allegories of the Cold War and nuclear anxiety (*Invasion of the Body Snatchers*), and so on up to our current regime of international coproduction (*Mad Max: Fury Road*; *Arrival*). Along the way, American films will be supplemented by international responses to Hollywood, both in film (e.g. Godard's *Contempt*; Fassbinder's *Ali: Fear Eats the Soul*) and literature (e.g. Manuel Puig's *Kiss of the Spiderwoman*).

HIST-LIT 90DM America's Queer Canon

CourseID: 207852

Faculty:

Next Term Offered:

This course examines a range of texts from American authors, poets, musicians, and film directors that engage with queer and subversive themes and desires, various sexual identities, and other relations outside of the heterosexual nuclear family. Central to the course's investigation are the intersections between queer theory, feminism, and critical race theory. The regulation of gender and sexual behavior?and transgression of sex/gender norms?have been central to American society from its beginnings. Weaving these analyses with our primary sources, this course focuses on the second half of the nineteenth century into the twenty-first. With help from social and cultural historians, we'll pay close attention to how changing discourses shape the meaning of queerness in

America, and how queer writers and artists have changed America.

HIST-LIT 90DN Alternative Archives

CourseID: 207853

Faculty:

Next Term Offered:

What is an archive? Starting from the premise that archives, as records of the past, are themselves products of history, this course will focus on the politics of archives and teach students how to read archival sources against the grain. We will begin by exploring ways of engaging with traditional archives, with particular attention to strategies scholars have used to mine official sources to focus on the people they marginalized. From there, we will turn to contemporary archival practices, including digital databases, private collections, oral histories, digital media, and artifacts such as photographs, sound, performance, and other non-textual evidence. Readings will include canonical theory and scholarship on archives, as well as recent interventions that propose alternative repositories of decolonized knowledge. Over the course of the semester, students will also visit archives on campus and online, culminating in the production of original scholarship that employs archival sources.

HIST-LIT 90DO Old Weird America

CourseID: 207854

Faculty:

Next Term Offered:

This seminar focuses on the United States before 1865. Poised halfway between our current moment and the seemingly archaic, superstitious fervor of the Salem Witch Trials, America in the antebellum era was in the process of fitfully, at times reluctantly, becoming modern. We will focus on strange objects?photographs of dead children, the spectacles created by P. T. Barnum, the seedy newspapers of antebellum New York?and texts that figure the disorienting changes to media, transportation, personhood, and nation that unfolded as the United States settled uneasily into nationhood. Considering literary and subliterate texts, religious beliefs, visual culture, and political practices with an eye to race, gender, sexuality, and class, students will learn about a period that is in many respects deeply alien to contemporary Americans but offers surprising moments of coincidence with the present.

History of Science

HISTSCI 108 Bodies, Sexualities, and Medicine in the Medieval Middle East

CourseID: 127093

Faculty: Ahmed Ragab

Next Term Offered: 2018 Fall

This course will examine the ways in which medical, religious, cultural, and political discourses and practices interacted in the medieval and early modern Middle East to create and reflect multiple understandings of human bodies and sexualities. Special attention to debates on health, sexuality, and gender and racial identities.

HISTSCI 118 Instruments and the Material Culture of Science in Early Modern Europe, 1500-1800

CourseID: 108927

Faculty: Jean-Francois Gauvin

Next Term Offered: 2018 Fall

What is an instrument? Can there be more than one definition? What, if any, is the epistemological difference between Galileo's telescope and rolling balls? Between Newton's prisms, Hooke's microscope, and Réaumur's thermometer? This course looks at three centuries of science and particularly at its material culture. What makes an "instrument" a "scientific" instrument? Are all instruments "scientific"? How does an object become a scientific instrument? What are the relationships between theory and instruments? Readings and discussion, though at the core of the course, will be supplemented with visits in other Harvard museums and hands-on classes using the Collection of Historical Scientific Instruments.

HISTSCI 132 History of Environmental and Earth Sciences

CourseID: 204998

Faculty: Naomi Oreskes

Next Term Offered: 2019 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 136 History of Biotechnology

CourseID: 107858

Faculty: Sophia Roosth

Next Term Offered: 2019 Spring

What becomes of life when researchers can materially manipulate and technically transform living things? In this course, we will historically investigate biotechnology in the twentieth and twenty-first centuries, paying attention to how efforts to engineer life are grounded in social, cultural, and political contexts. Topics include reproductive technologies, genetic engineering and cloning, genetically modified foods, genomics, stem cells, intellectual property, and biosafety and biosecurity. The course is organized around five crosscutting domains in which we will explore the ethical, legal, and social impacts of biotechnology: (1) food, (2) property and law, (3) sex and reproduction, (4) disease and drugs, and (5) genomic identities. We will read and discuss historical accounts of biotechnology, primary scientific publications, and legal cases. We will learn to evaluate the social constitution and impact of biotechnology on daily life, as well as how to place contemporary issues and debates in biotechnology in historical context.

HISTSCI 137 Animals in History

CourseID: 160366

Faculty: Janet Browne

Next Term Offered: 2018 Fall

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 143 Confined: Hospitals in the History of Medicine and Religion

CourseID: 203613

Faculty: Ahmed Ragab

Next Term Offered: 2018 Fall

While hospitals seem to be the most ubiquitous site for medical practice, they were not

always as common, as important or even looked the same. Hospitals were the battleground for defining the relationship between medicine and religion. From their charitable role to their staffing with nurses, hospitals represented and symbolized this relationship and its continuing development. They were also the space where medicine and law interacted and where ethical questions, questions about patient autonomy and about end-of-life care continue to play out. Embedded in their history and even their architecture, gender, sexuality and race were always central to the changing nature of hospitals and to how their role was understood.

This course investigates the history of hospitals from the medieval period till today looking at how they developed from sites of charitable care, to places for the confinement of the socially-marginalized to factories of medical technology. We will look at their role in the making of medical knowledge, in the relationship between medicine and religion, and in the changing doctor-patient relationship. We will also look at how doctors and other medical practitioners think, how hospitals were and are designed and run and how they perceive their roles.

HISTSCI 144 Medical Technologies in Historical Perspective

CourseID: 159730

Faculty: Evelyn Hammonds

Next Term Offered: 2019 Spring

The course examines the ways in which various medical technologies shaped and were shaped by physician and nurse practices and goals as well as ideas about patient care in American medicine from the 19th-century to the present. We will look at how the meanings attached to medical technologies grew out of specific historical, social, political and medical contexts. Medical technologies examined include: imaging machines; clinical, diagnostic and genetic tests; reproductive technologies; and artificial organs.

HISTSCI 159 History of Anthropology

CourseID: 156895

Faculty: Rebecca Lemov

Next Term Offered: 2019 Spring

This conference course looks at the long history of anthropological inquiry. We will begin with early modern "Curiosity Cabinets" that sequestered anthropological materials alongside the miraculous, marvelous, and mundane. We then turn to the age of exploration with its first-hand encounters between high-seas explorers or cross-continental travelers and tribal or non-Western groups sometimes known as "natives." After some attention to anthropological zoos and world's fairs, we will discuss the dawn of anthropology's professional golden age in the twentieth century; the arrival of epistemological and political crises during the 1960s, 1970s, and 1980s; and finally the current day's ontological turn, circling back to the interpretive and epistemological goals that have often animated the field.

HISTSCI 170 Broken Brains

CourseID: 160496

Faculty: Anne Harrington

Next Term Offered: 2018 Fall

An exploration of the complex relationship between doctors and scientists who study and treat different kinds of "broken brains," the patients they study and treat, and larger public conversations about being human in today's neurological society. Topics include iconic cases of brain damage that catalyze new scientific understandings (like the case of H.M.), the study of brain damage in war, the emergence of writings (including memoirs and novels) that attempt to describe "what it is like" to suffer from disorders like autism and Alzheimer's, and controversies over recent efforts to see psychiatric disorders like depression as simple products of a chemically "broken brain."

HISTSCI 176 Brainwashing and Modern Techniques of Mind Control

CourseID: 126335

Faculty: Rebecca Lemov

Next Term Offered: 2019 Fall

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 182 An American Way of War: Technology and Warfare

CourseID: 203128

Faculty: Matthew Hersch

Next Term Offered: 2020 Spring

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:

Next Term Offered:

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

Faculty:

Next Term Offered:

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: 2019 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 189 The World We Made: Technology and Society

CourseID: 203610

Faculty: Matthew Hersch

Next Term Offered: 2020 Spring

For as long as people have lived on Earth, they have shaped their world and have, in turn, been shaped by it. This lecture course surveys humans' relationships with the built world, beginning with the origins of civilization and extending through the present day. During the semester, we will track the development of transformative technologies—from fire-making to the Internet—throughout human history and across the globe, and place them in their social contexts. In so doing, we will learn how humanity chooses which technologies to exploit, and how human society is transformed by those choices.

HISTSCI 209 Science and Religion: Debates, Approaches and Controversies

CourseID: 127097

Faculty: Ahmed Ragab

Next Term Offered: 2018 Fall

How is your cellphone part of religious experience? Why do some people refuse to vaccinate their children? And why do some reject evolution and global warming? What is missionary medicine and how is it related to global health? What role do religious institutions play in our lives? And why does research show that prayers can improve health outcomes? How important is Pope Francis's encyclical on the environment? And why should we care?!

The study of science and religion has been dominated by a limited set of views that range from animosity to attempts at reconciliation. Yet, these approaches remain largely normative and are deeply rooted in particular readings of European history. In this course, we move beyond debates of conflict or harmony into deeper discussions of how scientific and religious discourses impact daily lives and how issues of race, gender, sexuality and socioeconomic status impact these discourses. The course is a research lab where students are trained on research methods, and on different genres of scholarly writing, including grants. Students choose two modules out of four addressing religion and (1) medicine and global health, (2) environmental and natural sciences, (3) social sciences, and (4) art. In each module, students learn about major questions in the field, work with different methods, and produce innovative research projects.

HISTSCI 231A Transforming Technologies: Science, Technology, and

Social Change: In the Field

CourseID: 207582

Faculty:

Next Term Offered:

Companion field work for HistSci 231 in Ladakh, India.

HISTSCI 249 The Opioid Epidemic in Historical Perspective

CourseID: 207699

Faculty:

Next Term Offered:

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 252 Sciences of History

CourseID: 160522

Faculty: Alex Csiszar

Next Term Offered: 2018 Fall

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 261 Ethnography of Science and Technology

CourseID: 108933

Faculty: Sophia Roosth

Next Term Offered: 2020 Spring

This course surveys monographs in the ethnography of science, both canonical and current. How have the methods and tools of the interpretive social sciences been applied to cultures of science and technology? What is the relation of description to analysis in

ethnographies of science? How do such ethnographies approach theory-building and interpretation? Beginning with early work in the sociology of scientific knowledge and laboratory studies, students will read work in feminist science studies, field and environmental studies, multi-sited ethnography, sensory ethnography, and ethnographic accounts of digital worlds. Throughout, pressure will be placed on issues of method, style, and representation.

HISTSCI 268 Health, Science, and Development in the Twentieth Century

CourseID: 204422

Faculty: Gabriela Soto Laveaga

Next Term Offered: 2019 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

CourseID: 156326

Faculty: Rebecca Lemov

Next Term Offered: 2018 Fall

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 283 Sources and Methods in the History of Technology

CourseID: 160503

Faculty: Matthew Hersch

Next Term Offered: 2019 Spring

Intended for graduate students, this seminar provides a comprehensive introduction to the field of history of technology and surveys its canonical works. Readings by authors like Thomas Hughes, Jennifer Light, and Fred Turner will explore the evolving histories of industrialization, computing, military and aerospace technologies, gender and technology, and other areas of student interest. Students will also gain experience working with primary sources, including archival documents, oral histories, popular media, memoirs, and material culture. At the conclusion of the term, each student will prepare a research prospectus suitable for a grant application or future work in the field.

HISTSCI 287 Teaching the History of Science and Technology

CourseID: 203611

Faculty: Matthew Hersch

Next Term Offered: 2020 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 293 Agnotology: The History of Knowledge and Ignorance

CourseID: 203706

Faculty: Naomi Oreskes

Next Term Offered: 2020 Spring

Historians of science have traditionally been concerned with the production of scientific knowledge, but in recent years have turned their attention to the production of ignorance. This course focuses on the production of ignorance as a social, political, cultural, economic and epistemic question, with attention both to techniques of deliberate ignorance production, and to the inadvertent and often uncontested production of ignorance that arises from accepted research practices and from the conditions that shape the direction and forms of scientific inquiry.

Health Policy

HLTHPOL 3002 Graduate Research Course: Mental Health Policy

CourseID: 207864

Faculty:

Next Term Offered:

Participants discuss research on mental health policy and examine how to apply existing work and methodological approaches to their own work.

HLTHPOL 3002B Graduate Reading Course: Mental Health Policy

CourseID: 159617

Faculty:

Next Term Offered: 2019 Spring

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

Division of Humanities

HUMAN 9A Hum 9A

CourseID: 207480

Faculty:

Next Term Offered:

Created to support student import.

HUMAN 9B Hum 9B

CourseID: 207477

Faculty:

Next Term Offered:

Created for student import.

Humanities

HUMAN 11B The Art of Listening

CourseID: 109855

Faculty: John T. Hamilton

Next Term Offered: 2018 Fall

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.

HUMAN 11C The Art of Reading

CourseID: 109856

Faculty: Michael J. Puett

Next Term Offered: 2019 Spring

This course introduces "reading" as a wide-ranging practice of interpretation, applicable to social phenomena and historical narratives as well as to literary texts. Participants in this introduction to the humanities will examine a range of texts, from poems and political journalism to graphic novels and blogs, both to practice close and subtle reading and to see how these texts seek to establish rules for their own interpretation. Rather than look at a particular artistic tradition or literary history, we will develop a set of "all-terrain" interpretive skills that can be deployed on a range of intellectual and cultural objects.

HUMAN 12 Essential Works In World Literature

CourseID: 110483

Faculty: David Damrosch

Next Term Offered: 2019 Spring

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.

HUMAN 52 Human History

CourseID: 156633

Faculty: Maya Jasanoff

Next Term Offered: 2019 Spring

Five hundred years of world history through the prism of twelve encounters between "the West" and "the Rest" -- beginning with the clash between Portuguese buccaneers and Chinese eunuchs in 1517 and ending yesterday. Human History takes globalization personally, but views it from at least two very different perspectives--those of the professors. (We also show how to resurrect the dead.)

HUMAN 54 The Urban Imagination

CourseID: 160422

Faculty: Julie A. Buckler

Next Term Offered: 2018 Fall

Cities are one of humankind's most richly complex inventions and can best be understood through both creative and critical thinking. Offered in connection with a Mellon-funded initiative in Architecture, Urbanism, and the Humanities, this course invites you to join an interdisciplinary investigation of the urban form and fabric, socio-cultural life, and artistic representation of five iconic cities ?Boston, Berlin, Moscow, Istanbul, and Mumbai, as well as the special case study of ?ód?, Poland. We will treat literature, film, and photography alongside cultural history, experiment with urban fieldwork, and use digital tools for mapping and curating virtual exhibitions.

Linguistics

LING 107 Introduction to Indo-European

CourseID: 110658

Faculty:

Next Term Offered: 2019 Spring

An introduction to the historical study of the Indo-European languages, using the comparative method to arrive at a picture of the parent language of the family, Proto-Indo-European.

LING 146 Syntax and Processing

CourseID: 122516

Faculty:

Next Term Offered: 2019 Fall

Selected grammatical phenomena will be examined from a theoretical and experimental perspective, with a view toward answering questions like the following: What theoretical treatments are available? How do experimental studies distinguish among competing theoretical approaches? What kind of future experimental work is needed to resolve the outstanding issues?

LING 152 Prosody and Intonation

CourseID: 123619

Faculty:

Next Term Offered: 2020 Spring

Prosody and intonation are intricately linked to many domains of language use and linguistic structure. We examine the phonetic form of prosodic contours and intonational grouping, the function of prosody in expressing semantic and pragmatic information and in disambiguation during sentence production and comprehension, and the use of "implicit" prosody even in silent reading.

LING 160 Psychology of Language

CourseID: 156739

Faculty:

Next Term Offered: 2020 Spring

How do children manage to learn the sounds, the words and the grammar of their native language in three years or less? Does the language that we speak change how we think? What happens in the mind (and brain) that allows us to convert sound into meaning during language comprehension (and meaning into motor movements during

language production)? Why are human languages similar to each other in some ways, and what allows them to vary in others? We will explore these questions integrating the perspectives of linguistics, psychology and cognitive neuroscience.

LING 168 Introduction to Germanic Linguistics

CourseID: 122755

Faculty:

Next Term Offered: 2018 Fall

An introduction to the comparative and historical linguistics of the Germanic family, with emphasis on Gothic and the early medieval languages.

LING 173 Structure of Japanese

CourseID: 113738

Faculty:

Next Term Offered:

An examination of selected phenomena in Japanese phonology, morphology, and syntax with special attention to difficulties encountered in the acquisition of Japanese by adult native English speakers.

LING 174 Tense and Aspect in Japanese

CourseID: 123350

Faculty:

Next Term Offered: 2019 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 204R Topics in Syntax

CourseID: 114737

Faculty:

Next Term Offered: 2019 Spring

Examination of current issues in syntactic theory with focus on topics of interest to the class.

LING 221R Workshop in Indo-European

CourseID: 107469

Faculty:

Next Term Offered: 2019 Spring

The topic for the year will be arranged in consultation with interested students.
Conducted as a seminar.

Mathematics

MATH 117 Probability and Random Processes with Economic Applications

CourseID: 127947

Faculty:

Next Term Offered: 2017 Spring

A self-contained treatment of the theory of probability and random processes with specific application to the theory of option pricing. Topics: axioms for probability, calculation of expectation by means of Lebesgue integration, conditional probability and conditional expectation, martingales, random walks and Wiener processes, and the Black-Scholes formula for option pricing. Students will work in small groups to investigate applications of the theory and to prove key results.

MATH 141 Introduction to Mathematical Logic

CourseID: 117615

Faculty:

Next Term Offered: 2018 Fall

An introduction to mathematical logic with applications to computer science and algebra. Formal languages. Completeness and compactness of first order logic. Definability and interpolation. Decidability. Unsolvable problems. Computable functions and Turing machines. Recursively enumerable sets. Transfinite induction.

MATH 144 Model Theory

CourseID: 125079

Faculty:

Next Term Offered: 2019 Spring

An introduction to model theory with applications to fields and groups. First order languages, structures, and definable sets. Compactness, completeness, and back-and-forth constructions. Quantifier elimination for algebraically closed, differentially closed, and real closed fields. Omitting types, prime extensions, existence and uniqueness of the differential closure, saturation, and homogeneity. Forcing, independence, and rank.

MATH 145A Set Theory I

CourseID: 156119

Faculty:

Next Term Offered: 2018 Fall

An introduction to set theory covering the fundamentals of ZFC (cardinal arithmetic, combinatorics, descriptive set theory) and the independence techniques (the

constructible universe, forcing, the Solovay model). We will demonstrate the independence of CH (the Continuum Hypothesis), SH (Suslin's Hypothesis), and some of the central statements of classical descriptive set theory.

MATH 156 Mathematical Foundations of Statistical Software

CourseID: 156000

Faculty:

Next Term Offered: 2018 Fall

Presents the probability theory and statistical principles which underly the tools that are built into the open-source programming language R. Each class presents the theory behind a statistical tool, then shows how the implementation of that tool in R can be used to analyze real-world data. The emphasis is on modern bootstrapping and resampling techniques, which rely on computational power. Topics include discrete and continuous probability distributions, permutation tests, the central limit theorem, chi-square and Student t tests, linear regression, and Bayesian methods.

MATH 222 Lie Groups and Lie Algebras

CourseID: 123238

Faculty:

Next Term Offered: 2019 Spring

Lie theory, including the classification of semi-simple Lie algebras and/or compact Lie groups and their representations.

MATH 233BR Theory of Schemes II

CourseID: 123479

Faculty:

Next Term Offered: 2019 Spring

A continuation of Mathematics 233a. Will cover the theory of schemes, sheaves, and sheaf cohomology.

Mind, Brain, and Behavior

MBB 980A Conscious States: Waking, Sleeping, and Dreaming

CourseID: 124113

Faculty: Robert Stickgold

Next Term Offered: 2018 Fall

Focuses on waking, sleeping, and dreaming as examples of conscious states in both humans and animals. Original papers and Antonio Damasio's book (*The Feeling of What Happens*) form the background for discussions of waking, sleeping, and dreaming from the perspectives of neurology, physiology, psychology, and cognitive neurosciences. Discusses various approaches to understanding the functions of sleep and wake (consciousness) and reviews several theories on the topic.

MBB 980B Addiction, Choice, and Motivation

CourseID: 124115

Faculty:

Next Term Offered: 2018 Fall

Seeks a comprehensive understanding of addiction and why it has been such a contentious topic. Topics include but are not restricted to (1) the characteristics of addiction as revealed in biographies, epidemiological studies, clinical research, laboratory experiments, and "natural experiments;" (2) the current "opioid epidemic," including an exploration of its possible economic correlates; (3) genetic influences on alcohol consumption; (4) drug-induced cognitive changes and their implications for drug use; (5) smoking and delay discounting; and (6) a choice-based analysis of addiction. This is a junior tutorial.

MBB 980G The Origins and Evolution of Cognition: A Comparative Study of Human and Nonhuman Abilities

CourseID: 109872

Faculty: Irene Pepperberg

Next Term Offered: 2019 Spring

Most scientists agree cognition is widespread in nature and involves an organism processing information to solve problems (like avoiding predators, finding prey, attracting a mate, achieving shelter), and in humans higher-level reasoning and conceptualizing. Less clear are the origins and evolutionary basis of cognition-what evolutionary pressures were exerted that selected for such processing? Explores possible ways to answer this question with research in anthropology, neurobiology, philosophy, psychology, genetics, sociality, and other disciplines. Faculty from a variety of departments attend discussions in their areas of expertise and assist students in coming to their own conclusions.

MBB 980K Fighting Cancer with the Mind

CourseID: 156497

Faculty:

Next Term Offered: 2019 Spring

Using contemporary mind-body practices as context, examines evidence (or lack of evidence) linking psychological practices with cancer survival. We will (1) review theoretical foundations for these links including psychoanalysis, psychoneuroimmunology, and cognitive-behavioral therapy; (2) analyze legitimization of mind-body practices for cancer in popular media; (3) interview mind-body medicine practitioners; and (4) examine published scientific data. Students will choose one mind-body practice for in-depth study, analyzing its underlying theories, scientific evidence, and appeal to patients.

Molecular and Cellular Biology

MCB 125 Molecular Basis of Behavior

CourseID: 159655

Faculty:

Next Term Offered: 2019 Spring

Modern molecular genetic approaches are teaching us a great deal on how the brain controls behaviors. This course will cover newly developed experimental strategies of molecular neuroscience, and how they have helped uncover the nature and identity of behavior circuit components. How genes and molecules affect behaviors will be investigated through key examples of mammalian behaviors with an emphasis on instinctive and social behaviors, their expression, development, and associated mental disorders.

MCB 141 Molecular and Cellular Biology of the Senses and their Disorders

CourseID: 115382

Faculty: Catherine Dulac

Next Term Offered: 2020 Spring

"The great art of life is sensation, to feel that we exist, even in pain." Lord Byron. Molecular basis of normal and pathological sensory perception, formation and modulation of sensory circuits during development and in the adult brain. Topics will include the mechanisms of sensory detection and discrimination, the discovery of key genes, cellular pathways and neural circuits affected in human disorders, molecular and genetic strategies for restoring normal sensation, coding of sensory information by the brain, establishment of appropriate connections in the developing brain, epigenetic influences on sensory function. Molecular, genetic and epigenetic approaches to normal and pathological sensing and associated behavior will be discussed.

MCB 142 Major Advances in Understanding Evolution and Heredity

CourseID: 122803

Faculty:

Next Term Offered: 2018 Fall

MCB 142 aims to develop an understanding of some of the principal advances leading to our present understanding of evolution and heredity, from Mendel and Darwin to the discovery of the genetic code. Course work includes critical reading of original papers, student presentations, group discussion, and submission of written answers to problem sets. Participation in class discussion of readings is essential. A substantial essay on a mutually agreed topic is due at end of reading period.

MCB 148 The Neurobiology of Pain

CourseID: 159880

Faculty:

Next Term Offered: 2019 Spring

This course will explore the neurobiological systems and mechanisms underlying both acute and chronic pain. Topics will include nociceptive/sensory systems, molecular basis and modulation of pain, neuroanatomy of peripheral and central pain circuits, pain pathologies, pharmacological and non pharmacological treatments. The emphasis will be on understanding basic neurobiological concepts underlying pain systems and reading/discussing the primary scientific research in the field.

MCB 157 Developmental Genetics and Genomics

CourseID: 108338

Faculty: Craig Hunter

Next Term Offered: 2019 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 176 Biochemistry of Membranes

CourseID: 112742

Faculty:

Next Term Offered: 2018 Fall

A course on the properties of biological membranes, essential elements for cell individuality, communication between cells, and energy transduction. Topics include: membrane structure; membrane protein synthesis, insertion in the bilayer and targeting; transporters, pumps and channels; electron transport, H⁺ gradients and ATP synthesis; membrane receptors, G proteins and signal transduction; membrane fusion.

MCB 195 Foundations of Systems Biology and Biological Engineering

CourseID: 123837

Faculty:

Next Term Offered: 2019 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 198 Advanced Mathematical Techniques for Modern Biology

CourseID: 127011

Faculty: Sharad Ramanathan

Next Term Offered: 2019 Spring

How do we find biologically meaningful patterns in a large amount of data? How do animals learn to use patterns in the environment to infer information despite the ignorance of the underlying laws? The course will introduce Bayesian analysis, maximum entropy principles, hidden markov models and pattern theory in order to study DNA sequence, gene expression and neural spike train data. The relevant biological background will be covered in depth.

MCB 199 Statistical Thermodynamics and Quantitative Biology

CourseID: 122410

Faculty: David Nelson

Next Term Offered: 2019 Spring

Course seeks to develop an understanding of thermodynamics and statistical mechanics, with applications to quantitative problems in biology such as configurations of biopolymers, equilibrium states of matter, chemical reactions and protein transport, using the concepts of entropy, free energy, adsorption, chemical kinetics and molecular diffusion.

Music

MUSIC 1 1000 Years of Listening

CourseID: 156060

Faculty:

Next Term Offered: 2019 Spring

This course aims to introduce you to a variety of music, and a range of ways of thinking, talking and writing about music. The majority of music dealt with will be drawn from the so-called "Classical" repertory, from the medieval period to the present day, including Monteverdi, Bach, Handel, Mozart, Beethoven, Schumann, and Schoenberg. Class will explore the technical workings of music and together we will build a vocabulary for analyzing music and articulating a response to it; we will explore music as a cultural phenomenon. By the end of class, students will be equipped to embark on a lifetime of informed listening.

MUSIC 24 Social Engagement through Music

CourseID: 000024

Faculty:

Next Term Offered:

MUSIC 123R Choral Literature of the 20th & 21st Century

CourseID: 128033

Faculty:

Next Term Offered: 2020 Spring

American Choral Music During World War II. In the America of the 1940s, concert music attained an unprecedented cultural relevance and ubiquity that is hard to imagine today. During the Second World War, choral music in particular was called upon to fulfill a cultural desire for fervent public expressions of patriotism and national chauvinism. Music was politicized and harnessed for numerous war-related tasks, including propaganda, cultural diplomacy, therapeutic recuperation, and social uplift. One could argue that American musical identity itself was forged during this time of crisis. This course will trace the historical currents and themes of American choral music from 1940-1950 through the study of representative choral works. Using various archives at Harvard, students will also examine the choral scene at the University during World War II, including the repertoire, activities, and the membership profile of the Harvard Glee Club, Radcliffe Choral Society, and the University Choir. An extensive background in music theory and choral music repertoire is not required, but a familiarity with Western music notation will be assumed.

MUSIC 125 Conducting

CourseID: 132908

Faculty:

Next Term Offered: 2020 Spring

MUSIC 152 Post-Tonal Analysis

CourseID: 113890

Faculty:

Next Term Offered: 2017 Spring

Intensive survey of compositional styles and techniques of the last 100 years. Traditional pitch-centered analysis, including set theory, as well as approaches focusing on rhythm, timbre, gesture, and other elements.

MUSIC 157R Theories of World Music

CourseID: 128035

Faculty:

Next Term Offered: 2020 Spring

MUSIC 171R Music of the 20th & 21st Century

CourseID: 121897

Faculty:

Next Term Offered:

The Music of Alvin Lucier

MUSIC 180R Performance and Analysis: Seminar

CourseID: 111399

Faculty:

Next Term Offered: 2020 Spring

Weekly master classes and intermittent private coachings.

MUSIC 186R Jazz Improvisation

CourseID: 125864

Faculty:

Next Term Offered: 2019 Spring

Our theme:

MUSIC 192R Topics in Music from 1600-1800: Proseminar

CourseID: 122658

Faculty:

Next Term Offered: 2019 Spring

MUSIC 194R Special Topics: Proseminar

CourseID: 111997

Faculty:

Next Term Offered:

Music and Power: Politics and the Collective Voice. In the past five years, Americans have heard a rising tide of voices calling for solidarity and division, pride and denunciation?even voices calling for silence from all the voices. It is a "vocal moment," and it resonates with a vast repertoire of practices of collectively "speaking up" which stretch far beyond our current time and place. This course builds a framework for understanding how a community of voices can come together in singing, chanting, and even using silence as a way of creating sound, as well as other modes of musical and vocal performance to shift the flow of a movement, time, idea, protest, or identity. We will take our material from real events, ranging from the 1960s to the present, focusing particular attention on moments outside the rehearsed, refined, and controlled environment of the concert hall. Our case studies will be oriented around elements of performance, power (identity, race, gender), and the voice itself (language, timbre, and dimension), asking how these elements come together to create consciousness and effect change. Moreover, we'll ask how a collection of voices together can upend our assumptions of the use and influence of each of these elements; we will additionally look at the situations in which these three elements combine, shift, and overlap. Coursework will draw on readings, listening, and issues from history, sociology, media studies, political science, cultural studies, cognition, and music; locations of engagement will include protests, social media, community trauma, patriotism, sports, memorial, and monument.

Note: there are no prerequisites for this course and students do not need a working knowledge of music theory to enroll.

MUSIC 194R Special Topics

CourseID: 108983

Faculty:

Next Term Offered: 2019 Fall

MUSIC 207RS Ethnomusicology: Seminar

CourseID: 118094

Faculty:

Next Term Offered: 2019 Fall

MUSIC 208R Ethnomusicology: Seminar

CourseID: 111347

Faculty:

Next Term Offered: 2019 Spring

MUSIC 208RS Ethnomusicology: Seminar

CourseID: 108992

Faculty:

Next Term Offered: 2019 Spring

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 Ngũgĩ 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.

MUSIC 213R Topics in Medieval Polyphony

CourseID: 125206

Faculty:

Next Term Offered: 2020 Spring

MUSIC 216R 18th-Century Music: Seminar

CourseID: 119785

Faculty:

Next Term Offered: 2020 Spring

Instruments and Instrumentality. This seminar will explore the history of musical instruments and the diverse ways in which we can think about what they are and what they do. We will touch on many topics including early organographies, notions of artisanal epistemology, the history of mediation, thing theory, and late eighteenth-century aesthetics. This seminar will draw on texts from a range of disciplines and will include a visit to the collection of musical instruments at the Museum of Fine Arts in Boston.

MUSIC 220R Topics in Music Theory

CourseID: 108001

Faculty:

Next Term Offered: 2020 Spring

Ancient Greek Music and its Afterlives. While Ancient Greece counts as the wellspring of western culture, its music was quite different from our own. This realization aroused surprise and controversy in 16th-century Italy, when scholars started studying ancient sources again. Adaptations of supposedly Greek music led to new and sometimes radical innovation. We will read salient texts from antiquity to the early modern.

MUSIC 222R Schenkerian Analysis I

CourseID: 113613

Faculty:

Next Term Offered: 2019 Spring

Introduction to the theories and graphing techniques of Heinrich Schenker and his followers through the analysis of selected works.

MUSIC 241R Musicology Special Topics

CourseID: 160693

Faculty:

Next Term Offered: 2019 Spring

Sound Studies and Instrumentality. This seminar will explore transforming notions of instrumentality, considering the role of instruments (defined broadly) within music and in broader technological contexts. We will consider both the history of instrumentality and what instrumentality means today in light of the proliferation of digital technologies. This seminar will be taught in collaboration with a mirror seminar at McGill, led by Jonathan Sterne. We will meet jointly?digitally?regularly throughout the semester and students in both seminars will work collaboratively throughout the semester, all the while reflecting thoughtfully on the tools and technologies that enable these sorts of interactions

MUSIC 242R Topics in Music Criticism

CourseID: 204414

Faculty:

Next Term Offered: 2020 Spring

This course is designed to stage next-generation research on the history of reading. Working outward from classic studies on print and orality by Roger Chartier, D. F. McKenzie, Jack Goody, Bruce Smith, and Michel de Certeau and grounded in close study of the material forms in which texts are conveyed, the seminar's interpretive toolkit will also draw theories from applied linguistics, musicology, and performance studies. Weekly assignments will be keyed to these readings. Seminar participants will produce a substantive essay treating an original source chosen in consultation with the professor. Global and cross-cultural studies are encouraged, as are perspectives of students specializing in literature, theater, linguistics, and history. Guest speakers include Roger Chartier and Ann Blair.

MUSIC 261R Composition: Seminar

CourseID: 112885

Faculty:

Next Term Offered: 2018 Fall

For first and second year graduate students prepared for work in original composition.

MUSIC 266R Creative Music Seminar

CourseID: 156122

Faculty:

Next Term Offered: 2018 Fall

For advanced musicians (graduate or undergraduate) prepared for work in improvisation and original composition.

Neurobiology

NEURO 57 Animal Behavior

CourseID: 207534

Faculty:

Next Term Offered:

A review of the behavior of animals under natural conditions, with emphasis on both mechanistic and evolutionary approaches. Topics include classical ethology; behavioral endocrinology; behavioral genetics; learning and memory; communication; orientation, migration and biological rhythms; optimal foraging; evolutionary stable strategies; sexual selection; parental investment and mating systems; selfishness, altruism, and reciprocity; and sociality in vertebrates and invertebrates.

NEURO 101CA Designer Neurons: How Cell Types are Generated in the Nervous System and the Lab

CourseID: 108068

Faculty:

Next Term Offered: 2018 Fall

The derivation of stem cells from a human embryo ten years ago ignited an explosion of scientific and public interest. This seminar will explore the current understanding of neural stem cells as it relates to their role in physiological and pathological states in developing and adult animals. We will also explore the generation, characterization, and manipulation of neural stem cells in current research.

NEURO 101CB Designer Neurons: How Cell Types are Generated in the Nervous System and the Lab

CourseID: 159696

Faculty:

Next Term Offered: 2019 Spring

The derivation of stem cells from a human embryo ten years ago ignited an explosion of scientific and public interest. This seminar will explore the current understanding of neural stem cells as it relates to their role in physiological and pathological states in developing and adult animals. We will also explore the generation, characterization, and manipulation of neural stem cells in current research. This is the second half of a full year course.

NEURO 101DA Building a Brain

CourseID: 127226

Faculty:

Next Term Offered: 2018 Fall

Neuronal connectivity underlies brain function. This seminar focuses on discussing and debating research related to how synaptic connections are influenced by genes, the environment, and chance to generate functional circuits and accommodate learning. In particular we will discuss molecular mechanisms, activity patterns (spontaneous and experience-evoked), and organizational rules implicated in synaptic formation and refinement in the context of many regions within the nervous system (retina, olfactory bulb, cortex, autonomic, and neuromuscular system).

NEURO 101DB Building a Brain

CourseID: 159697

Faculty:

Next Term Offered: 2019 Spring

Neuronal connectivity underlies brain function. This seminar focuses on discussing and debating research related to how synaptic connections are influenced by genes, the environment, and chance to generate functional circuits and accommodate learning. In particular we will discuss molecular mechanisms, activity patterns (spontaneous and experience-evoked), and organizational rules implicated in synaptic formation and refinement in the context of many regions within the nervous system (retina, olfactory bulb, cortex, autonomic, and neuromuscular system). This is the second half of a full year course.

NEURO 101IA The Neurobiology of Drug Addiction

CourseID: 109592

Faculty:

Next Term Offered: 2019 Fall

Students will examine primary literature to understand the acute and chronic action of drugs of abuse, including opioids, cannabinoids, psychostimulants, nicotine, and ethanol. The course will introduce the models of addiction and examine animal and human research results to build an understanding of how modifications to molecular signaling, cells and neural circuits underlie the development of the addicted brain. Students must complete both terms of this course (parts A and B) within the same academic year in order to receive credit.

NEURO 101IB The Neurobiology of Drug Addiction

CourseID: 159698

Faculty:

Next Term Offered: 2019 Spring

Students will examine primary literature to understand the acute and chronic action of drugs of abuse, including opioids, cannabinoids, psychostimulants, nicotine, and ethanol. The course will introduce the models of addiction and examine animal and

human research results to build an understanding of how modifications to molecular signaling, cells and neural circuits underlie the development of the addicted brain. Students must complete both parts of this course (parts A and B) within the same academic year in order to receive credit.

NEURO 1401 Computational Cognitive Neuroscience: Building Models of the Brain

CourseID: 207732

Faculty:

Next Term Offered:

"What I cannot create, I do not understand." This course applies Richard Feynman's dictum to the brain, by teaching students how to simulate brain function with computer programs. Special emphasis will be placed on how neurobiological mechanisms give rise to cognitive processes like learning, memory, attention, decision-making, and object perception. Students will learn how to understand experimental data through the lens of computational models, and ultimately how to build their own models.

Organismic and Evolutionary Biology

OEB 59 Plants and Human Affairs

CourseID: 143445

Faculty: Charles Davis

Next Term Offered: 2018 Fall

An introduction to the uses of plants by humans. Topics include the form, structure and genetics of plants related to their use as sources of food, shelter, fiber, flavors, beverages, drugs, and medicines. Plant structure and reproduction are studied in lecture and laboratory with a particular focus on relationships between the plant's structural, chemical, or physiological attributes and the utility plant.

OEB 106 Plant Development and Differentiation

CourseID: 148122

Faculty: Elena Kramer

Next Term Offered: 2018 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 107 Evolution of Plant Life in Geologic Time

CourseID: 131242

Faculty: Andrew Knoll

Next Term Offered: 2019 Spring

Origin, evolution, dispersal, paleoecology, and geologic history of the major groups of the plant kingdom. Laboratory study of representative groups, living and fossil.

OEB 114 Vertebrate Viviparity

CourseID: 142192

Faculty: David Haig

Next Term Offered: 2018 Fall

Viviparity has evolved many times in vertebrate phylogeny. The course reviews the diversity of parental care in vertebrates and explores the selective forces that have favored the evolution of live-bearing. The evidence for intergenerational conflicts is considered.

OEB 115 The Developmental Basis for Evolutionary Change

CourseID: 144999

Faculty: Mansi Srivastava

Next Term Offered: 2018 Fall

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 119 Deep Sea Biology

CourseID: 145140

Faculty:

Next Term Offered: 2018 Fall

The oceans contain 97% of Earth's water, and host the most disparate ecosystems on the planet. This course provides an introduction to deep ocean habitats, macrofauna and microorganisms. Emphasis is placed on the physiological adaptations of organisms to their environment, as well the role of microbes in mediating oceanic biogeochemical cycles.

OEB 120 Plants and Climate

CourseID: 156118

Faculty: Noel Holbrook

Next Term Offered: 2018 Fall

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 125 Molecular Ecology and Evolution

CourseID: 144180

Faculty: Scott Edwards

Next Term Offered: 2018 Fall

A survey of theory and applications of DNA technologies to the study of evolutionary, ecological and behavioral processes in natural populations. Topics to be covered will span a variety of hierarchical levels, timescales, and taxonomic groups, and will include the evolution of genes, genomes and proteins; the neutral theory of molecular evolution and molecular clocks; population genomics and phylogenetic principles of speciation and phylogeography; metagenomics of microbial communities; relatedness and behavioral ecology; molecular ecology of infectious disease; and conservation genetics.

OEB 126 Vertebrate Evolution

CourseID: 160453

Faculty: Stephanie Pierce

Next Term Offered: 2019 Spring

This course provides a comprehensive survey of the origin and evolution of vertebrates through an examination of the fossil record. A primary focus will be on major events in Earth's evolutionary history, with an emphasis on anatomical and physiological transformations in fish, amphibians, reptiles, birds and mammals. To compliment in-class lectures, students will be given hands-on experience identifying fossil material. As an added bonus, the course offers a spring recess fossil dig to the Triassic beds of Arizona.

OEB 141 Biogeography

CourseID: 145864

Faculty: Gonzalo Giribet

Next Term Offered: 2018 Fall

Biogeography aims to explain distributions of organisms through historical and ecological factors. This course will focus on the history of biogeographic research, developments in the area of historical biogeography, and on ecological processes that affect distributions of whole clades. Topics include plate tectonics and earth history, vicariance and dispersal, areas of endemism, phylogenetic niche conservatism, latitudinal gradients in species richness, and the theory of island biogeography. Software for biogeographical analysis will be discussed and evaluated.

OEB 155R Biology of Insects

CourseID: 142688

Faculty: Naomi Pierce

Next Term Offered: 2018 Fall

An introduction to the major groups of insects. The life history, morphology, physiology, and ecology of the main taxa are examined through a combination of lecture, lab, and field exercises. Topics include the phylogeny of terrestrial arthropods with a review of the extant orders, an analysis of abiotic and biotic factors regulating populations, including water balance, temperature, migration, parasitism, mutualism, sociality, insect/plant

interactions, medical entomology, and the use of insects in biological control.

OEB 168R Sociobotany

CourseID: 144194

Faculty: David Haig

Next Term Offered: 2019 Spring

A study of the diversity and evolution of plant life cycles, with an emphasis on interactions between the generations. The course this semester will focus on life histories of bryophytes.

OEB 191 Physiological and Biochemical Adaptation

CourseID: 148252

Faculty: Peter Girguis

Next Term Offered: 2019 Spring

This course examines how microbes and animals have evolved to maintain function throughout the wide range of extant habitats. Emphasis is on physiological/biochemical evolution in response to environmental conditions, including climate change and life in extreme environments. As the first course in the "genomes to biomes" series, we will examine new approaches to interrogating organismal physiology in nature. Those interested can continue the "genomes to biomes" program via LS 100r.

OEB 212R Advanced Topics in Plant Physiology

CourseID: 131261

Faculty: Noel Holbrook

Next Term Offered: 2018 Fall

A critical discussion of current research in plant physiology including measurement techniques, modeling, and experimental approaches. In 2016, the focus will be on stomata -- structure, function, biomechanics, signal transduction and environmental responses. We will consider stomata in bryophytes through angiosperms, and also look at models of stomatal regulation of transpiration and CO₂ uptake.

OEB 242 Population Genetics

CourseID: 145409

Faculty: Daniel Hartl

Next Term Offered: 2019 Spring

Mathematical theory, experimental data, and history of ideas in the field, including analytical methods to study genetic variation with applications to evolution, demographic history, agriculture, health and disease. Includes lectures, problem sets, and student

presentations.

OEB 252 Coalescent Theory

CourseID: 131583

Faculty: John Wakeley

Next Term Offered: 2018 Fall

The mathematics and computation of ancestral inference in population genetics. Theory relates observable genetic data to factors of evolution such as mutation, genetic drift, migration, natural selection, and population structure.

OEB 278 Adaptation

CourseID: 144586

Faculty: Robin Hopkins

Next Term Offered: 2019 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.

OEB 300 Museum Collections Management and Curation

CourseID: 204477

Faculty: James Hanken

Next Term Offered: 2019 Spring

Practical training in and understanding of contemporary curatorial practices and procedures for zoological collections management. Students will attend a weekly seminar, complete two 6-week rotations (@ 10 hr/wk) in two different specimen collections in the Harvard Museum of Comparative Zoology, and participate in a 2-day field trip to the National Museum of Natural History in Washington, DC.

Philosophy

PHIL 19 God, Perfection, and Evil: Introduction to the Philosophy of Religion

CourseID: 108848

Faculty:

Next Term Offered: 2018 Fall

An examination of some central themes in the philosophy of religion. Topics include: arguments for the existence of God, miracles, religious experience, the relation between religion and science, divine attributes, and the problem of evil.

PHIL 120 The Rationalists

CourseID: 111716

Faculty:

Next Term Offered: 2018 Fall

The seventeenth and eighteenth centuries were among the most exciting and revolutionary periods in the history of philosophy. Among the most prominent philosophers working in that period, Descartes, Spinoza and Leibniz have traditionally been grouped together under the label "Continental Rationalists" in virtue of their embrace of systematic metaphysics and emphasis on rational reflection as a source of knowledge. This course aims to provide an overview of the development of early modern rationalism while exploring in detail a number of central issues, arguments and controversies. Topics will include philosophical methodology, skepticism, knowledge, substance, mind-body relations, and the metaphysical foundations of science.

PHIL 141 Frege, Russell, and the Early Wittgenstein

CourseID: 146752

Faculty:

Next Term Offered: 2018 Fall

An examination of the beginnings of analytic philosophy, with primary interest in the reformulation of traditional philosophical problems by these three authors and the analytic and logical methods they introduced to treat them.

PHIL 145 Modal Logic

CourseID: 156023

Faculty:

Next Term Offered: 2019 Spring

An introduction to the semantics and metatheory of modal logic as well as some of its applications in philosophy and linguistics. Topics drawn from the following: Completeness, frames, and incompleteness for propositional modal logic; semantics for quantificational modal logics; provability interpretations of modal logic; intensional semantics for conditionals and other natural language expressions.

PHIL 149S Foundations of Space-Time Theories

CourseID: 000149

Faculty:

Next Term Offered:

PHIL 149Z Philosophy of Science

CourseID: 114427

Faculty:

Next Term Offered: 2019 Spring

Survey of 20th century and contemporary views on the nature of scientific knowledge, and related issues. Topics may include: logical empiricism, Popper and "falsifiability", induction and confirmation, explanation, scientific realism, causation and laws of nature, and the sense (if any) in which "everything reduces to physics". In one unit of the course we will take up these issues with respect to the burgeoning science of happiness and well-being.

PHIL 157 Philosophy of Action

CourseID: 132280

Faculty:

Next Term Offered: 2018 Fall

An examination of the nature and understanding of intentional action. Topics will include agency and causal explanation, the role of freedom and rationality in understanding action, the agent's own perspective on her action, the scope and variety of actions themselves (mental, physical, social, institutional). Readings will include Davidson, Anscombe, Frankfurt, Velleman and others.

PHIL 159 Epistemology

CourseID: 114155

Faculty:

Next Term Offered: 2018 Fall

An introduction to the theory of knowledge. Topics could include: the analysis of knowledge, the nature of the a priori, the regress problem, foundationalism vs. coherentism, internalism vs. externalism, naturalized epistemology, and skepticism.

PHIL 173X Practical Reasons

CourseID: 203456

Faculty:

Next Term Offered: 2019 Spring

Reasons are considerations that count for or against something - actions, in the case of practical reasons (as usually distinguished from beliefs, in the case of theoretical reasons). The notion of a practical reason has played a central role in ethical theorizing over the past several decades, and continues to enjoy close philosophical attention today. In this course, we'll first endeavor to get a clear sense of the general structure of practical reasons, and to disentangle them from nearby, but distinct, concepts. We'll then take a close look at several contemporary disputes about practical reasons. Primary among them is a question about how practical reasons are grounded: what makes it the case that something is a reason? Investigating this question will bring us into contact with debates about how reasons are related to desires, motivation, value, and moral requirements. We will also consider error-theoretic approaches to practical normativity, according to which there are no genuine practical reasons of the sort that most ethicists have in mind.

PHIL 179 Race and Social Justice

CourseID: 124577

Faculty:

Next Term Offered: 2019 Spring

Critically examines recent philosophical work on questions of racial justice: What is racism? What makes racial discrimination wrong? Are reparations owed for past racial injustices? Is racial profiling ever justified? Under what conditions should we regard racial disparities (e.g., in wealth or employment) as unjust? Should government foster racial integration in schools and neighborhoods? Is affirmative action unfair? Is a just society a "color-blind" society?

Physics

PHYSICS 211R Topics in Cosmology and Particle Physics

CourseID: 117201

Faculty:

Next Term Offered: 2019 Spring

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 253CR Quantum Field Theory III

CourseID: 118459

Faculty:

Next Term Offered: 2018 Fall

Introduction to some of the tools for studying the exact nonperturbative dynamics of supersymmetric gauge theories, supergravity, and gauge/gravity duality.

PHYSICS 254 The Standard Model

CourseID: 109328

Faculty:

Next Term Offered: 2019 Spring

The Standard Model of particle physics: theory and experimental implications. Topics include nonabelian gauge theory, spontaneous symmetry breaking, anomalies, the chiral Lagrangian, QCD and jets, collider physics and simulation, the Higgs at the LHC.

PHYSICS 287C Conformal Field Theory

CourseID: 160571

Faculty:

Next Term Offered: 2019 Fall

The role of conformal field theory in describing critical phenomena in statistical mechanics and quantum field theory. Virasoro algebra, conformal blocks, two dimensional rational and irrational conformal field theories, the conformal bootstrap in two and higher dimensions, a-theorem, and other recent developments.

PHYSICS 289R Euclidean Random Fields, Relativistic Quantum Fields

and Positive Temperature

CourseID: 118733

Faculty:

Next Term Offered: 2020 Spring

The course will give the reconstruction of relativistic quantum fields from Euclidean fields as well as the relation between representations of the Poincaré group to those of Euclidean group. Related topics are reflection positivity and Osterwalder-Schrader quantization, and supersymmetry, some of which will be covered.

Slavic Languages and Literatures

PLSH AB Elementary Polish II

CourseID: 159996

Faculty:

Next Term Offered:

Part two of a two part introductory course in modern Polish language and culture, designed for students without previous knowledge who would like to speak Polish or use the language for reading and research. All four major communicative skills (speaking, listening comprehension, reading, writing) are stressed. Students are exposed to Polish culture through reading of prose and poetry as they learn to use the language both as a means of communication and as a tool for reading and research.

Polish AA: Elementary Polish I together with Polish AB: Elementary Polish II satisfy the foreign language requirement and prepare students for continued study of Polish in intermediate-level courses and for study or travel abroad in Poland.

RUSS BAB Intermediate Russian (Intensive)

CourseID: 110903

Faculty:

Next Term Offered: 2019 Spring

An intensive version of Russian Ba and Russian Bb, covering the same material in a single semester. Class meets five days per week with five hours of the main section and three hours of small group speaking practice each week. Readings may vary.

RUSS 115 Advanced Russian for Academic and Professional Communication

CourseID: 130702

Faculty:

Next Term Offered: 2019 Spring

Emphasis on close reading and stylistic analysis of the Russian language with continued development of grammatical, sociolinguistic, strategic, and discourse competencies at an advanced level. Emphasis on reading with considerable practice in speaking, presenting, and writing for professional and academic purposes.

SLAVIC 125 Modern Russian in Historical Perspective

CourseID: 160167

Faculty: Michael Flier

Next Term Offered: 2019 Spring

Analysis of the anomalies of Modern Russian orthography, phonology, morphology, and syntax in light of historical development.

SLAVIC 132 Prague: A Cultural History

CourseID: 109672

Faculty: Jonathan Bolton

Next Term Offered: 2019 Spring

A survey of Prague's history and culture (including literature, theater, art, and film) from the city's beginnings to the present day.

SLAVIC 141 Russian Drama and Performance

CourseID: 108365

Faculty: Julie A. Buckler

Next Term Offered: 2018 Fall

Investigates performance and theatricality in imperial, Soviet, and post-Soviet contexts, in both art and life, through broad exploration of theoretical underpinnings (classical dramatic theory to contemporary performance studies) and case studies from drama, opera, ballet, film, musicals, performance art, religious ritual and folk festival, monarchy and court, mass spectacles, Cold War competitions and diplomacy, subcultures, and contemporary assertions of new orders.

SLAVIC 142 Russian and Soviet Avant-Garde Theater

CourseID: 159558

Faculty: Daria Khitrova

Next Term Offered: 2019 Spring

Explores the wave of radical reforms and revolutions in drama, staging and acting methods and systems, from Anton Chekhov and Konstantin Stanislavsky to Vladimir Mayakovsky and Vsevolod Meyerhold. Examines plays and productions against the broader Russian and early Soviet cultural, political and social background. Key notions include: emotional memory, biomechanics, Constructivism, theatricalization of life. Follows the effects innovative theories and practices in Russian and Soviet theater had on the style of film and stage productions as well as theater and drama studies across Europe and in the United States, including Brecht's *Verfremdung*, Method acting, and performance theory.

SLAVIC 147 Soviet Film After Stalin

CourseID: 125616
Faculty: Justin Weir
Next Term Offered: 2019 Spring

Considers the intersection of film and politics during the "thaw" years after Stalin's death, as well as themes of sexuality, gender, and violence in Russian culture of the 1960s and 1970s. Examines several films by Kalatozov, Tarkovsky, Paradjanov, and Shepitko which are well known for their innovation in form and narrative.

SLAVIC 148 Strange Russian Writers

CourseID: 115702
Faculty: Stephanie Sandler
Next Term Offered: 2019 Spring

Studies Russia's rebels, deviants, martyrs, loners, and losers as emblems of national identity. Stories, films and poems that project Russia's distinctive obsessions with history and religion. Includes Pushkin, Gogol, Dostoevsky, Tolstoy, Leskov, Babel, Kharms, Platonov, Nabokov, Petrushevskaya, Shalamov, Dobychin; films by Tarkovsky, Askoldov, Sokurov.

SLAVIC 150 Moscow and St. Petersburg

CourseID: 108383
Faculty: Julie A. Buckler
Next Term Offered: 2020 Spring

Explores the literary and cultural histories of Russia's two capital cities, their "urban geographies" and representations in visual and performing arts. Includes Pushkin, Gogol, Dostoevsky, Tolstoy, Chekhov, Bely, Zamyatin, Bunin, Bulgakov, Nabokov, Erofeev, Bitov, Tolstaya, Pelevin, Sokurov, Balabanov, Bekmambetov.

SLAVIC 166 Russian-Ukrainian Literary Relations in the 19th Century: Conference Course

CourseID: 133069
Faculty: George Grabowicz
Next Term Offered: 2018 Fall

Examines Russian-Ukrainian literary relations from 1798 to 1905, with special focus on canon formation, ethnic, national and imperial identity, and the interrelation of literature, society, and ideology. Topics include Decembrist historicism, Romantic poetics and folklore, Slavophilism and populism, literature as subversion (kotljarevshchyna), the uses of translation, the reception of major writers (Gogol, Shevchenko, and others), and the imperial attempt to suppress "Ukrainophilism."

SLAVIC 167 Revolutionary Ukraine: Between the Russian Revolution and

the Euromaidan of 2014

CourseID: 156680

Faculty: George Grabowicz

Next Term Offered: 2019 Fall

Focus on Ukrainian avant-garde literature and film, in the context of modernism, socialist realism, the impact of Stalinism, the famine (Holodomor), WWII and the Holocaust, late Sovietism and dissent, Crimea and the Tatars, collapse of the USSR and independence, varieties of post-modernism, and the present conflict with Russia. Also forays into visual art.

SLAVIC 168 Post-Soviet and Post-Modernist Ukrainian Literature

CourseID: 118111

Faculty: George Grabowicz

Next Term Offered: 2019 Fall

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: Yuriy Tarnawsky and Vasyl Makhno.

SLAVIC 170 War and Literature: Responses to WWII in Polish Culture

CourseID: 119975

Faculty: Aleksandra Kremer

Next Term Offered: 2019 Fall

The survey course War and Literature will introduce you to the works of Polish art and literature which resulted from direct experiences, collective memory, or an individual study of the Second World War, the event which demanded a radical revision of artistic means of expression, and continuously has numerous repercussions for Polish culture and politics. Literary works of different genres (poetry, novel, memoir, reportage, essay) and different traditions will be supplemented with visual arts (films, performances, paintings, photographs) and juxtaposed with recent scholarly texts and debates. We will examine works created between the 1940s and contemporary times, which refer to life under occupation, the Warsaw and Ghetto Uprisings, the Holocaust, Nazi concentration camps, Soviet gulags, as well as the post-war condition of the country, its art and survivors. Through this topic we will study different artistic strategies adopted by renowned Polish authors: Miłosz, Różewicz, Borowski, Nałkowska, Biały, Wat, Grotowski, Kantor, Wróblewski, Wajda, Krall, including works belonging to the so-called Polish Film School, Polish School of Poetry and Polish School of Reportage.

SLAVIC 174A Miłosz and America

CourseID: 203535

Faculty: Aleksandra Kremer

Next Term Offered: 2020 Spring

Czesław Miłosz spent almost half of his life in the United States, translated selected American poems, and maintained different personal contacts with American intellectuals. However, numerous roles that he played in the US as a professor of Slavic literatures, poet, essayist, translator, editor, and Nobel Prize winner, were mostly aimed at explaining and promoting his own cultural and historical background. His presentations of East-European heritage and his vision of poetry were built with American audience in mind and frequently in opposition to his convictions about Western culture. We will discuss diverse texts revealing different (often contradictory) faces of Miłosz as a poet who tried to control translations of his poems and his reception, as a teacher of Polish literature and promoter of Polish poets, as an interlocutor and correspondent of Brodsky and Merton, as a critic of the West, as a speaker at Harvard, as a translator of Eliot and Whitman, or as an author dedicating his texts to Ginsberg and Lowell. We will also study the recognition that Miłosz gradually won in the US and his impact on English-language poets, such as Hirsch, Hass, and Heaney.

SLAVIC 180 Russian Symbolist Poetry

CourseID: 118240

Faculty: John Malmstad

Next Term Offered: 2019 Spring

A survey of the history of the Symbolist movement in Russia with emphasis on close reading of poetry by its major figures.

SLAVIC 185 18th-Century Russian Literature: Seminar

CourseID: 156469

Faculty: Daria Khitrova

Next Term Offered: 2019 Spring

A survey of major authors and key questions in 18th-century Russian literature: (r)evolutions in literary language; syllabo-tonic reform; style and genre systems; the status of literature in the Imperial state, etc. Studies Prokopovich, Trediakovsky, Lomonosov, Sumarokov, Fonvizin, Derzhavin, Bogdanovich, Karamzin.

SLAVIC 186 Poetry after Brodsky: How Russian Is It?

CourseID: 124482

Faculty: Stephanie Sandler

Next Term Offered: 2018 Fall

Studies poetic practice since 1970. Includes Brodsky, Aygi, Dragomoshchenko, Eremin, Fanailova, Gronas, Mnatsakanova, Prigov, Sedakova, Shvarts, and others. Studies border crossings (in language and geography), connections to other art forms, and the changing representations of emotion and mind in contemporary poetry.

SLAVIC 188 Eugene Onegin

CourseID: 160745
Faculty: Daria Khitrova
Next Term Offered: 2020 Spring

This course, which is an alternative to Slavic 98b. Tutorial - Junior Year for students who are not concentrators, is devoted to a single topic and provides concentrators with a more intensive reading experience. This year's focus will be devoted to the close reading of "Eugene Onegin" in original.

SLAVIC 193 Russian and Soviet Silent Film

CourseID: 115709
Faculty: Daria Khitrova
Next Term Offered: 2018 Fall

Explores filmmaking and film culture from Imperial to early Soviet Russia; from the former's deep and deliberately slow psychological melodramas directed by Yevgeni Bauer to super-dynamic, politically charged montage movies that brought fame to directors as different as Dziga Vertov, Lev Kuleshov, and Sergei Eisenstein. The range of genres include: revolutionary heroics, adventure films, eccentric and social comedies, newsreels and documentaries. Films from Russia will mix with Ukrainian and Georgian silent films. Readings (all in English) include contemporary film theory (now classic) and critical reviews. Weekly screenings will be arranged.

SLAVIC 198 Czech Literary Culture after World War II: Conference Course

CourseID: 160013
Faculty: Jonathan Bolton
Next Term Offered: 2018 Fall

Czech literature and film from the Nazi occupation through the Communist period to the Velvet Revolution, with a focus on Hrabal, Havel, and Kundera, as well as directors of the Czech New Wave, including Forman and Nemeš. We will pay special attention to intersections of politics and literature, including censorship, samizdat, and forms of underground culture and dissent.

SLAVIC 222 20th-Century Ukrainian Poetry

CourseID: 123131
Faculty: George Grabowicz
Next Term Offered: 2018 Fall

An examination of the major poets and the contexts of modernism, socialist realism, emigration (both internal and actual) and dissent. Focus on Tychyna, the neo-classicists (Zerov and Ry's'kyj), Bazhan and futurism, Svidzins'kyj, Antonych, the interwar Prague School (Malaniuk and Olzhych), MUR (1945-1950) surrealism and experimentation (Kostec'kyj and Berezhan); the New York Group, the poets of the 1960s, the "Kyiv School," Vasyl Stus and Oleh Lysheha.

SLAVIC 241 Russian Futurism and Formalism

CourseID: 159557

Faculty: Daria Khitrova

Next Term Offered: 2019 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 251 Reading Anna Karenina

CourseID: 127636

Faculty: Julie A. Buckler

Next Term Offered: 2018 Fall

Close reading of *Anna Karenina* in original Russian with exploration of cultural context, artistic biography, tradition of nineteenth-century psychological novel, reception and interpretive paradigms, potential for new ways of reading.

SLAVIC 252 Rereading Russian Intellectual History

CourseID: 156361

Faculty: Justin Weir

Next Term Offered: 2019 Spring

This seminar reviews the standard texts and topics of pre-Revolutionary Russian intellectual history. Course readings include works by Chaadaev, Herzen, Belinsky, Chernyshevsky, Pisarev, Bakunin, Solovyov, and others. The seminar also considers methodological problems and how approaches to writing Russian intellectual history have evolved from the last half of the twentieth century to the post-Soviet era.

SLAVIC 280R Slavic Culture: Seminar

CourseID: 125507

Faculty: Michael Flier

Next Term Offered: 2019 Spring

The Culture of Medieval Rus': Art, Architecture, Ritual, Literature.

SLAVIC 287 Poetic Self-Creation in 20th-Century Russia: Seminar

CourseID: 112321
Faculty: Stephanie Sandler
Next Term Offered: 2020 Spring

Examines how poems create self-images for poets working in and after Russian modernism, including Khlebnikov, Vvedenskii, Mandel'shtam, Tsvetaeva, Barkova, Brodsky, Sedakova, Shvarts, Dragomoshchenko. Relies on literary and psychoanalytic theories of identity.

SLAVIC 289 Elegy: The Art of Losing

CourseID: 125567
Faculty: Stephanie Sandler
Next Term Offered: 2019 Fall

Poems, films, visual artifacts, and music alongside theories of loss. Focuses on non-narrative forms, with examples from Pushkin, Baratynsky, Fet, Brodsky, Shvarts; Tarkovsky, Shemiakin, Sokurov; Silvestrov, Sebald.

SLAVIC 295 East Central European Literature after World War II

CourseID: 119278
Faculty: Jonathan Bolton
Next Term Offered: 2019 Spring

Writers from Poland, Czechoslovakia, Hungary, Yugoslavia, and Romania have imagined their region as one of multicultural harmony and murderous ethnic cleansing, as home to Europe's most debased forms of evil and most inspiring spirit of resistance, as Europe's neglected backwater and its true conscience. For Milan Kundera, Central Europe was the kidnapped conscience of the West; for György Konrád it was a subversive dream, for Josef Kroutvor a melancholy grotesque. What holds these contradictory identities together? This seminar will introduce you to some of the classics of Central European literature after World War II, including authors such as David Albahari, Thomas Bernhard, Elias Canetti, Bohumil Hrabal, Ryszard Kapuściński, Danilo Kiš, Milan Kundera, Norman Manea, Sándor Márai, Czesław Miłosz, Herta Müller, Magda Szabó, and others. We will ask how these writers can be understood in a regional context rather than a national one, and we will examine some key themes of the modern Central European novel (including war and occupation, the encounter with Communism, emigration and exile, the interplay of personal biography and national history, and the encounter between artists and the state).

SLAVIC 299 Proseminar

CourseID: 122854
Faculty:
Next Term Offered: 2018 Fall

Introduction to graduate study in Slavic. Selected topics in literary analysis, history, and

theory.

Psychology

PSY 1202 Modern Neuroanatomy

CourseID: 203208

Faculty: Randy Buckner

Next Term Offered: 2019 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.

PSY 1301 Brain Science for World 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 1451 Debugging the Brain: Computational Approaches to Mental Dysfunction

CourseID: 203211

Faculty: Samuel Gershman

Next Term Offered: 2019 Fall

This course examines recent work applying computational models to mental disorders. These models formalize psychopathology in terms of breakdown in fundamental neurocognitive processes, linking normal and abnormal brain function within a common framework. Computational modeling has already begun to yield insights, and even possible treatments, for a wide range of disorders, including schizophrenia, autism, Parkinson's, depression, obsessive-compulsive disorder, and attention-deficit hyperactivity disorder. The course will consist of weekly readings from the primary literature, with one student leading the discussion of each paper

PSY 1654 Topics in Cognitive Development: Seminar

CourseID: 125979

Faculty: Elizabeth Spelke

Next Term Offered: 2019 Spring

This seminar considers the origins and nature of human knowledge, by focusing on the development of knowledge in four broad domains: knowledge of objects and their mechanical relationships, knowledge of number and mathematics, knowledge of geometry and spatial layout, and knowledge of other people and their social relationships. Students will write short papers in response to weekly readings, as well as a longer paper at the end of the term.

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 2020 Cognition, Brain, and Behavior: Proseminar

CourseID: 122608

Faculty:

Next Term Offered: 2019 Spring

Advanced survey of research topics in cognition, brain, and behavior.

PSY 2030 Bayesian Data Analysis

CourseID: 160667

Faculty: Patrick Mair

Next Term Offered: 2019 Spring

Bayesian Statistics is becoming popular in Psychology and is certainly a direction where

quantitative Psychology is going to move within the next few years. This class covers basic and advanced topics of Bayesian statistics in a very applied way with a strong focus on applications in

Psychology (and Social Sciences in general). 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 is familiar with). We elaborate on Bayes' seminal theorem and introduce gently the core components of Bayesian inference:

prior distributions, posterior distributions, and Bayes factors. Subsequently, we will learn about simulation based approaches for sampling posterior distributions. These are the infamous MCMC (Markov Chain Monte Carlo) techniques and have fancy names such as Metropolis-Hastings and Gibbs Sampling.

Then we are ready to actually do Bayesian inference and testing. We start with simple statistical tests and models such as t-test, ANOVA, and regression and compute them in a Bayesian way. We extend our modeling approach to generalized linear models (GLM) and a model family where Bayesian statistics turns out to be super helpful: hierarchical (aka multilevel or mixed-effects) models.

Finally, we focus on modern, more specific (psychometric) Bayesian methods such as multidimensional/multilevel item response theory (IRT), Bayesian latent variable models, latent Dirichlet allocations (LDA; as e.g. used in natural language processing), and Bayesian networks.

All topics covered will be supported by corresponding computations and illustrations in R. Lab units focus on knitting! (in other words, we focus on dynamic report generation using LaTeX and R Markdown in conjunction with the knitr package)

PSY 2050 History of Psychology: Seminar

CourseID: 118993

Faculty: Richard McNally

Next Term Offered: 2019 Spring

Covers major issues, theories, schools of thought, and controversies integral to the development of psychology from the late 19th century to the middle of the 20th century. Readings include classic articles exemplifying these themes.

PSY 2070 Psychometric Theory and Method Using R

CourseID: 204369

Faculty: Patrick Mair

Next Term Offered: 2020 Spring

By its classical definition, Psychometrics is concerned with the theory and techniques of psychological measurement. In this class we will cover a wide variety of modern psychometric methods; a big portion of them going beyond the classical psychometrics definition boundaries.

We start the class with a variety of exploratory scaling methods (units 1-5) where the aim is to scale and visualize association patterns in complex, multivariate datasets. Such techniques include principal components analysis (PCA), correspondence analysis (CA), G_i² models, multidimensional scaling (MDS), and biplots. There will also be a unit on networks where we cover basic (social) network analysis as well as more advanced techniques such as latent networks.

In the second part of the class (units 7-10) we focus on some classical psychometric approaches. The starting point is path models (which also include mediator/moderator models as special cases) which will then be extended to latent variable path models such as structural equation models (SEM). Subsequently, we will have two units on item response theory (IRT), which represents a large family of methods for scale construction and scale evaluation. We will cover unidimensional as well as multidimensional IRT models.

The third part of the class (units 11-12) focuses on the analysis of functional magnetic resonance imaging (fMRI) data. We will learn how to work with big datasets in R, how to obtain a parametric map through a general linear model t , and how to deal with the huge multiple testing problem. Subsequently, the last unit deals with multivariate fMRI methods such as independent components analysis (ICA) and some aspects of multi-voxel pattern analysis (MVPA) such as representational similarity analysis (RSA).

All topics covered will be supported by corresponding computations and illustrations in R. Basic R knowledge is required for this class. Lab units will be scheduled if needed.

PSY 2390 Advanced fMRI Analysis

CourseID: 203089

Faculty: Talia Konkle

Next Term Offered: 2018 Fall

When approaching functional neuroimaging data, the landscape of possible analysis techniques (and their do's and don'ts) is constantly changing. This course will have both lab-style and lecture formats, to discuss the current cutting edge analyses methods, and to explore in detail the specific analysis challenges that you as an fMRI practitioner are facing in your current neuroimaging research projects. Students are strongly encouraged

to have their own fMRI data set, and must have basic familiarity with the fMRI methodology and proficiency with MatLab/R.

PSY 2420 Cognitive-Behavioral Treatment of Psychological Disorders

CourseID: 144980

Faculty: Jill Hooley

Next Term Offered: 2018 Fall

Covers current cognitive-behavioral approaches to the treatment of common psychological disorders in adults. Emphasis is on the practical aspects of treatment, and on treatment outcome research. Includes theoretical underpinnings of cognitive-behavioral therapy.

PSY 2445 Psychological Treatment Research

CourseID: 118606

Faculty: John Weisz

Next Term Offered: 2020 Spring

Review theories of behavior change, methods of studying such change (single-case research designs, randomized clinical trials, etc.), and current evidence-based approaches to assessing and treating psychopathology. Examines historical, ethical, and cultural issues.

PSY 2460 Diagnostic Interviewing

CourseID: 113704

Faculty:

Next Term Offered: 2019 Spring

Students develop clinical interviewing and diagnostic skills using the Structured Clinical Interview for DSM-III-R and other instruments. Examines issues in diagnosis and assessment; provides exposure to psychopathology syndromes via tapes and clinical interviews.

PSY 2556 Advanced Topics in Moral Psychology

CourseID: 203612

Faculty: Fiery Cushman

Next Term Offered: 2018 Fall

A close study of contemporary research in moral psychology. Covers various psychological mechanisms supporting moral judgment and behavior, their development, their neural basis, and models of the biological and cultural evolution of morality. Particular attention is given to the function of morality.

PSY 2670B Decision Making and the Psychology of Possibility II

CourseID: 132599

Faculty: Ellen Langer

Next Term Offered: 2019 Spring

A deeper exploration into the theoretical and experimental issues pertaining to decision making and the psychology of possibility, raised in Psychology 2670a.

PSY 3490 Advanced Statistical Modeling and Psychometrics Using R

CourseID: 107774

Faculty:

Next Term Offered: 2019 Spring

This course introduces advanced statistical and modern psychometric methods such as Bayesian approaches (inference, predictions, MCMC), causal modeling (inference, moderator/mediator, graphical models), social network analysis (SNA measures, subgroups, visualization), multivariate exploratory methods (biplots, correspondence analysis, multidimensional scaling), item response theory, meta analysis, and machine/statistical learning (clustering, discriminant analysis support vector machines). All topics covered will be supported by corresponding computations in R. Lab sections will focus on Web Scraping, Text Mining, and data visualization.

PSY 3800 Psychometric Theory

CourseID: 118008

Faculty:

Next Term Offered: 2020 Spring

Covers basic psychometric theory and methods essential for reliable and valid measurement. Also covers conceptual issues in the assessment of individual differences (e.g., intelligence, personality).

Religion, The Study of

RELIGION 43 Religion and Contemporary Fiction

CourseID: 156934

Faculty:

Next Term Offered: 2019 Spring

This course will study the role of religious images, theologies, traditions, and identities in contemporary fiction. The course will seek to ask what it might mean for a literary text to bear religious meaning in contemporary life. What does it mean for a text (or a person, for that matter) to be understood as religious today? We will pursue these questions primarily through the study of literary texts (novels and short stories) published within the last half century, with authors to include Cormac McCarthy, Toni Morrison, Charles Johnson, Salman Rushdie, and Lorrie Moore, among others.

RELIGION 1232 Ancient Jewish Wisdom Literature

CourseID: 122312

Faculty: Jon Levenson

Next Term Offered: 2019 Spring

A close critical reading and interpretation of works thought to derive from the Wisdom tradition of ancient Israel, through the Second Temple period. The workings of the world and the ways of God as they appear in works such as Proverbs, Job, Qohelet, Ben Sira, some Psalms, the Wisdom of Solomon, Fourth Maccabees, and Pseudo-Phocylides as well as narratives about such figures as Joseph, Esther, and Daniel. Egyptian and Mesopotamian antecedents and parallels briefly considered. Emphasis on matters of worldview and literary form.

RELIGION 1816 Ismaili History and Thought

CourseID: 125910

Faculty:

Next Term Offered: 2019 Spring

This course explores the doctrines and practices of the Ismailis, adherents of a minority branch of Shia Islam that recognizes the continuation of religious authority after the Prophet Muhammad through a particular line of his descendants known as the *Imams*. Focusing on their historical evolution and manifestations in diverse political, cultural and social contexts, the course will consider three major communities: the Nizari Ismailis (in Syria, Iran, Central Asia, and South Asia); the Tayyibi (Daudi Bohra) Ismailis (in Yemen and South Asia) and the Druze (in Syria and Lebanon). Principal themes to be considered include conceptions of the *Imamah* and notions of authority, messianic doctrines, philosophy, ritual practice and devotional traditions. The course will also briefly consider the contemporary situation of these communities as minorities in North

America and Europe.

Stem Cell and Regenerative Biology

SCRB 20 Molecular Genetics and Genomics in Development and Disease

CourseID: 156398

Faculty:

Next Term Offered: 2019 Spring

The sequencing of the human genome has ushered in a new era of scientific investigation. In parallel, advances in molecular biology have made it possible to explore the processes underlying normal development and disease pathogenesis. We will apply principles and techniques of molecular biology - ranging from DNA structure to the Central Dogma, from PCR to cutting-edge genome-editing technology - to understand how genetics and genomics inform gene regulation and cell identity and, ultimately, the human condition.

SCRB 110 Classic Experiments in Developmental Biology

CourseID: 127065

Faculty:

Next Term Offered: 2019 Spring

This course will introduce students to classic experiments in developmental biology. We will explore the historical background, experimental design, and results of a handful of experiments that have defined the field of developmental biology and changed our understanding of the discipline. Students will read primary literature and, in turn, present the conclusions in written and oral formats.

SCRB 130 Biomedical Entrepreneurship: Turning Ideas into Medicine

CourseID: 128040

Faculty:

Next Term Offered: 2018 Fall

Medicines and other therapeutics have revolutionized the treatment of many diseases. Few of us pause to consider how these products are developed from an initial discovery in the lab to the treatment of patients. This course will consider this journey by incorporating scientific, biotechnology, intellectual property, venture capital, and business perspectives. In addition to lectures, students will work on group projects to chart a strategy toward bringing a novel biomedical idea to the clinic.

SCRB 150 Human Genetics: Mining Our Genomes for an Understanding of Human Variation and Disease

CourseID: 114797

Faculty:

Next Term Offered: 2020 Fall

The sequencing of the human genome has revealed the full extent of genetic variation that exists within us as a species. This genetic diversity underlies much of our physical variation as well as our differences in responsiveness to disease stimuli and their treatments. We will explore these and other ramifications of human genetic diversity by applying classical and contemporary genetic tools to the identification of specific genes and pathways that functionally underlie our variable biology.

SCRB 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 160 Experimental Embryology: From Stem Cells to Tissues and Back Again

CourseID: 125802

Faculty: Paola Arlotta

Next Term Offered: 2018 Fall

This advanced laboratory course will apply experimental approaches and surgical techniques to illustrate critical developmental events during mouse embryogenesis. Particular emphasis will be placed on experiments covering the following topics: fertilization and pre-implantation embryology; reprogramming of adult somatic cells into embryonic stem cells; early organ development; and surgical manipulation of late stage mouse embryos in utero.

SCRB 162 Experimental Regenerative Biology

CourseID: 126746

Faculty:

Next Term Offered: 2019 Spring

This laboratory course will allow advanced undergraduate students to explore classical and modern experimental models of regeneration, and through experimentation, understand the important concepts and key challenges of the regenerative biology field.

We will focus in particular on the regeneration of complex tissues and entire organ systems using both invertebrate and vertebrate models, including the planarian worm, the salamander, and the mouse.

SCRB 165 Directed Differentiation of Stem Cells

CourseID: 125191

Faculty: Chad Cowan

Next Term Offered: 2019 Spring

This practical laboratory course will investigate the biology of human pluripotent stem cells and their remarkable capacity to differentiate into all cell types of the body. Furthermore, key developmental pathways that guide stem cell development into these differentiated cell types will be explored and current paradigms for directing the differentiation of pluripotent stem cells will be discussed and studied experimentally. Finally, the utility of human pluripotent stem cells to understand and treat disease will be investigated.

SCRB 180 Development, Plasticity, and Regeneration in the Mammalian Brain

CourseID: 125803

Faculty: Jeffrey Macklis

Next Term Offered: 2018 Fall

Regenerative biology of the mammalian central nervous system (CNS), motivated by a focused and related set of human CNS disorders: This course will discuss molecular and cellular mechanisms of regeneration and repair in the mammalian central nervous system (CNS), motivated by prototypical examples in the motor control systems and circuitry of the cerebral cortex and spinal cord centrally relevant to spinal cord injury, ALS / Lou Gehrig's disease ("amyotrophic lateral sclerosis", and related disorders), and spinal muscular atrophy (SMA). We will take an approach integrating developmental and regenerative biology: we will compare and contrast aspects of embryonic neural development (molecular and cellular) with adult neural plasticity; discuss limitations to neuronal and axonal regeneration in the mature mammalian CNS following degeneration or injury; examine CNS regeneration approaches directed at overcoming intrinsic limitations; explore developmental controls, gene manipulation, and cellular reprogramming to promote neurogenesis, axonal regeneration, and directed differentiation in diseased adult mammalian brain; and consider technology such as "brain-computer interfaces".

SCRB 182 Got (New) Brain? The Evolution of Brain Regeneration

CourseID: 159693

Faculty:

Next Term Offered: 2018 Fall

This course will cover concepts and theories on evolutionary changes in nervous system regenerative capacity 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 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 195 The Translational Science of Stem Cells

CourseID: 204006

Faculty:

Next Term Offered: 2018 Fall

This tutorial will emphasize applications of stem cell biology to treating human disease. Students will help decide on the area of focus for the semester from a range of topics, including cell therapy for diabetes, drugs that mobilize stem cells to repair damaged tissue, and disease modeling. Together with the instructor, they will explore this area through lectures and extensive analysis of primary literature, with the goal of preparing a scientific review suitable for publication.

Social Studies

SOC-STD 98MI Migration in Theory and Practice

CourseID: 127021

Faculty:

Next Term Offered: 2018 Fall

In this course, we will examine how and why people migrate from one location to another, focusing both on the theoretical paradigms scholars use to explain migration processes as well as on the individual experiences of migrants. Topics include transnationalism, diaspora, identity formation, integration and assimilation, citizenship claims, and the feminization of migration. Ethnographic readings focus primarily on migration to the US, but also include cases from other world areas, most notably Asia.

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.

SOC-STD 980Q Political Rhetoric and American Democracy

CourseID: 159816

Faculty:

Next Term Offered: 2019 Spring

In this course, we will investigate a question at the heart of democratic politics: in what sense, if any, is rhetoric a part of reasoned political argument? Is rhetoric a regrettable feature of democracy, or a practice worth cultivating? We often denigrate rhetoric as pandering or manipulation. We often assume that stories, images, and metaphors intended to persuade a particular audience are, at best, adornments to the "real argument." At worst, they are means of trickery, ways of moving people to a decision that their better reason would reject.

But examples of great rhetoric force us to question this assumption. The speeches of political figures such as John F. Kennedy, Lyndon Johnson, and Martin Luther King arguably derive their moral force not simply from the principles they invoke, but from the way in which they appeal to the life circumstances of their listeners.

We will examine the case for and against rhetoric by turning to classical texts (Aristotle, Plato, Hobbes, Kant), contemporary political theory (Garsten, Beiner, Chambers), and great political speeches (Douglass, Lincoln, Johnson, and others.) This is a junior tutorial.

SOC-STD 980V Global Democratic Theory

CourseID: 203274

Faculty:

Next Term Offered: 2019 Spring

What does it mean to think democratic politics in a transnational or global vein? What might global democracy look like? Does it differ from global democratic practice? In this seminar we will consider the advantages and disadvantages of various contemporary responses to these questions. We will also turn to history in order to trace a genealogy of the possibilities and limits of global democratic theory from the 18th century to the present. Finally, we will engage a series of contemporary debates around digital democracy, transnational feminism, radical cosmopolitanism, and human rights in light of both the history of political thought as well as in relation to more recent democratic theory. Readings may include Rousseau, Marx, Luxemburg, and Arendt from the history of political thought as well as contemporary scholarship by Raymond Geuss, Martha Nussbaum, Seyla Benhabib, James Ingram, Claude Lefort, Etienne Balibar and Robert Meister, among others. This is a junior tutorial.

SOC-STD 980X Fascism and the Far Right in Europe and Beyond

CourseID: 203438

Faculty:

Next Term Offered: 2019 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.

Sociology

SOCIOL 10 Introduction to Sociology

CourseID: 114222

Faculty:

Next Term Offered: 2019 Spring

Introduces students to the main objects and goals of Sociology_ both for sociology concentrators and curious non-concentrators. Explores the theories of classical authors in the history of sociology (such as Marx, Durkheim, Weber, and beyond). Examines major topics in sociological research (including but not limited to social problems, deviance, inequality, social change, culture, education, social interaction).

SOCIOL 25 Introduction to the Sociology of Organizations

CourseID: 113256

Faculty:

Next Term Offered: 2018 Fall

This course examines the evolution of the modern organization, focusing on changing approaches to corporate strategy and to managing employees. We read both social scientific analyses and Harvard Business School cases to trace the history of management, from the harsh principles of the "drive system" to the latest theories of how "work teams" improve productivity and how focusing on a firm's "core competence" improves the bottom line. The course covers research examining the efficiency and the equity of current corporate practice

SOCIOL 26 Introduction to Global Social Change

CourseID: 109657

Faculty:

Next Term Offered: 2019 Fall

Focuses on the development of global capitalism and the relationship between markets, the state, and civil society. The course will pay particular attention to power and inequality, and to various forms of resistance against globalization.

SOCIOL 27 Introduction to Social Movements

CourseID: 109656

Faculty:

Next Term Offered: 2018 Fall

Social movements and revolution have long been driving forces behind political, social, and cultural change. From the Civil Rights movement of the 60s to the recent and

unpredicted "Arab Spring," the extraordinary mobilization of ordinary people is routinely credited with fundamentally re-shaping societal institutions--the polity, the economy, religion, gender, race, and even the environment. But can we really define and study something as ephemeral as social mobilization? Do we know how social movements begin? Why might they become revolutionary? Can they make a difference in the societies they target? This course examines these questions within the sociological literature on collective action. Theories of social movements and revolutions are then applied to a series of case studies around the globe. Case studies may include the US, Iran, China, El Salvador, Chile, India, Poland, Argentina, Egypt, and Nigeria, among others. Students will also be required to apply course readings to the collective action case of their choosing throughout the semester.

SOCIOL 29 Introduction to Urban Sociology

CourseID: 109703

Faculty:

Next Term Offered: 2020 Spring

Introduces the city as both object and site of social inquiry. We will start with the individual experience of living in cities, then explore the neighborhood structure of the modern metropolis, take on segregation and inequality, and conclude with globalization and world cities. We will also consider themes that cut across these levels, including crime, immigration, workforce issues, and arts and the creative economy. Throughout, students will use the cities of Cambridge and Boston to explore and evaluate ideas from class, via observational and fieldwork opportunities.

SOCIOL 90EI Research Lab: Ethnicity and Immigration

CourseID: 207692

Faculty:

Next Term Offered:

Students will build skills in formulating research questions and conducting original quantitative data analysis, using the Children of Immigrants Longitudinal Study (CILS). This dataset covers children of immigrants from more than 77 countries, with particular concentrations of those from Central America, the Caribbean, East Asia, and Southeast Asia. Students may use these data to study questions about the relationships between national, racial, ethnic, family background on one hand, and attitudes and outlook, school performance, and socio-economic attainment on the other.

SOCIOL 98BE Culture, Power, and Politics

CourseID: 159929

Faculty:

Next Term Offered: 2020 Spring

This course examines the role of meaning-making in political life, focusing on how

people's understandings of political phenomena affect their political choices, how political actors frame their claims in order to mobilize public support, and how political institutions and bureaucratic classification systems shape inequality. The material will prepare students for developing their own research projects, which will be collaboratively workshopped in class. This is a junior tutorial.

SOCIOL 98U Research Lab: Analyzing Urban Inequality

CourseID: 205123

Faculty:

Next Term Offered:

SOCIOL 98VA Development in Theory and Practice

CourseID: 108200

Faculty: Jocelyn Viterna

Next Term Offered: 2019 Spring

Why are some societies wealthier, healthier, and more highly educated than others? And how might we improve the lives of those individuals with the fewest opportunities? The purpose of this course is to investigate whether and how scholarly theories of development map onto the real world practices of development organizations (state development offices, intergovernmental agencies, not-for-profit organizations) and vice versa. Readings in development sociology will be interspersed with individual student analyses of specific development organizations across a range of issues including (but not limited to) gender, politics, the environment, education, health care, and the economy.

SOCIOL 98WC Sports and Society

CourseID: 127534

Faculty:

Next Term Offered: 2019 Spring

This course will examine sports through a sociological lens. We will examine processes of stratification in sports including class, race and gender, as well as sports as a business, the media and sports, and sports and health. Students will do an in depth independent or team based research project on the topic. This is a junior tutorial.

SOCIOL 105 Sports and Society

CourseID: 109896

Faculty:

Next Term Offered: 2018 Fall

This course will examine the institution of sports and how it is shaped by society. Is sports a level playing field and meritocracy where the best person or team wins? Or is sports a mirror of an unequal society where power and wealth shape social life? How do

class, race and gender shape the sports we play and how we play them? We will consider sports and higher education in the U.S. and at Harvard. We will also look at youth sports, sports as a business, the media and sports, and sports and health. Students will do an in depth research project on the topic and will actively discuss readings in class each week.

SOCIOL 108 Inequality at Work

CourseID: 108275

Faculty:

Next Term Offered: 2019 Fall

The American workplace has become much more diverse over the past 30 years, with women and minorities moving into greater positions of authority. But significant inequalities remain. Why? This course explores how sociologists go about analyzing the reasons for workplace inequalities using a variety of methods from ethnography to surveys to experiments. Using case studies, we pay particular attention to how work can be restructured in ways that increase participation and equality.

SOCIOL 117 Social Trauma and Collective Identity

CourseID: 203441

Faculty:

Next Term Offered: 2018 Fall

Even though trauma is often a personal experience, it can also affect groups, regions, and even whole nations. This course explores the notion of social trauma by focusing on its emergence, commemoration, and transmission in different societies. How do ideas of trauma stay constant across generations? And what are the consequences of these processes in a variety of sites such as politics, social activism, art, and domestic life? The main analytic assignment enables students to further explore a site of their choice that represents collective trauma. Upon collection of primary evidence, students will analyze their case using the concepts and readings covered in class.

SOCIOL 125 Personal Networks

CourseID: 203271

Faculty:

Next Term Offered: 2019 Spring

This course examines how individuals shape and are affected by their social networks. The course is substantive, not methodological. It is focused specifically on the networks of individuals, not broadly on network structure. Possible topics include the relationship between personal networks and social support, social capital, institutions, organizations, political beliefs, group membership, immigration, inequality, urbanization, online communication, and mobile technology.

SOCIOL 129 Education and Society

CourseID: 122467

Faculty:

Next Term Offered: 2020 Spring

Examines the key role played by the educational system in reproducing and transforming modern society. Considers the purposes served by an educational system, the distinctiveness of the American educational system in comparison to other countries, the ways that education connects to the labor market in the U.S. and other societies, and why educational attainment is related to social class and ethnicity.

SOCIOL 143 Just Institutions

CourseID: 108673

Faculty:

Next Term Offered: 2019 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 147 The Shareholder Value Management Revolution

CourseID: 107351

Faculty:

Next Term Offered: 2018 Fall

Since the late 1970s, the American style of management has been revolutionized. This course reviews the history of American management strategies, focusing on the origins and effects of the shareholder value approach that now prevails among leading firms. Shareholder value traces its roots to America's lackluster performance in the global economy during the 1970s, and the prescriptions offered by agency theorists in the field of financial economics. We explore how the shareholder value approach was promoted in American firms. We look at how the approach has changed core corporate strategy, how it has affected corporate performance, and how it has shaped labor markets, income inequality, and global trade.

SOCIOL 150 Neighborhood Effects and the Social Order of the City

CourseID: 108873

Faculty: Robert Sampson

Next Term Offered: 2019 Spring

Ideas about order and disorder have driven debates about the city for over a century. After reviewing classic approaches we will examine contemporary research on neighborhood inequality, "broken-windows" and crime, racial segregation, ethnic

diversity and immigration, the symbolic meanings of disorder, community organizations, and competing visions for the uses of public space. Students will conduct field-based observations drawing upon cutting-edge methods employed by urban sociologists to understand the workings of the modern city.

SOCIOL 162 Financilization: The Rise of Finance in Economic Life

CourseID: 205275

Faculty:

Next Term Offered:

This course surveys the origins and consequences of financialization. The 20th century witnessed a fundamental change in economic life: the rise of finance. Finance constituted about 7% of U.S. business profits in the mid-1940s but in the early 2000s, prior to the financial meltdown, it was about 40%. Large non-financial firms such as Macy's, Target, Ford, and General Electric earn a significant portion of their profits from financial channels like interest, dividends, and financial gain. In 1980, only 6% of U.S. households had mutual fund accounts, but that number increased to 50% by 2008. Finance became larger in size in the economy, transformed the decision making process in corporations, altered the way the economy grows, and is shaping the ways individuals think, work, save, buy houses, and retire. This course examines the rise of finance and discusses its contribution to the financial meltdown in 2008. It also explores the long-term ramifications of financialization with respect to economic growth, employment, and income inequality. This course will train students to critically assess the phenomenon utilizing recent studies and will tackle following questions:

- How can we define financialization? Is it a new phase of capitalism?
- How did it contribute to the economic crisis in 2008?
- What are the causes of financialization?
- What are the consequences of financialization? How does it affect the labor market and inequality?
- How are American households and corporations financialized?
- How does financialization work in tandem with globalization? Can we observe financialization in other industrialized countries?
- What can we do to fix the social problems caused by financialization?

This course employs a sociological approach to these questions while incorporating studies from multiple perspectives including economics and finance.

SOCIOL 164 Successful Societies: Markers and Pathways

CourseID: 127922

Faculty:

Next Term Offered: 2019 Spring

Analyzes the markers of societal success and the social conditions that sustain it. Discusses various indicators ranging from the standard economic measures to the human development index, inequality, resilience to shocks, educational, child development and health measures. Considers the role of cultural and institutional buffers

(how cultural repertoires and myths feed strong collective identities, cultural and institutional supports for coping with stigma, models of citizenship and immigration, and multi-level governance and their impact on welfare and poverty). Similarly addresses factors that present major challenges, or 'wicked problems', like concentrated urban poverty, well-being of indigenous and other racialized groups and some of the solutions attempted. Particular attention will be put on the United States, Canada, and other advanced industrial societies and to the role of space, institutions, and culture in shaping the conditions for successful societies. Public policy implications will also be discussed.

SOCIOL 165 Inequalities in Health Care

CourseID: 122318

Faculty: Mary Ruggie

Next Term Offered: 2019 Spring

Asks why certain social groups are at greater risk for more severe health problems (e.g., infant mortality, HIV/AIDS, cancer) and yet receive unequal health care in the US. Examines what best practices foster adequate delivery of healthcare services, mutual respect between patient and provider, and healthy living. Considers the role of government, the private sector, family and community.

SOCIOL 170 Culture and Networks

CourseID: 108274

Faculty:

Next Term Offered: 2019 Fall

This course will serve as an overview of the growing field of network research with a particular focus on how patterns of social interaction shape and are themselves shaped by cultural preferences and meaning-making processes. We will discuss a variety of substantive topics, including musical tastes, romantic relationships, organizational collaboration and competition, and social movement mobilization, while paying particular attention to the increasingly important role of social media in establishing and maintaining social ties.

SOCIOL 180 Law, Science, and Society in America

CourseID: 108974

Faculty: Sheila Jasanoff

Next Term Offered: 2019 Spring

This course explores the tensions, contradictions, and mutual appropriations that characterize the relationship between law, science, and technology in America. It examines how ideas of evidence, expertise, and public reason have changed over the past half-century in response to such phenomena as the rise of the risk society, environmentalism, patient advocacy, and the information revolution. Law is broadly construed to include the activities of legislatures, regulatory agencies, and courts. The

course seeks to contextualize the interactions of law, science, and technology in relation to wider transformations in US culture and society.

SOCIOL 188 Politics and Social Class

CourseID: 203392

Faculty:

Next Term Offered: 2020 Spring

How does social class matter in politics? Do party coalitions reflect class divisions? Does class position shape opportunities for political mobilization? Has there been a realignment in class interests in recent elections? In this course, we will explore these questions in an effort to understand the complex relationship between social class and politics. Our primary focus will be the United States, though we will supplement our analysis with cross-national comparisons. Topics of study will include a review of sociological research on social class and class consciousness, an analysis of how class influences political behavior and party identification, a historical examination of developments in the relationship between class and voting behavior, and opportunities to apply course concepts to the 2016 elections.

SOCIOL 210 Social Science Epistemology: Evidence, Theory, and Method

CourseID: 112020

Faculty:

Next Term Offered: 2018 Fall

All knowledge claims are based on an explicit or implicit model of epistemology. This course examines different models for their reasonableness and implications. A particular focus will be on the relationship between the assumed ontology and the phenomenology of a situation and the notion of truth. Among others, readings will include Abductive Analysis, Making it Count, Economic Rules.

SOCIOL 211 Analysis of Longitudinal Data: Seminar

CourseID: 131333

Faculty:

Next Term Offered: 2019 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 223 American Society and Public Policy: Research Seminar

CourseID: 108204

Faculty:

Next Term Offered: 2018 Fall

Explores growing inequality in the U.S., and its implications for public policy in the areas of social support for families and workers, immigration and citizenship, and access to higher education. Students are expected to develop and present their own research.

SOCIOL 236 Cultural Processes in the Production of Inequality

CourseID: 121062

Faculty:

Next Term Offered: 2019 Spring

This advanced course will consider recent developments at the intersection of cultural sociology and the sociology of inequality, mobility and poverty. Topics will include: the coproduction of social and symbolic boundaries; moral schemas and inequality; cultural scripts in the construction of racism and anti-racism; new developments in the study of identity, ethno-racial and class cultures; cognition, cultural repertoires and networks; evaluation and other cultural and social processes; and the conceptualization of context and explanations in cultural sociology.

SOCIOL 237 Contemporary Chinese Society: Seminar

CourseID: 114986

Faculty:

Next Term Offered: 2018 Fall

A seminar devoted to the intensive analysis of a particular aspect of contemporary Chinese society. This year the focus will be on trends in inequality and stratification in China.

SOCIOL 243 Economic Sociology

CourseID: 118601

Faculty:

Next Term Offered: 2018 Fall

Introduction to economic sociology at the graduate level. Surveys economic inequality and the ways that economic behavior and outcomes are shaped by social institutions such as markets, networks, organizations, family, and culture.

SOCIOL 246 Seminar in Crime and Justice

CourseID: 109694

Faculty:

Next Term Offered: 2018 Fall

This multidisciplinary seminar will read and discuss research on crime, the social context in which it occurs, and criminal justice policy. We address this literature in the historic context of shifts in US crime policy to a less punitive regime, where incarceration rates

may be significantly reduced. Besides studying empirical research on crime and punishment, we will also consider the future of crime policy, and how principles of justice can guide the role of police and corrections in poor communities.

SOCIOL 248 Race, Politics, and Social Inequality: Seminar

CourseID: 125300

Faculty:

Next Term Offered: 2018 Fall

Examines intersection of race, public will, and policy-making. Reviews theories of race-making and racial inequality, dynamics of public opinion, and effects of a racialized public sphere on social policy. Focuses on the welfare state, the criminal justice system, and the dynamics of a multiethnic society.

SOCIOL 263 Historical Sociology: Cultural and Institutional Perspectives

CourseID: 107332

Faculty: Orlando Patterson

Next Term Offered: 2019 Spring

The seminar explores the emergence, dynamics and interaction of cultural, structural and institutional processes in the development, and underdevelopment, of capitalism in selected western and non-western societies. Among the topics explored, through close study of selected texts, are: merchant capital, network channeling and cultural change in renaissance Italy; institutional, cultural and imperial factors in the rise and divergence of West European capitalism; networks and informal institutions in the rise of capitalism in China; cultural and institutional change in Tokugawa Japan; and the institutional and cultural origins of development and underdevelopment in Latin America and the Caribbean. Our readings and discussions will be guided by the recurring theoretical problems of causality, origins, continuity and change in institutional and cultural processes and the fundamental problem of how the past influences later periods and present outcomes.

SOCIOL 267 Political Sociology

CourseID: 125782

Faculty:

Next Term Offered: 2019 Spring

This course examines power relations between (and within) society and the state. We will focus on nation-state formation, revolutions, social movements, ideology and political attitudes, welfare state policies, and globalization, while interrogating the major theoretical traditions that have shaped the sociological study of politics.

SOCIOL 275 Social Network Analysis: Seminar

CourseID: 119926

Faculty: Peter Marsden
Next Term Offered: 2017 Spring

Concepts and methods for studying social structure using social networks. Approaches to collecting network data; data quality; graph-theoretic, statistical, and visual approaches to analyzing network data, including blockmodels and multidimensional scaling.

SOCIOL 296B Proseminar on Inequality and Social Policy II

CourseID: 112354

Faculty:

Next Term Offered: 2019 Spring

Deals with causes and possible cures for economic inequality, including skill differences, discrimination, immigration, household composition, residential segregation, and the welfare state.

SOCIOL 314 Workshop on Urban Social Processes

CourseID: 126400

Faculty: Robert Sampson

Next Term Offered: 2019 Fall

Cities are back, urbanization is rapidly expanding around the world, and new forms of data are presenting unique opportunities for research. SOC314 is a forum to explore the social mechanisms, processes, and structures that occur in urban settings and the diverse behaviors that are shaped by spatial inequality. The workshop highlights the presentation of graduate student research but also includes discussion sessions on selected readings and work-in-progress by faculty at Harvard and around the country.

SOCIOL 318 Quantitative Methods in Sociology

CourseID: 109750

Faculty:

Next Term Offered: 2018 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 319 Workshop on Mixed Methods of Empirical Analysis

CourseID: 156057

Faculty:

Next Term Offered: 2018 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 2144 Economic Sociology

CourseID: 207698

Faculty:

Next Term Offered:

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.

Romance Languages and Literatures

SPANSH 269 Body Matters and Market Forces in Latin American Literature and Culture

CourseID: 127884

Faculty:

Next Term Offered:

Traces and analyzes social and symbolic dynamics of urban commodity capitalism. Emphasis on the body and perception as contested sites of coercion and critical agency. Readings by Benjamin, Arlt, Adorno, Siqueiros, Merleau-Ponty, Paz, Eltit.

Statistics

STAT 140 Design of Experiments

CourseID: 116364

Faculty:

Next Term Offered: 2018 Fall

Statistical designs for efficient experimentation in the physical, life, social and management sciences and in engineering. A systematic approach to explore input-output relationships by deliberately manipulating input variables. Topics include completely randomized and randomized block designs, 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 151 Multilevel and Longitudinal Models

CourseID: 160736

Faculty:

Next Term Offered: 2018 Fall

Data often have structure that needs to be modeled explicitly. For example, when investigating students' outcomes we need to account for the fact that students are nested inside classes that are in turn nested inside schools. If we are watching students develop over time, we need to account for the dependence of measurements across time. If we do not, our inferences will tend to be overly optimistic and wrong. The course provides an overall framework, the multilevel and generalized multilevel (hierarchical) model, for thinking about and analyzing these forms of data. We will focus on specific versions of these tools for the most common forms of longitudinal and clustered data. This course will focus on applied work, using real data sets and the statistical software R. R will be specifically taught and supported. While the primary focus will be on the linear model with continuous outcomes (i.e., the classic regression framework) we will also discuss binary, categorical, and ordinal outcomes. We will emphasize how to think about the applicability of these methods, how they might fail, and what one might do to protect oneself in such circumstances. Applications of hierarchical (multi-level) models will include the canonical specific cases of random-slope, random-intercept, mixed effect, crossed effect, marginal, and growth-curve models.

STAT 170 Quantitative Analysis of Capital Markets

CourseID: 122306

Faculty:

Next Term Offered: 2018 Fall

An introduction to the analysis of capital markets using quantitative methods. Concepts

include risk, expected utility, discounting, binomial-tree valuation methods, martingales, continuous time stochastic calculus methods, stochastic discount factors, financial econometric models and Monte Carlo simulations. These concepts are applied to equities, risk management and derivative pricing.

STAT 186 Statistical Methods for Evaluating Causal Effects

CourseID: 110022

Faculty:

Next Term Offered: 2019 Spring

Statistical methods for inferring causal effects from data from randomized experiments or observational studies. Students will develop expertise to assess the credibility of causal claims and the ability to apply the relevant statistical methods for causal analyses. Examples from many disciplines: economics, education, other social sciences, epidemiology, and biomedical science. Evaluations of job training programs, educational voucher schemes, changes in laws such as minimum wage laws, medical treatments, smoking, military service.

STAT 221 Statistical Computing and Learning

CourseID: 115077

Faculty:

Next Term Offered: 2018 Fall

Computational methods commonly used in statistics: random number generation, optimization methods, numerical integration, Monte Carlo methods including Metropolis-Hastings and Gibbs samplers, approximate inference techniques including Expectation-Maximization algorithms, Laplace approximation and variational methods, data augmentation strategies, data augmentation strategies.

STAT 230 Multivariate Statistical Analysis

CourseID: 119940

Faculty:

Next Term Offered: 2018 Fall

Multivariate inference and data analysis. Advanced matrix theory and distributions, including Multivariate Normal, Wishart, and multilevel models. Supervised learning: multivariate regression, classification, and discriminant analysis. Unsupervised learning: dimension reduction, principal components, clustering, and factor analysis.

STAT 240 Matched Sampling and Study Design

CourseID: 123714

Faculty:

Next Term Offered: 2018 Fall

This course provides an accessible introduction to the study of matched sampling and other design techniques in any field (e.g., economics, education, epidemiology, medicine, political science, etc.) conducting empirical research to evaluate the causal effects of interventions.

STAT 310HFRA Topics in Astrostatistics

CourseID: 120000

Faculty:

Next Term Offered: 2018 Fall

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

STAT 310HFRB Topics in Astrostatistics

CourseID: 160676

Faculty:

Next Term Offered: 2019 Spring

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

STAT 321 Stochastic Modeling and Bayesian Inference

CourseID: 117134

Faculty:

Next Term Offered: 2019 Spring

Stochastic processes and their applications in biological, chemical and financial modeling. Bayesian inference about stochastic models based on the Monte Carlo sampling approach.

STAT 365R Philosophical Foundations of Statistics

CourseID: 204454

Faculty:

Next Term Offered: 2019 Spring

Controversies, paradoxes, fallacies, and philosophical issues in the foundations of probability and statistics. Bayesian vs. frequentist vs. fiducial; objective vs. subjective; design-based vs. model-based; low assumption vs. high assumption; robustness vs. relevance; population inference vs. individualized prediction.

STAT 366HFRA Introduction to Research

CourseID: 108851

Faculty:

Next Term Offered: 2018 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. Students must complete both parts of this course (parts A and B) within the same academic year in order to receive credit.

STAT 366HFRB Introduction to Research

CourseID: 160678

Faculty:

Next Term Offered: 2019 Spring

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

STAT 392 Research Topics in Missing Data, Matching and Causality

CourseID: 127521

Faculty:

Next Term Offered: 2018 Fall

Students will make at least one presentation on current research in applied or theoretical statistics. All registered students are expected to participate by offering commentary/suggestions during presentations. This is a requirement to obtain credit.

Systems Biology

SYSBIO 204 Biomolecular Engineering and Synthetic Biology

CourseID: 127916

Faculty:

Next Term Offered:

A course focusing on the rational design, construction, and applications of nucleic acid- and protein-based synthetic molecular and cellular machinery and systems. Students are mentored to produce substantial term projects.

Theater, Dance, and Media

TDM 105 Introduction to Dramaturgy (Documentary Theater and A.R.T. 2017-18 Season)

CourseID: 118876

Faculty: Ryan McKittrick

Next Term Offered: 2018 Fall

This course introduces students to the fundamentals of dramaturgy, with a special focus on documentary/verbatim theater and the American Repertory Theater's 2017-18 season. Students will analyze a wide range of theatrical texts, meet with the artists involved in the creation of those works, and write their own documentary or verbatim dramas that will be read aloud at the end of the semester.

TDM 117 Acting Chekhov

CourseID: 123900

Faculty: Remo Airaldi

Next Term Offered: 2019 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 119 Vocal Production for the Stage

CourseID: 118497

Faculty: Erika Bailey

Next Term Offered: 2018 Fall

Whether one is performing in a play, speaking professionally, teaching a class or leading a group, the ability to use one's voice effectively is a primary element of the success of the presentation. Using several major techniques of speaking training, students learn not only how to use the voice, but how these various approaches to voice training correspond to specific performance challenges.

TDM 128X Death of a Salesman (or Two)

CourseID: 203087

Faculty:

Next Term Offered: 2018 Fall

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 141 Movement Lab

CourseID: 161233

Faculty: Jill Johnson

Next Term Offered: 2019 Spring

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 142 Contemporary Dance: Countertechnique

CourseID: 203636

Faculty:

Next Term Offered: 2018 Fall

Countertechnique is a system of movement designed by esteemed Dutch choreographer, Anouk Van Dijk. The technique offers a dynamic dance practice that focuses on directing and counter-directing the body through space so that each participant can develop authentic, sincere and unique movement vocabularies ?tools that Van Dijk believes will prepare the dancing body and mind for negotiating demanding dance practices in the 21st century. Scale, risk-taking, fluidity, strength and flexibility are skills this course aims to expand.

TDM 144 Embodied Expression/Expressive Body: Dance in Cultural Context

CourseID: 203432

Faculty:

Next Term Offered: 2018 Fall

This seminar explores the ways in which dance forms create, express, interrogate and challenge ideas and values of personal and interpersonal significance in ritual, theatrical and social contexts. By observing several dance forms on film and in live performances, participating in dance workshops, and reading ethnographic, historical and theoretical texts, we will attempt to understand the emergent (and unstable) significance of dance from the perspective of both movers and witnesses.

TDM 147 Deconstructing a Novel Into a Dance

CourseID: 204032

Faculty: Mario Zambrano

Next Term Offered: 2019 Spring

This is a project-based course that will study the structure and thematic elements of a novel as a means to compose a choreographic work. Divided into three units, the course will begin with a close reading of three novels: *Giovanni's Room* by James Baldwin, *The Waves* by Virginia Woolf, and *The Buddha in the Attic* by Julie Otsuka. Unit II (in studio) will be dedicated to improvisational tasks derived and inspired from the novels. By sourcing structure and language—metaphor, style, and rhythm—the movement exercises will embody the literature we study. Unit III will focus on composition, arranging what we've learned in prior units, and will culminate in a choreographic architecture both literary and physical.

TDM 153 Introductory Theater Design: Lighting, Audio, and Video

CourseID: 204029

Faculty:

Next Term Offered: 2019 Spring

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.

Visual and Environmental Studies

VES 14 Making Things: Form, Function, and Materials

CourseID: 203314

Faculty: Katarina Burin

Next Term Offered: 2019 Spring

This studio art course will explore some of the conceptual and material fundamentals of design, beginning with executed plans or drawings from which to then craft usable functional objects. The course will be divided into five sections in which we will study, investigate and gain expertise in various materials. Paper construction, architectural model making, cast ceramics, basic woodworking and book arts will be explored from initial design through to end product.

VES 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.

VES 23 Conceptual Figure

CourseID: 108842

Faculty: Matt Saunders

Next Term Offered: 2019 Spring

Portrait, person, effigy, model, anatomy, subject, self?the body is often central in art. This course will examine many ways of approaching the human figure through painting. Working first from life, we will also consider the body in media, in horror, in history and in absentia; as politics, as sexuality, as identity and as idea.

VES 24 Painting, Smoking, Eating

CourseID: 127177

Faculty: Matt Saunders

Next Term Offered: 2019 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.

VES 41A Introduction to Still Photography

CourseID: 122184

Faculty: Sharon Harper

Next Term Offered: 2019 Fall

Introduction to still photography with an emphasis on the medium as a vehicle for expression and personal vision. Covers technical, historical, and aesthetic aspects of the medium. Class is organized around slide lectures, individual meetings, group critiques, and readings.

VES 58S Constructing Realities: A Filmmaker's Guide to Contemporary Southeast Asian Cinema

CourseID: 207858

Faculty:

Next Term Offered:

This studio course is a combination between film production and film studies. In the course, we will examine cinema from Southeast Asia from the year 2000 to the present, looking at the works of independent filmmakers such as Lav Diaz, Apichatpong Weerasethakul, Tan Chui Mui, and others. Films selected for class viewing will be studied for their modes of production as well as their relations to their socio-cultural milieu. As critical reflection expected, the study also aims to broaden students' perspectives towards interrelationship between film production and its social/monetary constraints ?to the point where its constraints become a form of political/creative act.

VES 73 Exploring Culture Through Film

CourseID: 117631

Faculty: Lucien Castaing-Taylor

Next Term Offered: 2019 Spring

Introduction to the history and theory of documentary and ethnographic film. A wide variety of works from 1895 to today will be screened and discussed. Different cinematic styles which have been used to depict human existence and the relationships between individuals and the wider cultural and political contexts of their lives will be compared.

VES 80 Loitering: Studio Course

CourseID: 123380

Faculty: Stephen Prina

Next Term Offered: 2019 Fall

You will hang out in the vicinity of culture and make things in response to it. This class is not thematic or linked to any particular discipline.

VES 100 Critical Studies: The Artist

CourseID: 203367

Faculty: Carrie Lambert-Beatty

Next Term Offered: 2019 Spring

What does it mean to be an artist? Challenging assumptions about the artist as cultural role, this seminar explores the different ways makers of aesthetic things have been named and defined, trained and treated. It uncovers the histories that shaped the modern, Western model of the artist, and evaluates the challenges and alternatives that have weakened that model's dominance. Working toward an understanding of contemporary artists' many choices and challenges, we will turn to sources including works of art and conversations with contemporary artists as well as primary texts, historical and anthropological scholarship, films, literary representations, and biographies.

VES 115 Printed Matters: Studio Course

CourseID: 128025

Faculty:

Next Term Offered: 2021 Spring

Painting's productive association with the technologies of reproduction. We will think both pre- and post-20th century, considering the analogue (intaglio printing, especially etching and aquatint; also block, book and commercial printing) and digital as worthy collaborators. Workshops in technique will support independent projects in any media.

VES 123R Post Brush: Studio Course

CourseID: 119644

Faculty: Annette Lemieux

Next Term Offered: 2019 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.

VES 152R Intermediate Video Workshop: Studio Course

CourseID: 117216

Faculty:

Next Term Offered: 2019 Spring

A workshop for students with experience in video to explore further the capabilities of the medium by working in the nonfiction genres of the documentary, the experimental, and the experimental documentary. Students may work singly or together to make either an extended project or a series of shorts.

VES 173 Visual Music

CourseID: 110045

Faculty: Laura Frahm

Next Term Offered: 2019 Spring

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 ani-mations 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 inter-relations between film, video, animation, and music.

VES 173L Variations on the Ethnographic Film

CourseID: 207803

Faculty:

Next Term Offered:

VES 182 Film Architectures: Seminar

CourseID: 119771

Faculty: Giuliana Bruno

Next Term Offered: 2019 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.

VES 192 Cinema and French Culture from 1896 to the Present

CourseID: 123960

Faculty: Tom Conley

Next Term Offered: 2020 Spring

Focuses on relations of cinema to French culture from the silent era to the age of video. Explores film in dialogue with cultural and historical events, development of a national style and signature, a history of criticism. Correlates study of cinema to cultural analysis. Takes up Renoir and poetic realism, unrest in 1930s, France and other filmic idioms (Italy, Hollywood, Russia), new wave directors, feminist and minoritarian cinema after 1980.

VES 283 Screens: Media Archaeology and Visual Arts Seminar

CourseID: 108653

Faculty: Giuliana Bruno

Next Term Offered: 2019 Fall

How do screens function as interface between us and the world? What is the role of the screen in contemporary visual arts and media culture? The art of projection has traveled from film exhibition to art installation. With the interdisciplinary approach of visual studies, we examine the history and archaeology of screen media, their cultural and aesthetic dimensions, from pre-cinematic exhibition to the post-medium condition. Considering the art of screening in the deep time of media, we explore the changing architecture of screen space, at the crossroads of science and art, museum and moving images.

VES 289 The Frankfurt School on Mass Media and Mass Culture

CourseID: 156172

Faculty: Eric Rentschler

Next Term Offered: 2019 Spring

This seminar considers the Frankfurt School's deliberations on film, radio, television, and mass culture. We will devote the majority of the course to three seminal figures: Siegfried Kracauer, Walter Benjamin, and T. W. Adorno. More generally, we will focus on the debates catalyzed by the emergence of modern mass media and an industrialized visual culture; we will also reflect on the pertinence of these debates for our own contemporary culture of media convergence.

Women, Gender, and Sexuality, Studies of

WOMGEN 1200SH Power to the People: Black Power, Radical Feminism, and Gay Liberation, 1955-1975

CourseID: 108482

Faculty:

Next Term Offered:

An introduction to the radical American social change movements of the 1960s and 70s. We will examine the specific historical conditions that allowed each of these movements to develop, the interconnections and contradictions among them, and why they ultimately lost political power. Along with historical analysis, we will examine primary source materials, manifestos, autobiographies, and media coverage from the period, as well as relevant films, music, and fiction. The class will be a mixture of lecture and discussion.

WOMGEN 1237 LGBT Literature

CourseID: 109800

Faculty:

Next Term Offered:

This course examines a range of works from the British and American LGBT (lesbian, gay, bisexual, and transgender) canon. Our starting premise will be that LGBT themes have been central, rather than peripheral, to the Western literary tradition. We'll pay close attention to how sexual identity, gender identity, sex, and desire are understood and represented in different social and historical circumstances, as well as the aesthetic traditions and personal experiences shaping these individual works. Authors include James Baldwin, E.M. Forster, Nella Larsen, and Audre Lorde.

WOMGEN 1274 Gender, Race, and Poverty in the United States

CourseID: 207786

Faculty:

Next Term Offered:

In what ways are conversations about poverty and its causes infused with assumptions and stereotypes related to gender, race, and sexuality? In this course, we will look at the realities of poverty through an intersectional lens, meaning that we will consider the simultaneous impact of race, gender, sexuality (and other identities) on economic insecurity. Topics include historical understandings of poverty, the impact of globalization on economic mobility, the myth of meritocracy, and depictions of poverty in pop culture.

No Department

XBUS 1344 Design Thinking and Innovation

CourseID: 207831

Faculty:

Next Term Offered: