

Bracketed Courses 2019-2020

The courses were not offered during the 2019-2020 academic year, but were displayed as expected to be offered.

African and African American Studies

AAAS S-171 Study/So Africa: Perspectives

CourseID: 214430

Faculty:

Next Term Offered:

AAAS S-188 Study/So Africa: Colonialism

CourseID: 214431

Faculty:

Next Term Offered:

AAAS 130Y Mobility, Power and Politics

CourseID: 000130

Faculty:

Next Term Offered:

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

AAAS 196Y African Trauma Literature and the Politics of Memory

CourseID: 214584

Faculty:

Next Term Offered:

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

AAAS 197Y Critiquing Black Muslim Reason

CourseID: 213299

Faculty:

Next Term Offered:

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

The secondary aim of this course on Black Muslims is to think more deeply about how such a term has historically been applied to African-American Muslims (that is, American-born Muslims of African descent). Yet, our task is take up Edward Curtis' assertion that the popular use of the term 'Black Muslim' has not traditionally included

Senegalese, Gambian, Somali, Sudanese, Trinidadian, or otherwise dark-skinned Muslims whose point of origin is beyond the United States. Nonetheless, Senegalese or Somali-American Muslims must contend with the othering effects of racism and Islamophobia—they are similarly impacted by police violence and structural discrimination. However, in some cases, they must also combat racially and religiously-motivated legislation that results in exclusion masked as immigration reform (e.g. Muslim Ban).

AAAS 217X Themes in the History of African American Political Thought: Seminar

CourseID: 216013

Faculty:

Next Term Offered:

This seminar will closely examine influential figures and texts in the history of African-American political thought from slavery to the contemporary era. We will critically evaluate, assess, and critique a range of African American authors and their interlocutors across genres (e.g., philosophy, literature, music, etc.) to better understand and build upon the development of key traditions, themes, and concepts. This year's theme will be the idea of "crime" in black politics and political thought, with special eye toward illuminating contemporary debates around hyperincarceration, public safety, and the political ethics of social movements. Open to graduates and undergraduates.

AAAS 219A Race and Ethnicity in Latin America

CourseID: 213432

Faculty:

Next Term Offered:

AAAS 299 Introduction to Graduate School: Skills and Practices for Scholarly Success

CourseID: 212836

Faculty:

Next Term Offered:

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

AFRAMER 100 Race and Modernity: W. E. B. Du Bois, James Baldwin and Lorraine Hansberry

CourseID: 205689

Faculty:

Next Term Offered:

This course will examine the classic texts of the towering intellectual figures who exemplify profound interpretations of race and modernity. Works include Du Bois's The Souls of Black Folk, Dusk of Dawn, Baldwin's Notes of a Native Son, No Name in the Street and Hansberry's Raisin in the Sun and To Be Young, Gifted and Black.

AFRAMER 123Z American Democracy

CourseID: 111438

Faculty:

Next Term Offered:

Democracy, inequality, and nationalism in America. The white working class and American politics. Class and race. Identities and interests. Conditions for socially inclusive economic growth. Alternative directions of institutional change, viewed in light of American history. Democratizing the market and deepening democracy. Self-reliance and solidarity.

Readings from classic and contemporary works on the United States. Extended take-home examination.

AFRAMER 125X Urban Inequality after Civil Rights

CourseID: 156259

Faculty:

Next Term Offered: 2019 Spring

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

AFRAMER 130X Richard Wright: Literature, Philosophy, and Politics

CourseID: 156260

Faculty:

Next Term Offered:

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

AFRAMER 131X Faulkner, Interracialism and Popular Television

CourseID: 208092

Faculty:

Next Term Offered:

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

AFRAMER 134X How Sweet is it to be Loved By You: Black Love and the Emotional Politics of Respect

CourseID: 110293

Faculty:

Next Term Offered:

The word 'love' is almost never used in any portrayal or description of the African American community's daily life in contemporary media and in the social sciences. But love, as a human experience, is central to our understanding of what it means to be a vital member of a culture and society and thus respected, nurtured, etc. This seminar examines the love that difference makes. It is a comprehensive study of the representation of gender, love and sexuality in African American and African Diasporan culture. It introduces students to some of the principal questions of feminist theory, as viewed from the social sciences and humanities including anthropology, psychology, media studies and literature. Love, in all its many forms: familial, erotic, romantic,

fraternal, is abundant, sometimes dominant, in black culture in the form of song, film, poetry and rhyme, and literature. This course will review and analyze the 'look of Black love' in the humanities and social sciences and writings on intersubjectivity, family, language, culture and ritual. It will also look at the absence of love within and toward the African American community as well as love's role in movements like Black Lives Matter. We will closely read, watch and listen to some of the many Black artists who have looked deeply at this thing called Love. How Sweet it Is explores and analyzes Black Love from disciplinary, social and cultural perspectives including: family, romance, gender, sexuality, racism, and physical and emotional health, institutions and space, place and home.

AFRAMER 142 Hiphop and Don't Stop. I Am Hiphop: Build, Respect, Represent

CourseID: 126710

Faculty:

Next Term Offered:

This reading seminar takes up the question of how and why Hiphop art, culture and politics has taken over and dominated American public, youth, popular culture and African American discourse in general. ***I AM HIPHOP*** is a vivid exploration into the origins, culture, style, art and enduring influence of hiphop as a uniquely American black cultural art form adapted around the globe. It explores how hiphop language ideology has penetrated the 'arts' and American culture by identifying and reframing life in the 21st century. Readings will be on theoretical, ideological and philosophical arguments embedded in hiphop artistic practices in the U.S. and throughout the world. We will examine hiphop's influence in all genres including the arts, social sciences, business, etc. The course will examine how people throughout the world incorporate hiphop edicts to disseminate public and popular ideologies to represent individuals, neighborhoods, cities and nations.

AFRAMER 154X Learning Languages: Communication, Acquisition, Translation and Authorship from Africa and Beyond

CourseID: 207977

Faculty:

Next Term Offered:

This interdisciplinary, experimental, social engagement course explores the foundations of language learning and communicative competence from an African perspective. What do language learners at Harvard have to learn from the polyglots of rural Cameroon, the transnational traders of the Sahara Desert, the code-switching "beach boys" of the Swahili Coast, and the code-mixing/code-scrambling urban dwellers? How might studying language acquisition, communicative commerce, and the pragmatics of association and affiliation from Africa help to make us better language learners, translators, and global citizens in an increasingly connected world? What does it mean to "know" a language? How is "fluency" best achieved? Is language best understood as

a "skill" as an "opportunity" as a "space" -what? What happens when we start to think of language not just as an avenue but as a locus of knowledge production, wealth generation and cultural participation. How does fluency (competence and performance) through social engagement learning compare to fluency attained through scholarly study? Calling into question dominant Western modes of language teaching and learning, this course explores new theoretical, methodological, and practical approaches to language learning, translation, and intellectual engagement. This course will allow students to bring their own linguistic questions and projects into the classroom, while at the same time studying the Harvard African Language Program's ongoing experiment in language teaching and learning. Encouraging hands-on, practical language learning, the course will offer students the opportunity to attain new linguistic capacities and strategies through "shock language lessons," to practice collaborative translations with language speakers and tradition bearers, and to undertake their own communicative adventures in local communities. Readings will include a wide range of interdisciplinary texts, including Nigerian novels, Anthropological theory, Swahili rap lyrics, historical Linguistics, Zulu praise poetry, Colonial-era grammars, and STS (science and technology studies) ethnographies. Coursework will include translations of foreign language texts, reading responses, social engagement work, and a final analytic or creative project.

AFRAMER 160 Christianity, Identity, and Civil Society in Africa

CourseID: 125927

Faculty: Jacob Olupona

Next Term Offered: 2017 Spring

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

AFRAMER 186X Childhood in African America

CourseID: 108168

Faculty:

Next Term Offered: 2019 Fall

Black children's lives matter. Our goal is to understand how black children's lives have mattered over the past two centuries. Toward this end, we ask, what have the diverse lives of African American children been like since the nineteenth century? How have African American children experienced family, education, play, work, and activism? How

have they been affected by social structures such as schools and carceral systems? How have they enacted agency and resistance? How have images of and ideas about African American children, as well as individual African American children, been important to political movements including abolition, New Negro politics, the Civil Rights Movement, and #blacklivesmatter? Our study of African American children proceeds chronologically and uses the methodologies of historical and literary analysis.

AFRAMER 187X The Creole Spirits

CourseID: 208021

Faculty:

Next Term Offered:

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

AFRAMER 198X Scientific Racism: A History

CourseID: 110497

Faculty:

Next Term Offered:

This course focuses on the history of "race" as a category of difference and explores why "race" has become a globally-accepted idiom to classify humans. It assesses the prominent roles that science and scientists have played in the process of naturalizing "race" and analyzes how "scientific" theories of race were developed and disseminated globally in the modern period. We trace the formation of these ideas in the North Atlantic, their diffusion to various areas of the world, and the manner in which cultural and political elites adopted or challenged them. We will devote considerable time to the emergence of eugenics, the science of racial improvement, in Europe, the Americas, and Africa and study the process of institutionalization of this science in Nazi Germany and elsewhere, including the United States. A final section of the course discusses the impact of contemporary science on ideas of race. Students in this class will work with texts and archival materials related to these scientists, some of whom were Harvard faculty.

AFRAMER 199X Social Revolutions in Latin America

CourseID: 110501

Faculty:

Next Term Offered:

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. We will try to identify: (1) the historical factors that led to revolutions in the region (the so-called revolutionary situations); (2) the strategies followed by different movements and how successful they were; (3) the programs and policies instituted by the different revolutionary governments; (4) the social and political forces opposed to those policies, including international forces; and (5) the ability of these revolutionary movements to hold on to power for extended periods of time. 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.

AFRAMER 199Z Majesty and Mythology in African Art

CourseID: 207767

Faculty:

Next Term Offered:

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

AFRAMER 209A Africa Rising? New African Economies/Cultures and Their Global Implications

CourseID: 108680

Faculty:

Next Term Offered:

This course is being taught as part of the African Studies Workshop at Harvard (ASW). It will consist of two components: (i) a public session, to be held every Monday evening at 6.15-8.15, at which a speaker invited from outside the university, a member of the Harvard faculty, or an advanced graduate student will present a pre-circulated paper to an audience similarly composed of faculty, visiting scholars, students, and Africanists from other institutions in the greater Boston area. Each session will include a brief introduction to the paper by its author, a commentary by a discussant, and an open conversation, in which students will be given the floor first for a period, followed by

anyone else present; (ii) an under/graduate student seminar component, to be held every Monday at 12.00-1.30, at which participants will discuss the paper to be presented on the same evening in the public session, along with relevant readings drawn from the contemporary Africanist canon, and an introduction to the topic by the instructors. The theme of the course derives from a story in The Economist in 2011 under the title, "Africa Rising." It argued that the continent has come to epitomize both the "transformative promise of [capitalist] growth and its bleakest dimensions." During the spring semester, we shall explore Africa's changing place in the world – and the new economies, legalities, socialities, and cultural forms that have arisen there; this in relation to the papers presented in the public sessions of the ASW. We shall also interrogate the claim that the African present is a foreshadowing of processes beginning to occur elsewhere; that, therefore, it is a productive source of theory about current conditions world-wide.

AFRAMER 212 Entrepreneurship in Africa

CourseID: 110092

Faculty: Jacob Olupona

Next Term Offered: 2019 Spring

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

AFRAMER 218 Topics in African American History

CourseID: 115728

Faculty:

Next Term Offered: 2019 Spring

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

AFRAMER 256 Advanced Readings in Legal Anthropology

CourseID: 204463

Faculty:

Next Term Offered: 2021 Spring

AFRAMER 402 Theory and Race in the Americas

CourseID: 211218

Faculty:

Next Term Offered:

AFRAMER 402 Theory and Race in the Americas

CourseID: 211219

Faculty: Marla Frederick

Next Term Offered:

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 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 101AR Advanced Egyptian Arabic

CourseID: 206883

Faculty:

Next Term Offered:

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

EWE AB EWE AB

CourseID: 214454

Faculty:

Next Term Offered:

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

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.

JAMAICAN AB Elementary Jamaican Patois

CourseID: 205844

Faculty:

Next Term Offered:

A study of Jamaican Patois the primary native language of Jamaica at the Elementary level (First year part 2). Contact hours supplemented by language digital resources. Emphasis on written expression, reading comprehension, and oral fluency. Students are

strongly encouraged to take both parts of the course within the same academic year. The curriculum builds throughout the year. This course is offered only in the Spring.

JAMAICAN BB Intermediate Jamaican Patois

CourseID: 205881

Faculty:

Next Term Offered:

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

OROMO AA Elementary Oromo

CourseID: 206575

Faculty:

Next Term Offered:

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

SOMALI AB Elementary Somali

CourseID: 206578

Faculty:

Next Term Offered:

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

SOMALI BB Intermediate Somali

CourseID: 206586

Faculty:

Next Term Offered:

A study of Somali the official language of Somalia at the Intermediate level (Second year

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

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.

Art, Film, and Visual Studies

AFVS 14 Making Things: Form, Function, and Materials

CourseID: 203314

Faculty: Katarina Burin

Next Term Offered: 2021 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.

AFVS 21S New Grounds: Painting Course

CourseID: 127166

Faculty: Matt Saunders

Next Term Offered: 2020 Fall

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

AFVS 24 Painting, Smoking, Eating

CourseID: 127177

Faculty: Matt Saunders

Next Term Offered: 2021 Fall

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

AFVS 37 Lay of the Land: A Studio-based Seminar

CourseID: 119646

Faculty: Stephen Prina
Next Term Offered: 2020 Fall

The pursuit of and response to the horizontal in art will be the focus of this studio class. To cite a few examples, abstract expressionist painting, cartography, earthworks, landscape photography, 19th century German Romantic landscape painting, and Rayograms will provide models of the horizontal that will be points of departure for studio projects, the forms of which will be determined by what the investigation provides. Students will shift medium from project to project.

AFVS 52 Introduction to Non Fiction Videomaking

CourseID: 108859

Faculty:

Next Term Offered: 2021 Fall

This course is an introduction to documentary filmmaking. We will explore a range of approaches to nonfiction filmmaking through assignments which encompass video and sound recording and editing, cinematography and montage. Following introductory camera, sound and editing exercises, each student will spend the semester making a single nonfiction film on a subject of their choice. Class time will include technical workshops, film screenings, discussions of student work and occasional visiting filmmakers.

AFVS 107 Studies of the Built North American Environment since 1580

CourseID: 122679

Faculty: John Stilgoe

Next Term Offered: 2020 Fall

North America as an evolving visual environment is analyzed as a systems concatenation involving such constituent elements as farms, small towns, shopping malls, highways, suburbs, and as depicted in fiction, poetry, cartography, television, cinema, and advertising and cybernetic simulation.

AFVS 154G Scientific Sites

CourseID: 208323

Faculty:

Next Term Offered: 2022 Spring

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

AFVS 159J Foreign Bodies, Directing Images: Non-fiction filmmaker-cinematographers

CourseID: 213728

Faculty:

Next Term Offered:

This is a filmmaking studio course with a specific focus on cinematography, for students who want to direct and simultaneously film their own work. Filming will be explored as a practice of daily life where one dares to believe in what one sees, and to construct it through images. We will find subjects in transient forms, bodies and spaces, here and elsewhere, and embody them through a continuous practice of filmmaking. Students will work mostly in a non-sync mode of recording sound and image, constructing reality, subject and form through their encounter.

AFVS 160 Modernization in the Visual United States Environment, 1890-2035

CourseID: 148176

Faculty: John Stilgoe

Next Term Offered: 2021 Spring

Modernization of the US visual environment as directed by a nobility creating new images and perceptions of such themes as wilderness, flight, privacy, clothing, photography, feminism, status symbolism, and futurist manipulation as illustrated in print-media and other advertising enterprise.

AFVS 163R Moving Images: Advanced Projects in Film and Video

CourseID: 207843

Faculty: Karthik Pandian

Next Term Offered: 2021 Spring

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

AFVS 165V Vertical Cinema

CourseID: 205411

Faculty: Karthik Pandian

Next Term Offered: 2021 Spring

The ever-increasing flexibility of video presentation technology creates the opportunity to

reconsider cinema's most deeply rooted conventions. In this course, students will create vertical videos. Drawing on a history of artists who have investigated aspect ratio, portraiture and the creation of new contexts for moving image, we will pursue a phenomenology of format through the creation of 9:16 work. The course will culminate in the erection of a temporary cinema house dedicated to vertical videos.

AFVS 166 North American Seacoasts and Landscapes, Discovery to Present: Seminar

CourseID: 117143

Faculty: John Stilgoe

Next Term Offered: 2020 Fall

Selected topics in the history of the North American coastal zone, including the seashore as wilderness, as industrial site, as area of recreation, and as artistic subject; the shape of coastal landscape for conflicting uses over time; and the perception of the seashore as marginal zone in literature, photography, film, television, and advertising.

AFVS 167 Adventure and Fantasy Simulation, 1871-2036: Seminar

CourseID: 142149

Faculty: John Stilgoe

Next Term Offered: 2021 Spring

Visual constituents of high adventure since the late Victorian era, emphasizing wandering woods, rogues, tomboys, women adventurers, faerie antecedents, halflings, crypto-cartography, Third-Path turning, martial arts, and post-1937 fantasy writing as integrated into contemporary photography, advertising, video, computer-generated simulation, and designed life forms.

AFVS 173 Visual Music

CourseID: 110045

Faculty: Laura Frahm

Next Term Offered: 2021 Fall

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

AFVS 182 Film Architectures: Seminar

CourseID: 119771

Faculty: Giuliana Bruno

Next Term Offered: 2021 Fall

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

AFVS 192 Cinema and French Culture from 1896 to the Present

CourseID: 123960

Faculty: Tom Conley

Next Term Offered: 2021 Fall

Focuses on relations of cinema to French culture from the silent era to the age of video. Explores film in dialogue with cultural and historical events, development of a national style and signature, a history of criticism. Correlates study of cinema to cultural analysis. Takes up Renoir and poetic realism, unrest in 1930s, France and other filmic idioms (Italy, Hollywood, Russia), new wave directors, feminist and minoritarian cinema after 1980.

AFVS 193 Fortunes of a Genre: The Western

CourseID: 110037

Faculty: Tom Conley

Next Term Offered: 2020 Fall

Studies American westerns through appreciation of genre theory and history with emphasis on French reception. Includes films of Boetticher, Dwan, De Toth, Ford, Fuller, Hawks, Hellman, Lang, Mann, Ray, Vidor, Walsh, et al.

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

CourseID: 205203

Faculty: Laura Frahm

Next Term Offered: 2020 Fall

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

AFVS 241 New Media Theory

CourseID: 110046

Faculty: Laura Frahm
Next Term Offered: 2021 Spring

A graduate course that surveys new developments in media theory and provides an overview of advanced approaches to the study of media. We will look at different schools and streams of thought that productively expand and transform the established corpus of media theory, ranging from cultural technologies, media archaeology, and object studies to non-representational theory, actor network theory, and process philosophy. Two research projects will further advance our critical survey of new media theory.

AFVS 252 Sonic Ethnography

CourseID: 108976

Faculty:

Next Term Offered: 2020 Fall

This is a practice-based course in which students record, edit, and produce anthropologically informed audio works which interpret culture and lived experience. Listening sessions will provide a broad context of contemporary work using location recordings, and readings will situate the practice within the growing field of sound studies. In their projects, students will experiment with technical and conceptual strategies of recording and composition as they engage with questions of ethnographic representation through the sensory dimension of sound.

AFVS 283 Screens: Media Archaeology and Visual Arts Seminar

CourseID: 108653

Faculty: Giuliana Bruno

Next Term Offered: 2021 Spring

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.

AFVS 305 FVS Dissertation Group

CourseID: 208018

Faculty: Laura Frahm

Next Term Offered: 2020 Fall

A dissertation writing course offered to graduate students within the Film and Visual Studies program in their final year of the dissertation. The course will include discussions of individual chapters, professional development components, as well

as dedicated writing sessions in the months leading up to the submission of the dissertation.

American Studies

AMSTDIES 200 Major Works in American Studies

CourseID: 113328

Faculty: Philip Deloria

Next Term Offered: 2020 Fall

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

Near Eastern Languages and Civilizations

ANE 102 Introduction to Mesopotamian Religion

CourseID: 114298

Faculty: Piotr Steinkeller

Next Term Offered: 2020 Fall

A survey of the history and major concerns of ancient Mesopotamian religion from prehistoric times down to the reign of Alexander the Great. Among the topics treated are the key figures of the Sumero-Babylonian pantheon, the major mythological compositions (read in translation), personal religion, cosmogonies and theogonies, magic and divination, Mesopotamian temples, and cult and ritual. The course makes rich use of ancient iconography.

ARABIC 251R Classical Arabic Texts: Seminar

CourseID: 156121

Faculty:

Next Term Offered:

Readings in Classical Arabic texts.

HEBREW 239 Exodus 2 in Three Contexts: Seminar

CourseID: 156094

Faculty: Jon Levenson

Next Term Offered: 2020 Fall

A close critical reading of the account of the early life of Moses in three contexts: (1) the Hebrew Bible and the ancient Near Eastern world in which it took shape; (2) rabbinic Judaism in Late Antiquity; and (3) medieval Jewish commentary. Texts to be read in Hebrew include Exodus 2 and a selection of rabbinic midrashim and medieval commentaries on it.

HEBREW 241 Talmudic Narrative

CourseID: 205531

Faculty:

Next Term Offered: 2020 Fall

Talmudic literature is full of stories. This is surprising, even odd, given the fact that Talmud is primarily a legal literature. What purpose do these stories serve? How, in particular, does narrative serve legal discourse? How are these narratives to be analyzed and understood, both as examples of narrative "art" and within their legal context? In addressing these questions, we will look at narrative theory in general as

well as contemporary scholarship on Talmud and Talmudic narrative, with a particular focus on Mishnah and the Babylonian Talmud. Assignments will include secondary readings on and about narrative more generally, but the focus of the course-- and the majority of class-time-- will be on reading the Rabbinic texts in their original language.

ISLAMCIV 158Y Qur'anic Exegesis and Prophetic Tradition

CourseID: 205290

Faculty:

Next Term Offered: 2020 Fall

An introduction to Qur'anic exegesis and prophetic tradition (Hadith). A survey of different schools of Qur'anic interpretation within the Islamic tradition. The course introduces the discipline of Hadith and the role it plays in Qur'anic commentary. Topics include: Hadith, transmission, collections of sound Prophetic traditions, Sunni and Shii Hadith collections, Schools of Qur'anic Exegesis, Esoteric interpretation, Modern Interpretation, Qur'an, science and modernity.

ISLAMCIV 178 Muslim Societies in South Asia: Religion, Culture, and Identity

CourseID: 111918

Faculty: Ali Asani

Next Term Offered: 2020 Fall

South Asia (India, Pakistan, and Bangladesh) is home to the largest concentration of Muslims in the world. This course introduces students to a variety of issues that have characterized the development and evolution of South Asian Muslim communities. While the course will briefly survey the historical development of Islamic and Muslim institutions in the region, its central focus will be the formation of identity - as expressed through language, literature, and the arts - among South Asian Muslim communities. The issues that influence these identities will be considered with regard to the constantly evolving religious and political contexts of South Asia. Special attention will be given to recent attempts to redefine Muslim religious identities through reform and revivalist movements as well as state policies of Islamization. We will look at the impact of these policies on issues such as the status of Muslim women, relations between Muslim and non-Muslims and the growth of sectarian tensions between Muslim groups. The course is appropriate for those who wish to acquire a bird's-eye view of the Islamic tradition in South Asia, as well as those interested in exploring some of the issues confronting Muslim populations in contemporary times.

ISLAMCIV 181 Islam and Religious Diversity

CourseID: 207167

Faculty:

Next Term Offered: 2020 Fall

The problem of religious diversity recurs in all of the major branches of Islamic thought and appears in complex permutations in diverse cultural contexts. Focusing primarily on pre-modern Islam, this course invites students to investigate perspectives on the religious other in the Quran, Islamic law, theology, philosophy and Sufism. In the final portion of the course we will look at Muslim Spain, Mughal India, and the Muslim-Confucians of late imperial China as examples of how these complex dynamics played out on the ground. The larger aim of this course is for students to develop interpretive skill in dealing with the internal complexity of a number of Islamic discourses and contexts by pursuing a single problematic across them. To this end the course will be taught in seminar format and participants will be encouraged to engage creatively with primary and secondary sources to develop their own scholarly points of view.

ISLAMCIV 186 Ismaili History and Thought

CourseID: 125910

Faculty: Ali Asani

Next Term Offered: 2021 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. Jointly offered with the Divinity School as HDS 3939.

JEWISHST 178 Writing Jewish Modernity

CourseID: 215967

Faculty:

Next Term Offered:

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

JEWISHST 179 Ghostwriters and Ventriloquists: Postwar Jewish American Culture

CourseID: 203082

Faculty:

Next Term Offered: 2020 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 and revoiced ghosts in order to alternately dazzle and comfort audiences. This course asks: How do strategies of ghostwriting and ventriloquy compensate for trauma and loss? In what ways do such reenactments modify an original text? Through analysis of postwar texts and films in English and Yiddish (in translation), this course studies how specters of the past function both as arbiters of cultural value and as reminders of the discontinuities and traumas of the Jewish American present. Films include *Tevya*, *Fiddler on the Roof*, *The Diary of Anne Frank*, and the TV series *Transparent*. We will read texts by Sholem Aleichem, Isaac Bashevis Singer, Philip Roth, Cynthia Ozick, Grace Paley, and others.

MODMDEST 101 The Politics of Religion in the Modern Middle East

CourseID: 216223

Faculty:

Next Term Offered:

PERSIAN 105 Beyond Akhlāq: Ethical Literatures of the Persianate World

CourseID: 211354

Faculty:

Next Term Offered:

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

In this course, I aim to illustrate that the medieval and early modern Persianate worlds witnessed a flowering of literary production on normative conduct within a wide variety of literary genres including *belles lettres* (*adab*), Sufi prose and poetry, epic poetry, and *akhlāq*, the genre whose title is normally translated as "ethics." Although *akhlāq* is usually translated into English as "ethics," in light of a broader conception of ethics, *akhlāq* was only one of many genres dedicated to the subject. Readings on *akhlāq* will include *Tūsī's Akhlāq-i Nāsiḥ* and *Kāshifī's Akhlāq-i Muhsinī*, while readings outside of it will include selections from Ferdowsi's *Shāhnāmah*, Sa'dī's *Gulistān*, and *Kāshifī's Futuvvat-nāmah-yi Sultānī*.

YIDDISH 107 The Politics of Yiddish

CourseID: 207574

Faculty: Saul Zaritt

Next Term Offered: 2020 Fall

A bastardized German, a jargon, a woman's vernacular, an old world language, a dying and ghostly tongue, a Hasidic language, a queer language, a radical language—these are just a few of the ways that Yiddish has been labeled over its one-thousand-year history. This course will trace the shifting politics attached to Yiddish from its early modern beginnings as a language of translation between Jewish and non-Jewish cultures to its postwar vacillation between a language of mourning and nostalgia, Jewish American humor, Hasidic isolation, and contemporary Jewish radicalism. Through poetry, fiction, essay, and film, we will discuss what it might mean to discover "the secret language of the Jews" at the origins of Jewish socialism and at the foundations of diaspora nationalism. All texts will be read in translation.

Anthropology

ANTHRO 1080 American History Before Columbus

CourseID: 125588

Faculty: Matt Liebmann

Next Term Offered: 2020 Fall

What happened in America before 1492? What were the major turning points in Native American history? Why don't we know more about the ancient history of North America? Anthropology 1080 answers these questions by introducing you to the discipline of North American archaeology. This lecture course will help you to understand how Native American societies developed in the millennia before the European invasion, why American Indian peoples live where they do today, and how their dynamic populations have changed over the course of the past 15,000 years. In the process you'll have the opportunity to examine a truly world-class collection of artifacts from the Peabody Museum, allowing you to hold the remains of American history in your own hands and investigate the past with your own eyes.

ANTHRO 1130 Archaeology of Harvard Yard

CourseID: 121141

Faculty: Diana Loren

Next Term Offered: 2020 Fall

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

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

CourseID: 123195

Faculty: Patricia Capone

Next Term Offered: 2021 Spring

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

ANTHRO 1150 Ancient Landscapes

CourseID: 120579

Faculty: Jason Ur

Next Term Offered: 2021 Spring

Archaeological approaches to settlement and land use at the regional scale. Issues will include settlement systems, agricultural and pastoral systems, the role of humans environmental change, and also the methods used to investigate them.

ANTHRO 1182 People of the Sun: The Archaeology of Ancient Mexico

CourseID: 109568

Faculty: William Fash

Next Term Offered: 2021 Spring

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

ANTHRO 1400 Quests for Wisdom: Religious, Moral and Aesthetic Experiences in the Art of Living

CourseID: 108865

Faculty: Arthur Kleinman

Next Term Offered: 2020 Fall

This is an experimental course taught from the perspectives of anthropology and religious studies intended to be transformative for students and teachers alike. Our goal is to develop, in collaboration with enrolled students, a pedagogy for fostering students' personal quests for wisdom, through lectures and readings, through extensive conversation, and also through other experiences inside and outside of class, including dramaturgical experiences with film or theater, caregiving, and meditation.

As teachers we are inspired by William James's conception of knowledge in the University as intended for strategies needed to live a life of purpose and significance that also contributes to improving the world. In the words of Albert Camus, "Real generosity toward the future lies in giving all to the present." Together, we will engage with the problems of danger, uncertainty, failure, and suffering that led the founders of the social sciences and humanities to ask fundamental questions about meaning, imagination, aesthetics, social life and subjective experience. These are the same existential questions that bring ordinary people all over the world, and throughout history, to question commonsense reality in the face of catastrophes and the violence of everyday

life. The many answers to these questions – wisdom that is found in religious, ethical and aesthetic quests, expressions and traditions - are intended to furnish individuals' art of living with strategies to respond to potential and hope, pain and suffering, to promote healing, and to address concerns about salvation, redemption, or other kinds of moral-emotional transformation.

Together - through discussions, lectures, films, museum visits, readings, and action - we will explore different paths to wisdom, including (1) the youthful quest for truth, beauty and goodness; (2) the affirmation of caregiving for others as the means of applying wisdom to repair and improve the world; (3) suffering and the ordeal of journeying through labyrinths and tests of courage; (4) the discovery of wisdom in teachers and mentors near and far; (5) the process of creative mourning for past losses and shaping new beginnings;

ANTHRO 1681 Decompensation: Incarceration, Capitalism, and Mental Health

CourseID: 215942

Faculty:

Next Term Offered:

ANTHRO 1698 Anthropology of Death and Immortality

CourseID: 109571

Faculty: Anya Bernstein

Next Term Offered: 2022 Spring

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

ANTHRO 1718 Engaged Anthropology: From the Local to the Global

CourseID: 215944

Faculty:

Next Term Offered:

ANTHRO 1785 Law and Violence in Latin America

CourseID: 203531

Faculty: Ieva Jusionyte

Next Term Offered: 2023 Spring

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

ANTHRO 1800 Race and Caste

CourseID: 207678

Faculty: Ajantha Subramanian

Next Term Offered: 2021 Spring

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

ANTHRO 2000 Osteoarchaeology Lab

CourseID: 113280

Faculty: Richard Meadow

Next Term Offered: 2020 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 2177 Jaguar-Men and Golden Cities: The Archaeology of South America

CourseID: 128017

Faculty: Gary Urton
Next Term Offered: 2021 Fall

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

ANTHRO 2722 Sonic Ethnography

CourseID: 108976

Faculty:

Next Term Offered: 2020 Fall

This is a practice-based course in which students record, edit, and produce anthropologically informed audio works which interpret culture and lived experience. Listening sessions will provide a broad context of contemporary work using location recordings, and readings will situate the practice within the growing field of sound studies. In their projects, students will experiment with technical and conceptual strategies of recording and composition as they engage with questions of ethnographic representation through the sensory dimension of sound.

ANTHRO 2725 History and Anthropology: Seminar

CourseID: 110313

Faculty: Vincent Brown

Next Term Offered: 2021 Spring

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

ANTHRO 2796 Medical Anthropology: Advanced Topics

CourseID: 160441

Faculty: Arthur Kleinman

Next Term Offered: 2023 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: John Comaroff

Next Term Offered: 2020 Fall

Examines, in critical depth, the major theoretical and methodological approaches that have shaped the history of Anglo-American anthropology and, more generally, social thought through the prism of Africa. In so doing, it will address (i) the historical roots and philosophical foundations of these approaches and (ii) their significance for contemporary concerns in the social sciences at large.

ANTHRO 3638 Professionalism in Anthropology

CourseID: 215948

Faculty:

Next Term Offered:

Applied Computation

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: 2022 Spring

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

Applied Mathematics

APMTH 21A Mathematical Methods in the Sciences

CourseID: 118408

Faculty:

Next Term Offered: 2025 Spring

Multivariate calculus: functions of two or three variables, approximating functions, partial differentiation, directional derivatives, multiple integration. Vectors: dot and cross products, parameterized curves, line and surface integrals. Vector calculus: gradient, divergence and curl, Green's, divergence and Stokes' theorems. Complex numbers.

APMTH 202 Physical Mathematics II

CourseID: 143530

Faculty:

Next Term Offered: 2023 Spring

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

APMTH 217 Patterns

CourseID: 204956

Faculty:

Next Term Offered: 2022 Spring

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

APMTH 221 Advanced Optimization

CourseID: 107600

Faculty:

Next Term Offered: 2022 Spring

This is a graduate level course on optimization which provides a foundation for

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

APMTH 225 Advanced Scientific Computing: Numerical Methods for Partial Differential Equations

CourseID: 203586

Faculty:

Next Term Offered: 2021 Spring

This course examines a variety of advanced numerical methods, with a focus on those relevant to solving partial differential equations that arise in physical problems. Topics include the finite volume method, finite element method, and interface tracking methods. Associated problems in numerical linear algebra and optimization will be discussed. The course will examine the mathematical underpinnings of each method, as well as look at their practical usage, paying particular attention to efficient implementations on modern multithreaded and parallel computer architectures.

APMTH 231 Decision Theory

CourseID: 203548

Faculty:

Next Term Offered:

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

APMTH 254 Information Processing and Statistical Physics

CourseID: 160447

Faculty:

Next Term Offered: 2022 Fall

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

Applied Physics

APPHY 217 Foundations of Modern Optics

CourseID: 121975

Faculty:

Next Term Offered: 2021 Spring

Optical systems and lasers have 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. We will illustrate the material with its applications in atomic physics and biological imaging.

APPHY 225 Introduction to Soft Matter

CourseID: 121403

Faculty:

Next Term Offered: 2022 Fall

Introduction to the physics of soft matter, also called complex fluids or squishy physics, includes the study of capillarity, thin films, polymers, polymer solutions, surfactants, and colloids,. Emphasis is on physical principles which scale bulk behavior. Students will understand the concepts, experimental techniques, and, especially, the open questions. Lecture notes are supplied in place of a textbook.

APPHY 292 Kinetics of Condensed Phase Processes

CourseID: 134488

Faculty:

Next Term Offered: 2021 Spring

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

Astronomy

ASTRON 50 Introduction to Space Exploration

CourseID: 215962

Faculty:

Next Term Offered:

The 1960s were the early glory days of space exploration, driven by the space race between the U.S. and the U.S.S.R., the Apollo program, and the successful Moon landings. After this heroic decade, space exploration lost a great deal of its impetus. Yet, very recently, there are clear signs of a reemerging dynamic in space exploration, now characterized by both the emergence of new players and new fields of exploration. This course introduces the students to a comprehensive array of diverse topics. These range from the history and sociology of space exploration to space law and space policy, from the space economy to the physical, astronomical, and engineering basics of space exploration.

ASTRON 130 Cosmology

CourseID: 125883

Faculty:

Next Term Offered: 2021 Spring

The physical model describing the initial conditions, evolution, and ultimate fate of the Universe. Topics include cosmic dynamics; the Robertson-Walker Metric; curvature; estimating cosmological parameters; the accelerating universe; dark matter; gravitational lensing; the cosmic microwave background; nucleosynthesis; inflation and the very early universe; formation of structure. Note: Offered in alternate years.

ASTRON 201 Astrophysical Fluids & Plasmas

CourseID: 124099

Faculty:

Next Term Offered: 2021 Spring

Fluid and gas dynamics with applications drawn from astrophysical phenomena. Topics include: kinetic theory, diffusive effects, incompressible fluids, inviscid and viscous flows, boundary layer theory, accretion disks, fluid instabilities, turbulence, convection, gas dynamics, linear (sound) waves, method of characteristics, Riemann invariants, supersonic flow, non-linear waves, shocks, similarity solutions, blast waves, radiative shocks, ionization fronts, magnetohydrodynamics, hydromagnetic shocks, dynamos, gravitational collapse, principles of plasma physics, Landau damping, computational approaches, stability criteria, particle based (Lagrangian) methods, adaptive mesh refinement, radiation hydrodynamics.

ASTRON 203 Interstellar Medium and Star Formation

CourseID: 118138

Faculty:

Next Term Offered: 2021 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 204 Stellar Astrophysics

CourseID: 118266

Faculty: Alicia Soderberg

Next Term Offered: 2021 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, asteroseismology & variability, compact objects and supernovae.

ASTRON 209 Exoplanet Systems

CourseID: 108130

Faculty:

Next Term Offered: 2020 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.

Medical Sciences

BCMP 228 Macromolecular NMR

CourseID: 136204

Faculty: Gerhard Wagner

Next Term Offered: 2020 Fall

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

BCMP 236 Modern Drug Discovery: From Principles to Patients

CourseID: 156104

Faculty:

Next Term Offered: 2021 Spring

This course will familiarize students with central concepts in drug action and therapeutics: specifically we will cover concepts surrounding Pharmacokinetics (PK) and the intersection of PK and medicinal chemistry in both lectures and cases based discussions. These concepts are central to modern drug development and evaluation. In the course we will cover drug-target interactions, Pharmacokinetics and Pharmacodynamics. This course will have a focus on modern approaches to therapeutic development for small molecules, protein based therapeutics, nucleic acid based drugs and antibacterial compounds as well new frontiers in therapeutic discovery.

IMMUN 377L Study molecular aspects of immune recognition

CourseID: 208294

Faculty:

Next Term Offered: 2020 Spring

NEUROBIO 312QC Development of the Central Nervous System

CourseID: 207085

Faculty: Mohini Lutchman

Next Term Offered: 2020 Spring

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

Biomedical Engineering

BE 130 Neural Control of Movement

CourseID: 122341

Faculty:

Next Term Offered: 2021 Spring

Approaches from robotics, control theory, and neuroscience for understanding biological motor systems. Analytical and computational modeling of muscles, reflex arcs, and neural systems that contribute to motor control in the brain. Focus on understanding how the central nervous system plans and controls voluntary movement of the eyes and limbs. Learning and memory; effects of variability and noise on optimal motor planning and control in biological systems.

Biophysics

BIOPHYS 204 Structural Biology From Molecules to Cells

CourseID: 119219

Faculty: Stephen Harrison

Next Term Offered: 2021 Spring

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

BIOPHYS 314 Structure of Viruses and Viral Proteins

CourseID: 119788

Faculty:

Next Term Offered: 2020 Fall

Biostatistics

BIOSTAT 233 Methods II

CourseID: 119847

Faculty:

Next Term Offered: 2021 Spring

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

BIOSTAT 244 Analysis of Failure Time Data

CourseID: 119849

Faculty: L. Wei

Next Term Offered: 2021 Spring

Discusses the theoretical basis of concepts and methodologies associated with survival data and censoring, nonparametric tests, and competing risk models. Much of the theory is developed using counting processes and martingale methods.

BIOSTAT 254 Topics in Biostatistics

CourseID: 160702

Faculty: Donna Spiegelman

Next Term Offered: 2020 Fall

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

BIOSTAT 290 Advanced Computational Biology and Bioinformatics

CourseID: 126948

Faculty:

Next Term Offered: 2020 Fall

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

Biological Sciences in Public Health

BPH 206 Advanced Respiratory Physiology

CourseID: 108448

Faculty: James Butler

Next Term Offered: 2020 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: 2021 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 306QC Tuberculosis

CourseID: 127603

Faculty: Sarah Fortune

Next Term Offered: 2021 Spring

This is a comprehensive survey course on tuberculosis featuring lectures by some of the leading authorities in the field. The course is designed for students from diverse backgrounds, with the goal of teaching cross-disciplinary thinking and communication. It frames the global TB epidemic as a multi-scale problem, introducing students to the challenges posed by the basic biology of the organism, the clinical challenges of TB care and the health systems challenges associated with a disease that disproportionately impacts resource limited populations. The course will use case-based teaching - posing current questions that students will be asked to address from the perspective of key constituents in the field. Students will be evaluated on the basis of class participation and a written response to a problem in the field.

BPH 345 Lung Macrophage Differentiation and Function

CourseID: 112714

Faculty: Lester Kobzik

Next Term Offered: 2020 Fall

BPH 368 Host-Pathogen Interactions of Shigella

CourseID: 116293

Faculty: Marcia Goldberg

Next Term Offered: 2020 Fall

BPH 397 Kidney Injury, Repair and Regeneration

CourseID: 207466

Faculty: Joseph Bonventre

Next Term Offered: 2020 Fall

Celtic Languages and Literatures

CELTIC 101 Irish Heroic Saga

CourseID: 122419

Faculty:

Next Term Offered: 2021 Spring

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

CELTIC 105 The Folklore of Gaelic Ireland

CourseID: 160495

Faculty:

Next Term Offered: 2022 Spring

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

CELTIC 111 Shapeshifters and Manbeasts in Celtic Traditions

CourseID: 207727

Faculty:

Next Term Offered: 2020 Fall

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

CELTIC 121 The Art of Storytelling in Medieval Ireland

CourseID: 207728

Faculty:

Next Term Offered: 2020 Fall

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

CELTIC 138 The Mabinogion: Stories from Medieval Wales

CourseID: 118671

Faculty:

Next Term Offered: 2021 Spring

An exploration of the Four Branches of the Mabinogi, Welsh Arthurian romances and tales, and the bardic lore associated with them, in the context of the literary culture of Wales in the twelfth through fourteenth centuries. All texts are read in English translation.

IRISH 132 Introduction to Modern Irish

CourseID: 119128

Faculty:

Next Term Offered: 2020 Fall

An introduction to Irish as it is spoken and written today. Class work is participatory, and includes conversational role play and games as well as grammar study and drills. Audio and audiovisual resources reinforce pronunciation and aural comprehension. Songs, proverbs, and poems are an integral part of the course, introducing students to the vibrant oral and literary tradition of Gaelic Ireland.

IRISH 133R Intermediate Modern Irish

CourseID: 119063

Faculty:

Next Term Offered: 2021 Spring

A continuation of Irish 132, developing students' fluency in spoken and written Irish. As our knowledge of the language expands, we venture into storytelling, journal writing and writing and performing short skits. Internet, audio and video resources complement the study of grammar and select prose texts.

IRISH 204R Readings in Early Irish Poetry

CourseID: 123862

Faculty:

Next Term Offered: 2021 Spring

Readings in selected texts.

IRISH 205R Readings in Early Irish Prose

CourseID: 111898

Faculty:

Next Term Offered: 2020 Fall

Readings in selected texts.

Chemistry and Chemical Biology

CHEM 106 Physical-Organic Chemistry

CourseID: 108840

Faculty:

Next Term Offered: 2021 Fall

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

CHEM 154 Advanced Inorganic Chemistry

CourseID: 126035

Faculty: Daniel Nocera

Next Term Offered: 2021 Spring

The physical inorganic chemistry of transition elements will be discussed. The course will emphasize group theoretical methods of analysis and attendant spectroscopic methods (e.g., electronic, vibrational, EPR, magnetic) derived therefrom. Connections between molecular structure and electronic structure and how that parlays into the properties of complexes and their reactivity will be illustrated throughout various modules, which will touch on advanced problems of interest in the subjects of catalytic, organometallic, coordination, solid state and bioinorganic chemistries.

CHEM 163 Frontiers in Biophysics

CourseID: 116159

Faculty:

Next Term Offered: 2020 Fall

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

CHEM 167 Surface and Interfacial Phenomena

CourseID: 144246

Faculty:

Next Term Offered: 2021 Spring

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

CHEM 170 Chemical Biology

CourseID: 122175

Faculty:

Next Term Offered: 2021 Fall

Applying chemical approaches to problems in biology. Topics include: protein engineering and directed evolution; genomics, proteomics, and metabolomics; genome editing; gene regulation; modern drug discovery; chemical genetics; glycobiology; cancer chemical biology; synthetic biology.

CHEM 171 Biological Synthesis

CourseID: 107702

Faculty:

Next Term Offered: 2021 Spring

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: 2020 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.

East Asian Languages and Civilizations

CHNSE 168R Chinese in the Social Sciences

CourseID: 108384

Faculty:

Next Term Offered: 2021 Spring

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

CHNSE 187 Art and Violence in the Cultural Revolution

CourseID: 115034

Faculty: Xiaofei Tian

Next Term Offered: 2021 Fall

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

CHNSE 280 Teaching Chinese as a Foreign/Second Languages

CourseID: 109520

Faculty:

Next Term Offered: 2022 Fall

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 225R Topics in Middle Period History: Seminar

CourseID: 115124

Faculty: Peter K. Bol

Next Term Offered: 2022 Spring

Examines various topics in the political, institutional and intellectual history of middle period China (8th-15th c.) with a focus on the literati as local elites participating in national cultural trends.

CHNSHIS 232R Topics in Han History: Seminar

CourseID: 117082
Faculty: Michael J. Puett
Next Term Offered: 2021 Fall

Examines various topics in the history of the Han Dynasty.

CHNSHIS 233R Sources of Early Chinese History

CourseID: 114370
Faculty: Michael J. Puett
Next Term Offered: 2022 Spring

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

CHNSHIS 253 Topics in Late Imperial History

CourseID: 125694
Faculty: Mark Elliott
Next Term Offered: 2021 Fall

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

CHNSLIT 114 Introduction to Premodern Chinese Literature

CourseID: 125194
Faculty: Xiaofei Tian
Next Term Offered: 2020 Fall

This course will introduce students to the best-known writers and canonical works of Chinese literature from the premodern period.

CHNSLIT 137 Worlding China through Stories

CourseID: 215838
Faculty:
Next Term Offered:

The course takes as its point of departure President Xi Jinping's call in 2013 to "tell the good China story." What is the good China story? Is this the story China should tell about itself to the world? Is this about cultural self-perception, understanding the world, cross-cultural communication, or simple propaganda? What seems beyond dispute is the power of stories to bring China to the world and the world to China. In exploring the "fictional turn" of contemporary Chinese cultural politics as it relates to the world, we will also trace its genealogy to earlier historical moments. Stories matter in China, not only in

our times but also throughout history.

CHNSLIT 223R Keywords

CourseID: 109524

Faculty: Wai-yee Li

Next Term Offered: 2020 Fall

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

CHNSLIT 229R Topics in Early Medieval Literature

CourseID: 124534

Faculty: Xiaofei Tian

Next Term Offered: 2020 Fall

This semester's focus is on narrative and anecdotal accounts of the Northern and Southern Dynasties: historical, religious, geographical, and bibliographical.

CHNSLIT 242R From Fiction into History

CourseID: 156199

Faculty: David Wang

Next Term Offered: 2020 Fall

This seminar deals with the dialogics between historical dynamics and literary manifestation at select moments of twentieth century China. It focuses on two themes: history and representation; modernity and monstrosity.

CHNSLIT 267R Topics in Tang Literature: Seminar

CourseID: 115521

Faculty: Xiaofei Tian

Next Term Offered: 2021 Spring

This semester's focus is on the ninth-century poetry and prose.

CHNSLIT 268R Topics in Song and Yuan Literature

CourseID: 115522

Faculty: Xiaofei Tian

Next Term Offered: 2022 Spring

Survey of Song literature.

EABS 245R Ritual and Text in Japanese Buddhist Literature

CourseID: 119754

Faculty: Ryuichi Abe

Next Term Offered: 2020 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.

EAFM 112 Global Japanese Cinema

CourseID: 159550

Faculty: Alexander Zahlten

Next Term Offered: 2020 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?

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

CourseID: 207561

Faculty: Carter Eckert

Next Term Offered: 2022 Spring

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

CourseID: 109513

Faculty: Alexander Zahlten

Next Term Offered: 2021 Spring

This seminar will focus on transitional moments in the history of film and media culture in Japan. We will explore the deep transformations of the years 1927, 1963, and 1995—with an additional focus on 1968—and their connections to media-historical shifts that include magazines, TV, animation, music, the experimental arts and other media / genres.

We will also take a step back to consider the theory and methods of historiography of media, both generally and in the specific case of Japan.

EAFM 220 Topics in Chinese Film and Media Studies: Seminar

CourseID: 109511

Faculty: Jie Li

Next Term Offered: 2022 Spring

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

EASTD 199 China and the African Continent

CourseID: 215837

Faculty:

Next Term Offered:

Confronted with Africa's daunting development challenges, the presence of China invites intriguing alternative visions to the poorly performing designs by traditional actors in the region. Moving from copper mines in Zambia, infrastructure construction projects in Mali, military bases in East Africa to the United Nations headquarters, this seminar critically assesses the potential for Beijing to transform Sub-Saharan Africa. It starts with the continent's traditional partners and their development assistance, along with Maoist attempts to revolutionize the "world countryside" – resulting in legacies such as a China-trained guerilla fighter serving as the President of Zimbabwe. We then discuss the footprint of official Beijing, including its influence on elite politics, Chinese public and private business interests, and the diversity of the one million Chinese migrants to Africa. Four sessions will specialize on (1) resource extraction, with case studies of Chad and Sudan (2) debt-traps of Western and Eastern origin (3) the evolving effectiveness of human rights policies (4) and civil war, with a case study of Peace-Keeping Operations in Congo. Finally, the course will discuss how the Chinese presence transforms established multilateral institutions, as well as the emergence of new financing institutions, with implications for Africa. Concepts in the political science literature will be read alongside journalistic accounts and primary documents, such as leaked diplomatic cables and strategy papers. Student assignments contribute to a public course-related website. Will Africa become Beijing's Second Continent, of the neo-colonial or tributary kind? What promises does the China model hold for Africans? How do the partners on both continents react to experiences of disillusionment and retreat?

EASTD 211 Historical Theory and Methods

CourseID: 142676

Faculty: Shigehisa Kuriyama

Next Term Offered: 2020 Fall

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

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

CourseID: 125813

Faculty:

Next Term Offered: 2020 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: 2021 Spring

Continuation of Japanese 210a.

JAPNHIST 126 Shinto: Conference Course

CourseID: 120323

Faculty: Helen Hardacre

Next Term Offered: 2021 Fall

An examination of Shinto, emphasizing its concepts of deity (*kami*), patterns of ritual and festival, shrines as religious and social institutions, political culture and interactions with party politics, and its contribution to contemporary youth culture.

JAPNHIST 151A Introduction to Edo and Meiji Period hentaigana

CourseID: 215836

Faculty:

Next Term Offered:

This course offers a basic introduction to reading *hentaigana* the various cursive forms of *hiragana* with which the greater part of texts and image inscriptions of premodern Japan were composed. The course will concentrate chiefly on mastering the *hentaigana* found in printed books and images of the Edo and Meiji periods, but it will also cover a limited number of common *kuzushiji* (cursive rendering of Chinese characters). No prior experience with cursive scripts is assumed, but students should normally have taken three years of modern Japanese.

JAPNHIST 260R Topics in Japanese Cultural History

CourseID: 120567

Faculty: Shigehisa Kuriyama

Next Term Offered: 2021 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: 2021 Spring

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 170 Traditional Japanese Literature: From the Dawn of Writing to the Dawn of Modernity

CourseID: 204985
Faculty: David Atherton
Next Term Offered: 2021 Spring

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

JAPNLIT 260 Early Modern Japanese Literature and Culture

CourseID: 204984
Faculty: David Atherton
Next Term Offered: 2021 Spring

This course explores the literature of the Edo period, a time that saw the emergence of a dynamic market for popular literature, the rise of new dramatic forms such as kabuki and puppet theater, the heyday of comic linked verse and satirical poetry, striking innovations in travel writing and the essay, and radically new approaches to the literature of Japan's past. Surveying a diverse range of prose, poetry, and drama, we will explore such relationships as those between text and image, stage and page, orality and literacy, print and manuscript, high and low, literature and politics, and Japan and the continent.

KORHIST 231AR Documents and Research Methods for the Study of Premodern Korea I: Seminar

CourseID: 127714
Faculty: Sun Joo Kim
Next Term Offered: 2020 Fall

Introduction of the different types of primary sources and research methodologies useful for study of Ch'oson Korea. Students are required to write a research paper.

KORHIST 231B Documents and Research Methods for the Study of Premodern Korea II: Seminar

CourseID: 127743

Faculty: Sun Joo Kim

Next Term Offered: 2021 Spring

Continued training in reading and interpreting primary sources and exploring innovative research methodologies. Students are required to write a research paper based on original sources on a topic of their choosing.

KORHIST 260 Readings in Modern Korean History I

CourseID: 112681

Faculty: Carter Eckert

Next Term Offered: 2021 Fall

Explores the history of the field through an examination of major scholarship. Designed primarily for graduate students preparing for the general examination.

MONGOLN A Elementary Written Mongolian

CourseID: 112097

Faculty: Mark Elliott

Next Term Offered: 2021 Fall

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

MONGOLN B Elementary Written Mongolian

CourseID: 123855

Faculty: Mark Elliott

Next Term Offered: 2022 Spring

Continuation of Mongolian A.

MONGOLN 120A Intermediate Written Mongolian

CourseID: 117090

Faculty:

Next Term Offered: 2020 Fall

Readings in classical and modern Mongolian texts.

MONGOLN 120B Advanced Written Mongolian

CourseID: 117091

Faculty:

Next Term Offered: 2021 Fall

Continuation of Mongolian 120a.

UYGHUR B Elementary Uyghur

CourseID: 124107

Faculty: Mark Elliott

Next Term Offered: 2020 Fall

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: 2020 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: 2021 Spring

Continuation of Uyghur 120A.

VIETNAM 120A Intermediate Vietnamese

CourseID: 116268

Faculty:

Next Term Offered:

Further development of speaking, reading, writing, and aural comprehension. Texts and dialogues on Vietnamese geography, history, culture, and customs will be used, as well as audiotapes and videos. Students are expected to speak Vietnamese in all class discussions.

VIETNAM 120B Intermediate Vietnamese

CourseID: 116270

Faculty:

Next Term Offered:

Continuation of Vietnamese 120a. Further development of speaking, reading, writing, and aural comprehension. Texts and dialogues on Vietnamese geography, history, culture, and customs will be used, as well as audiotapes and videos. Students are expected to speak Vietnamese in all class discussions.

VIETNAM 130A Advanced Vietnamese

CourseID: 116271

Faculty:

Next Term Offered:

Development of high proficiency in Vietnamese. Introduction of complex grammar and vocabulary, using authentic Vietnamese texts, videos, and translation of English news articles into Vietnamese. Discussions focus on selected short stories and poems.

VIETNAM 130B Advanced Vietnamese

CourseID: 116272

Faculty:

Next Term Offered:

Continuation of Vietnamese 130a. Development of high proficiency in Vietnamese. Introduction of complex grammar and vocabulary, using authentic Vietnamese texts, videos, and translation of English news articles into Vietnamese. Discussions focus on selected short stories and poems.

Classics, The

CLASARCH 10 Greek Art

CourseID: 108583

Faculty: Adrian Staehli

Next Term Offered: 2021 Spring

The course provides a broad overview of the development of Greek art, architecture, and material culture from the end of the "Dark Ages" through the Archaic and Classical periods to the Hellenistic age. It offers basic knowledge about core categories of archaeological artifacts and remains within their topographical setting and the context of Greek culture and society, and includes issues of archaeological method and problems of current research.

GREEK 105K Advanced Greek Prose Composition

CourseID: 113714

Faculty:

Next Term Offered: 2021 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 106B Virgil: Aeneid

CourseID: 120309

Faculty: R.J. Tarrant

Next Term Offered:

Reading and discussion of Virgil's *Aeneid*, with attention to its place in the epic tradition and its status as a work of Augustan literature.

LATIN 112A History of Latin Literature I

CourseID: 120352

Faculty:

Next Term Offered: 2020 Fall

The literature of the Republic and early Augustan period. Reading of extensive selections from the major authors, with lectures and discussion on the evolution and development of Latin prose and poetry. The course focuses on a variety of issues: Latin individuality through manipulation of inherited Greek forms, metrical and stylistic developments, evolving poetics, intertextuality and genre renewal, dynamic effects of social and political contexts.

LATIN 134 Archaic Latin

CourseID: 110649

Faculty: Jeremy Rau

Next Term Offered: 2020 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.

MEDGREEK 115 Introduction to Byzantine Greek

CourseID: 121896

Faculty: Alexander Riehle

Next Term Offered: 2021 Spring

This course provides an introduction to the language of late antique and Byzantine Greek texts. This "Medieval Greek" should not be understood as a particular, "intermediate" stage in a supposedly linear development from Ancient to Modern Greek, but rather as a conventional designation of a broad continuum of linguistic registers, ranging from highly archaizing usages ("Atticism") to the so-called vernacular. In the surviving texts, these registers may vary significantly, depending on the author and his (or rarely, her) audience, the genre and other contextual factors. Through a close reading of representative literary and "sub-literary" texts from various periods and genres, the course intends to give students a first impression of this diversity and multi-layeredness of Greek writing in late antiquity and the Middle Ages. Although the main focus will be on grammatical and lexical analysis, we will also discuss related aspects of composition and style.

Comparative Literature

COMPLIT 103 Grounds for Comparison

CourseID: 128115

Faculty: David Damrosch

Next Term Offered: 2020 Fall

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

COMPLIT 104 On Theory

CourseID: 122350

Faculty:

Next Term Offered: 2020 Fall

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

COMPLIT 107 The Politics of Yiddish

CourseID: 207574

Faculty: Saul Zaritt

Next Term Offered: 2020 Fall

A bastardized German, a jargon, a woman's vernacular, an old world language, a dying and ghostly tongue, a Hasidic language, a queer language, a radical language—these are just a few of the ways that Yiddish has been labeled over its one-thousand-year history. This course will trace the shifting politics attached to Yiddish from its early modern beginnings as a language of translation between Jewish and non-Jewish cultures to its postwar vacillation between a language of mourning and nostalgia, Jewish American humor, Hasidic isolation, and contemporary Jewish radicalism. Through poetry, fiction, essay, and film, we will discuss what it might mean to discover "the secret language of the Jews" at the origins of Jewish socialism and at the foundations of

diaspora nationalism. All texts will be read in translation.

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

CourseID: 122573

Faculty: Verena Conley

Next Term Offered: 2020 Fall

Focuses on major existential concepts, examining how works move across time and space and how writers, philosophers and filmmakers enter in dialogue and conflict with each other while searching for meaning in life. Authors and artists include: Saint Augustine, Montaigne, Kierkegaard, Dostoyesky, Nietzsche, Gide, Heidegger, Sartre, Camus, Simone de Beauvoir, Kamel Daoud, Scorsese, Linklater.

COMPLIT 114 Mysticism and Literature

CourseID: 203092

Faculty:

Next Term Offered: 2020 Fall

Examines trends, issues and debates in the comparative study of mystical literature. Close readings of primary works by Jewish, Christian and Muslim authors from the Middle Ages through the 16th century. Topics include poetry and mysticism; allegory, symbolism and Scripture; body and gender; apophasis vs cataphasis; exemplarity and autobiographism; language and experience. Also examines creative engagement of pre-modern mystical literature in selected works by modern authors (Borges, T.S. Eliot) and literary theorists (DeCerteau).

COMPLIT 117 Literature, Gender, and Revolution

CourseID: 109677

Faculty: Karen Thornber

Next Term Offered: 2020 Fall

Explores relationships among literature, gender, and revolution in China, Cuba, Iran, Japan, Korea, and Russia from the late 19th century to the present. Readings by Butler, Chukovskaya, Danishvar, de Beauvoir, Foucault, Mikiso Hane, Kim Ilyop, Loynaz, Marruz, Pleck, Qiu Jin, Scott, Tamura Toshiko among others.

COMPLIT 121 From the 1001 Nights to the Arabian Nights: Adaptation, Transformation, Translation

CourseID: 123897

Faculty: Sandra Naddaff

Next Term Offered: 2020 Fall

Examines how the *1001 Nights*, popularly known in the West as the *Arabian Nights*, is transformed and adapted for different media and genres. Focuses on a variety of films, (e.g., *The Thief of Baghdad*, *Chu Chin Chow*, *Aladdin*), illustrations/images (e.g., Doré, Chagall, Matisse), musical and balletic renditions (e.g., Rimsky-Korsakov, Fokine), translations (e.g., Galland, Lane, Burton, Haddawy), and re-tellings of stories (e.g., Poe, 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: 2020 Fall

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

COMPLIT 127 Comparative Modernisms

CourseID: 203090

Faculty: David Damrosch

Next Term Offered: 2020 Fall

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

COMPLIT 131 The Arab American Experience in Fiction, Film, and Popular Culture

CourseID: 128114

Faculty: Sandra Naddaff

Next Term Offered: 2020 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: Marc Shell

Next Term Offered: 2020 Fall

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

COMPLIT 133 Shakespeare and the Globe

CourseID: 109665

Faculty: Marc Shell

Next Term Offered: 2020 Fall

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

COMPLIT 135 History of Drama

CourseID: 109675

Faculty:

Next Term Offered: 2020 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

CourseID: 107835

Faculty:

Next Term Offered: 2020 Fall

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

COMPLIT 137 Child Sacrifice, Pros and Cons: The Binding of Isaac in Jewish, Christian, Islamic, and Modern Lit

CourseID: 160331

Faculty: David Stern

Next Term Offered: 2021 Spring

Child Sacrifice-- specifically, the story of the parent's sacrifice of the first-born child-- lies at the heart of Western religion and culture. The Biblical narrative in Genesis 22, known as the Binding of Isaac, is one of the most famous and problematic tales in the Bible. The same narrative is foundational to Christianity. Later Jewish tradition has interpreted the Biblical text in countless ways from the ancient period down to the present day. The narrative figures prominently in Islam from the Qur'an on. And the Biblical story has been criticized and critiqued since the Middle Ages as a barbaric narrative. Recent works have blamed it for the ubiquity of child abuse in Western society, and it has become a ubiquitous motif of anti-war and protest poetry all over the world. This course will use the interpretive career and literary history of Genesis 22 as a lens through which to study the place of this foundational narrative in Western culture.

Readings will include Biblical texts, Euripides' *Iphigeneia in Aulis*, Philo of Alexandria, ancient Jewish sources, the New Testament, St. Augustine and other Christian exegetes, the Qur'an and later Islamic traditions, Kierkegaard's *Fear and Trembling*, Martin Buber, Kafka, Bob Dylan, Yehuda Amichai, and Leonard Cohen, among many other modern writers and poets.

COMPLIT 139 Fictions of Kin and Kind

CourseID: 156474

Faculty: Marc Shell

Next Term Offered: 2020 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

CourseID: 160527

Faculty: David Stern

Next Term Offered: 2020 Fall

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

COMPLIT 142 Narrative Theories of Prose and Film

CourseID: 109676

Faculty: Justin Weir

Next Term Offered: 2020 Fall

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

COMPLIT 146 Space and Place: The Environment in Film

CourseID: 124822

Faculty: Verena Conley

Next Term Offered: 2020 Fall

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

COMPLIT 154 Music, Literature, and the Voice

CourseID: 125538

Faculty: John T. Hamilton

Next Term Offered: 2020 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: John T. Hamilton

Next Term Offered: 2020 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 159 Poetry as Musical Performance

CourseID: 216042

Faculty:

Next Term Offered:

This course is inspired by the words of T. S. Eliot, in "The Dry Salvages" (1941): "You are the music / While the music lasts." Participants are encouraged to explore the musicality of poetry composed as poetry, where poets build into their poetry an internal music that invites musical composers to "set it to music." A celebrated example is a lyric poem composed by Heine, which also gets set to music in the form of a Lied by Schumann. Students are free to select for their focus of research any particular kind of poetry, composed in whatever language, including English. No requirement of competence in any language other than English.

COMPLIT 162 Homer and Beyond: Theory and Comparative Methods in Studying Oral Traditions

CourseID: 148222

Faculty: Gregory Nagy

Next Term Offered: 2020 Fall

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

songs, Latin prosimetrum narratives, etc.

COMPLIT 163 Jewish Languages and Literature

CourseID: 125260

Faculty: Marc Shell

Next Term Offered: 2020 Fall

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

COMPLIT 173 Carmen and the Art of Seduction

CourseID: 205135

Faculty: John T. Hamilton

Next Term Offered: 2021 Spring

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

COMPLIT 174 Realism, Fantasy, and the Grotesque: Hoffmann and Balzac

CourseID: 125539

Faculty: John T. Hamilton

Next Term Offered: 2021 Spring

A close reading of select works by E.T.A. Hoffmann and his reception in the work of Balzac focuses on Realism's indebtedness to the imaginative realms of the fantastic and the grotesque. Topics: music and inspiration; societal decadence and caricature; magic and the uncanny; experience, observation and expression.

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

CourseID: 160327

Faculty:

Next Term Offered: 2020 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: Saul Zaritt

Next Term Offered: 2020 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: 2020 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 and revoiced ghosts in order to alternately dazzle and comfort audiences. This course asks: How do strategies of ghostwriting and ventriloquy compensate for trauma and loss? In what ways do such reenactments modify an original text? Through analysis of postwar texts and films in English and Yiddish (in translation), this course studies how specters of the past function both as arbiters of cultural value and as reminders of the discontinuities and traumas of the Jewish American present. Films include *Tevya*, *Fiddler on the Roof*, *The Diary of Anne Frank*, and the TV series *Transparent*. We will read texts by Sholem Aleichem, Isaac Bashevis Singer, Philip Roth, Cynthia Ozick, Grace Paley, and others.

COMPLIT 188 Futurisms (a comparative history)

CourseID: 205146
Faculty: Jeffrey Schnapp
Next Term Offered: 2021 Spring

From its foundation in Feb. 1909 through WWII, futurism developed into the first international cultural-political avant-garde. Its aim was a revolutionary transformation of all spheres of life and its influence extended to the whole of Europe, parts of Asia, and the Americas. Combating the traditionalism of turn-of-the-century European culture, the movement sought to found a cosmopolitan (but nationalist) counterculture based on the exaltation of youth, speed, violent revolt, innovation, and experimentation. Hence the movement's name: the label "Future-ism" denoting at once adoration of the new and struggle against the prevalence of "past-ism" or *passatismo* (the idolatry of the past). In its first decade of existence Futurism became the first full-fledged cultural/political avant-garde of our century, gathering together painters, musicians, architects, political revolutionaries, and poets from several European nations. A key progenitor of later movements such as Dada-, Vorticism, and Surrealism, Futurism had a powerful formative influence not only on the cultural atmosphere of Italy during the Fascist era (1922-1945), but also on 20th century culture as a whole.

COMPLIT 190 Translation: Language at Work

CourseID: 205097
Faculty: Marc Shell
Next Term Offered: 2020 Fall

What difference does language make? This class 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: the final reading list will thus arise from group discussion of the languages we know. The first half of the course considers issues of literalness and literariness along with rhythm and rhyme in both poetry and prose. At the same time we will discuss simultaneous translation, dubbing, and general ineffability along with American literature written in languages other than English. The second half focuses on the relationships of language translation to economic transfer and to literary metaphor and also considers the roles of inter-linguistic translation in various arts and media: movies, plays, music, and variably 'bilingual' paintings.

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

CourseID: 108791
Faculty: Luis Giron Negron
Next Term Offered: 2021 Spring

Does love have a history? This course will explore a particularly rich, multiseular

episode in the literary history of this emotion: the efflorescence and varieties of love poetry, both lyrical and narrative, in Europe and the Middle East from the Middle Ages through the 16th century. Weekly discussions will center on close readings of selected love poems and versified narratives from a variety of literary traditions, including: Provençal troubadour lyric; French chansons, the Germanic Minnesang and the Galician-Portuguese cantigas (the question of amour courtois); Ibero-Romance and colloquial Arabic jarchas; the Italian dolce stil novo; the Petrarchan sonnet and its early modern heirs in Portugal, England and Spain; Arabo-Andalusian and Hispano-Jewish qaṣīd and muwashshaḥāt, medieval Latin love lyric; Persian Sufi and Christian mystical love poetry; Dante's Vita nuova; and selections from two other erotological classics in narrative verse, Libro de buen amor and Roman de la Rose. Discussions will be framed by an overview of both premodern discussions on love – how love is conceptualized at the intersection of philosophy, theology and medicine by Jewish, Christian and Muslim thinkers– and contemporary scholarly debates on the origins and development of medieval love literature.

COMPLIT 194 Literary Criticism: Major Approaches and Methods

CourseID: 203216

Faculty: James Engell

Next Term Offered: 2020 Fall

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

COMPLIT 211 Mysticism and Literature

CourseID: 114368

Faculty: Luis Giron Negrón

Next Term Offered: 2021 Spring

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

COMPLIT 214 The Literature of the Islands

CourseID: 107411

Faculty: Marc Shell

Next Term Offered: 2020 Fall

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

COMPLIT 217 14 Things (A Secret History of Italian Design)

CourseID: 207623

Faculty: Jeffrey Schnapp

Next Term Offered: 2021 Spring

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

COMPLIT 226 Peripheral Modernisms

CourseID: 207621

Faculty: David Damrosch

Next Term Offered: 2021 Spring

The past several years have seen ambitious attempts to rethink modernism as a global phenomenon rather than a largely Anglo-American and West European movement. Center-periphery relations have often been foregrounded in these efforts, and in critiques of them. Building on theoretical statements and critiques by Jorge Luis Borges, Kenzaburo Oe, Franco Moretti, Pascale Casanova, Emily Apter, Eric Hayot, and Susan Stanford Friedman, this seminar will explore the politics of language, periodization, and center-periphery relations both within and beyond the West, in works by Higuchi Ichiyo, James Joyce, Lu Xun, Ryunosuke Akutagawa, Virginia Woolf, Djuna Barnes, Borges, Kukrit Pramoj, Pramoedya Ananta Toer, and Derek Walcott.

COMPLIT 227 Comparative Modernism

CourseID: 127034

Faculty: David Damrosch

Next Term Offered: 2020 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: Karen Thornber

Next Term Offered: 2020 Fall

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

COMPLIT 231 Living the Lives of Others: Reading Beyond the Hermeneutics of Suspicion (Grad Seminar in Gen Ed)

CourseID: 207624

Faculty: Diana Sorensen

Next Term Offered: 2021 Spring

A Graduate Seminar in General Education focused on creating a Gen Ed course that will show that literary reading has the power to transform our understanding of alterity, to experience the lives of others, entering the minds of characters and often transforming our assumptions. The driving question is how to construct a course that would lead undergraduates to enter the civic sphere equipped to read differently, led by a hermeneutics of hope and recognition. We will begin with a critical assessment of the hermeneutics of suspicion, and then consider emerging reading criticism such as surface reading, reparative reading, enchanted reading, materialist reading and assembly reading.

COMPLIT 238 After Orientalism: Writing across Arabic-Islamic Contact Zones

CourseID: 212726

Faculty:

Next Term Offered: 2020 Fall

How might the transregional presence of scriptural Arabic have impacted the formation of (post)-colonial, national literatures in ways that contrast with vernacular, European counterparts evolving from a Latin imperial or ecumenical context? How did the differential politics of empire impact the trajectories of Arabophone and Arabographic writing across regional and colonial lines, and foreground enduring debates on (post)-

colonial forms of cultural literacy? Across a diversity of (post)-colonial contexts, to what extent did the historical coexistence of scriptural Arabic and nominally vernacular languages give rise to creative tensions and literary innovations irreducible to unilateral, European influences or Eurocentric paradigms of progressive vernacularization? To what extent could the shared historical presence of scriptural Arabic across a diversity of former colonial territories give rise to revisionist approaches to late colonial and (post)-colonial cultural histories?

Exploring these questions, this course will engage with texts that illuminate the following dynamics across regional differences and former colonial lines: monoglossic and heteroglossic ideologies of language and their comparative implications within historically Arabophone regions; the status of Arabic as a historically inter-ethnic, culturally polycentric, and progressively interconfessional medium; the colonial politicization of nominally "scriptural" and "vernacular" literacies; the politics of orthography; and the vitality of concepts unique to Arabic contact zones ('ammiyya and 'ajamiyya) as the basis of underexamined cultural comparisons across a regional dispersion. In addition to literary texts, primary materials will include colonial era archival documents and journalistic writing, with broader contextual readings drawn from the fields of sociolinguistics and historical scholarship. Materials will be presented or made available in bilingual editions or in English translation.

COMPLIT 242 Germany and the Greeks: Philhellenism from Winckelmann to Heidegger

CourseID: 203231

Faculty: John T. Hamilton

Next Term Offered: 2020 Fall

Topics include the relation of epic to German national identity; originality; genius and 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: Panagiotis Roilos

Next Term Offered: 2020 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 249 Cartography and Early Modern Literature

CourseID: 109663

Faculty: Katharina Piechocki

Next Term Offered: 2021 Spring

This course explores the intimate relationship between literature, maps, diagrams, and related visual material in the early modern period. It asks about the emergence of new cartographies, maps, and itineraries in a period of increased interest in world travels, "discoveries," philology, and translation. How does the production of European maps relate to non-European cartographies? How can the "spatial turn" and the visualization of knowledge, key to digital humanities today, help deepen our understanding of early modernity? We will discuss European, Arab, and Chinese maps and texts such as Columbus's Voyages, Aztec poems, Waldseemüller's and Ringmann's *Universalis Cosmographia*, Fracastoro's *Syphilis*, Ibn Battuta's *Travels*, Garcilaso's *Royal Commentaries* and *Florida*, Marguerite de Navarre's *Heptameron*, Montaigne's selected *Essays*, and Sor Juana's *Divino Narciso*.

COMPLIT 251 Literary Criticism and Theory: Antiquity to the Renaissance

CourseID: 125841

Faculty: John T. Hamilton

Next Term Offered: 2020 Fall

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

COMPLIT 252 The Literatures of Medieval Iberia

CourseID: 125848

Faculty: Luis Giron Negron

Next Term Offered: 2020 Fall

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

COMPLIT 255 Dysfunctional Family as National Allegory in the Middle Eastern Novel

CourseID: 109673

Faculty: William Granara
Next Term Offered: 2020 Fall

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

COMPLIT 258 Ancient Interpretation of the Bible

CourseID: 160526

Faculty: David Stern

Next Term Offered: 2021 Spring

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

COMPLIT 259 The Bible as a Book (Graduate Seminar in General Education)

CourseID: 203275

Faculty: David Stern

Next Term Offered: 2020 Fall

This interdisciplinary seminar will focus upon the intersection of two distinct subjects-- the Bible, on the one hand, and the history of the book as a material text, on the other-- in order to show how the varying physical features that the Bible has taken in Jewish, Christian, and modern secular culture over the last two 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: Jeffrey Schnapp

Next Term Offered: 2020 Fall

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

COMPLIT 263 Journey, Exile, and Displacement in Arabic Literature

CourseID: 122408

Faculty: William Granara

Next Term Offered: 2020 Fall

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

COMPLIT 264 Thinking and Writing Transculturally

CourseID: 123880

Faculty: Karen Thornber

Next Term Offered: 2021 Spring

This course explores approaches to literature and transculturation in the context of new understandings of human and textual border creation and 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 possibilities and ramifications of cross-cultural study. We also examine the relationship between creative production/literary scholarship and ethnic studies, empire and (post)colonialism, identity, travel/migration/exile/diaspora, labor, war, trauma, multilingualism, translanguaging, literary reconfiguration (adaptation, intertextuality), and world literature. Course readings are drawn from Africa, Asia, and the Americas. New syllabus for 2019.

COMPLIT 266 Irony

CourseID: 118731

Faculty: Panagiotis Roilos

Next Term Offered: 2020 Fall

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

COMPLIT 272 Ritual Poetics

CourseID: 203241

Faculty: Panagiotis Roilos

Next Term Offered: 2021 Spring

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

CourseID: 203049

Faculty: Jeffrey Schnapp

Next Term Offered: 2020 Fall

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

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

CourseID: 109674

Faculty:

Next Term Offered: 2020 Fall

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

COMPLIT 283 Language Differences

CourseID: 108760

Faculty: Marc Shell
Next Term Offered: 2020 Fall

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

COMPLIT 287R Selected Topics in Poetics and Rhetoric: Seminar

CourseID: 122889
Faculty: Gregory Nagy
Next Term Offered: 2020 Fall

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

COMPLIT 290 Translation, Metaphor, and Exchange

CourseID: 134075
Faculty: Marc Shell
Next Term Offered: 2020 Fall

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

COMPLIT 293 The Aftermath of Theory

CourseID: 212725
Faculty:
Next Term Offered:

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

COMPLIT 294 Debating World Literature

CourseID: 108790

Faculty: David Damrosch

Next Term Offered: 2020 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: John T. Hamilton

Next Term Offered: 2020 Fall

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

COMPLIT 298 Allegory

CourseID: 108896

Faculty: Panagiotis Roilos

Next Term Offered: 2020 Fall

Investigates major landmarks in the development of allegorization and allegorical literary composition in European tradition. Starting with pseudo-Herakleitos and his allegorical hermeneutics of the Homeric epics, this seminar will study different theoretical explorations and literary manifestations of allegorical discourse from antiquity to modernity - from ancient Greek rhetoric to Prudentius to Byzantine literature to Dante to the Romantics to C. P. Cavafy to Benjamin and de Man. Topics to be addressed include: personification, ambiguity, hermeneutic double-tonguedness (amphoteroglosia), the interplay between allegory and other tropes and discursive modes (metaphor, metonymy, symbol, parody, satire).

Computer Science

COMPSCI 96 System Design Projects

CourseID: 121508

Faculty:

Next Term Offered: 2021 Fall

Cooperative design, development, and testing of a sizable and realistic computer system. Students work as a group with a client on a real-world open-ended problem, and gain experience in problem definition, software development, and system lifecycle issues, and in the area of application. Students work in groups; both student participation in the classroom and effective group cooperation outside the classroom are stressed. This term the problem to be addressed is the fragmentation of civil discourse in the United States and abroad, often going under the terms 'polarization' and 'filter bubbles', and leading to incorrect beliefs and allegations of 'alternative facts' or 'fake news'.

COMPSCI 125 Algorithms and Complexity

CourseID: 156210

Faculty:

Next Term Offered: 2022 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 134 Networks

CourseID: 160409

Faculty:

Next Term Offered:

Networks—of social relationships, economic interdependencies, and digital interactions—are critical in shaping our lives. This course introduces models and algorithms that help us understand networks. Fundamental concepts from applied mathematics, microeconomics, and computer science will be presented through the lens of network science, in order to equip students to usefully analyze the "big data" generated by online networks. Applications discussed include the viral spread of ideas, maximizing influence, and the contagion of economic downturns. Concepts and tools covered include game theory, graph theory, data mining, and machine learning.

COMPSCI 144R Networks Design Projects

CourseID: 112630

Faculty:

Next Term Offered: 2021 Spring

Deep neural networks (DNNs) are becoming a popular tool in data-driven applications.

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

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

COMPSCI 182 Artificial Intelligence

CourseID: 110661

Faculty:

Next Term Offered: 2020 Fall

Artificial Intelligence (AI) is an exciting field that has enabled a wide range of cutting-edge technology, from driverless cars to grandmaster-beating Go programs. The goal of this course is to introduce the ideas and techniques underlying the design of intelligent computer systems. Topics covered in this course are broadly divided into 1) planning and search algorithms, 2) probabilistic reasoning and representations, and 3) machine learning (although, as you will see, it is impossible to separate these ideas so neatly). Within each area, the course will also present practical AI algorithms being used in the wild and, in some cases, explore the relationship to state-of-the-art techniques. The class will include lectures connecting the models and algorithms we discuss to applications in robotics, computer vision, and speech processing.

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 191 Classics of Computer Science

CourseID: 204964

Faculty:

Next Term Offered: 2021 Spring

Papers every computer scientist should have read, from all areas of the field and dating from its origins to the present.

COMPSCI 208 Applied Privacy for Data Science

CourseID: 211395

Faculty:

Next Term Offered: 2022 Spring

The risks to privacy when making human subjects data available for research and how to protect against these risks using the formal framework of differential privacy. Methods for attacking statistical data releases, the mathematics of and software implementations of differential privacy, deployed solutions in industry and government. Assignments will include implementation and experimentation on data science tasks.

COMPSCI 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 221 Computational Complexity

CourseID: 111993

Faculty:

Next Term Offered: 2021 Spring

A quantitative theory of the resources needed for computing and the impediments to efficient computation. The models of computation considered include ones that are finite or infinite, deterministic, randomized, quantum or nondeterministic, discrete or algebraic, sequential or parallel.

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 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 226 Sketching Algorithms for Big Data

CourseID: 205311

Faculty:

Next Term Offered: 2020 Fall

Big data is data so large that it does not fit in the main memory of a single machine. The need to process big data by space-efficient algorithms arises in Internet search, machine learning, network traffic monitoring, scientific computing, signal processing, and other areas. This course will cover mathematically rigorous models for developing such algorithms, as well as some provable limitations of algorithms operating in those models.

Some topics covered include streaming algorithms, dimensionality reduction and sketching, randomized algorithms for numerical linear algebra, sparse recovery and the sparse Fourier transform. The course will also cover some applications of these methods.

COMPSCI 227BR Topics in Cryptography

CourseID: 212924

Faculty:

Next Term Offered:

TBD

COMPSCI 234R Topics on Computation in Networks and Crowds

CourseID: 109667

Faculty:

Next Term Offered: 2021 Spring

Topics on the design and analysis of algorithms, processes, and systems related to crowds and social networks. Readings in AI, theoretical CS, machine learning, social science theory, economic theory, and operations research.

COMPSCI 244R Networks Design Projects

CourseID: 112631

Faculty:

Next Term Offered: 2021 Spring

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

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

Motivations for parallel and distributed deep learning; Parallelism available in deep

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

COMPSCI 250 Software Foundations

CourseID: 156204

Faculty:

Next Term Offered: 2023 Fall

This course introduces concepts and techniques in the foundational study of programming languages, as well as their formal logical underpinnings. The central theme is the view of programs and languages as formal mathematical objects about which precise claims may be made and proved. Particular topics include operational techniques for formal definition of language features, type systems, and program logics. The models and proofs are formalized using mechanical theorem provers.

COMPSCI 260R Projects and Close Readings in Software Systems

CourseID: 110276

Faculty:

Next Term Offered: 2024 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 262 Introduction to Distributed Computing

CourseID: 122813

Faculty:

Next Term Offered: 2021 Spring

An examination of the special problems associated with distributed computing such as partial failure, lack of global knowledge, asynchrony and coordination of time, and protocols that function in the face of these problems. Emphasis on both the theory that grounds thinking about these systems and in the ways to design and build such systems.

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 285 Multi-Agent Systems

CourseID: 114492

Faculty:

Next Term Offered: 2023 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 287R Machine Learning for Natural Language

CourseID: 112867

Faculty:

Next Term Offered: 2025 Spring

Machine learning for natural language processing with a focus on deep learning and generative models. Topics include language modelling, information extraction, multi-model applications, text generation, machine translation, and deep generative models. Course is taught as a reading seminar with student presentations. Requires comfort with reading ML research papers and completion of a major final project.

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 53 Marine Geochemistry

CourseID: 126174

Faculty: David Johnston

Next Term Offered: 2020 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 102 Data Analysis and Statistical Inference in the Earth and Environmental Sciences

CourseID: 216019

Faculty:

Next Term Offered:

Statistical inference, deterministic and stochastic models of data, denoising and filtering, data, visualization, time series analysis, image processing, Monte Carlo methods. The course emphasizes hands-on learning using real data drawn from atmospheric and environmental observations, applied by students in projects and presentations.

E-PSCI 109 Earth Resources and the Environment

CourseID: 114664

Faculty: John Shaw

Next Term Offered: 2021 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 120 Introduction to Planetary Sciences

CourseID: 205193

Faculty: Roger Fu

Next Term Offered: 2021 Spring

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

E-PSCI 130 Biogeochemistry of Carbon Dioxide and Methane

CourseID: 205244

Faculty: Steven Wofsy

Next Term Offered: 2021 Spring

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

E-PSCI 132 Introduction to Meteorology and Climate

CourseID: 123877

Faculty: Brian Farrell

Next Term Offered: 2020 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 134 Climate Change Debates: The Reading Course

CourseID: 126141

Faculty: Eli Tziperman

Next Term Offered: 2021 Spring

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

E-PSCI 139 Paleoclimate as Prologue

CourseID: 205194

Faculty: Peter Huybers

Next Term Offered: 2021 Spring

In this course we will explore and quantitatively assess past events in Earth's history involving temperature, sea level, and the cryosphere; and compare these events with respect to our understanding of current and predicted changes. The class will take a 'raw-data' and 'first-principles' approach to the subject: raw data in the sense that we will work with quantities that are directly observed in order to make estimates and draw inferences, and first principles in the sense of focusing on basic mechanisms. Working backward in time, topics will include modern temperature variability, the Little Ice Age, Medieval Warm Period, and more ancient climate variations. Complimentary to study of existing datasets, the course will also involve developing quantitative inferences from historical artwork and archival information, including through a series of field trips to the Harvard Art Museums and University Archives.

E-PSCI 166 Introduction to Seismology

CourseID: 110819

Faculty: Miaki Ishii

Next Term Offered: 2021 Spring

Introduction to seismology with a focus on conceptual understanding of seismic phenomena. Emphasis will be on earthquakes, e.g., detection, mechanism, characteristics, statistics, hazard, and relationship to dynamics. Broader topics such as the types of seismological data and inferences of the Earth's internal structure also will be covered.

E-PSCI 189 Analytical and Field Methods in Geobiology

CourseID: 126669

Faculty: David Johnston

Next Term Offered: 2021 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 204 Earthquake Sources

CourseID: 114669

Faculty: Marine Denolle

Next Term Offered: 2020 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: 2020 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 220 A Survey of Planetary Sciences

CourseID: 207622

Faculty: Roger Fu

Next Term Offered: 2020 Fall

An overview of the key processes that govern the planetary bodies of the solar system and a survey of current topics of research.

E-PSCI 228 Topics in Hydrometeorology and Hydroclimatology: Causes and consequences of drought

CourseID: 211357

Faculty: Kaighin McColl

Next Term Offered: 2021 Spring

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

E-PSCI 230 Paleoclimate as Prologue

CourseID: 160230

Faculty: Peter Huybers

Next Term Offered: 2021 Spring

In this course we will explore and quantitatively assess past events in Earth's history involving temperature, sea level, and the cryosphere; and compare these events with respect to our understanding of current and predicted changes. The class will take a 'raw-data' and 'first-principles' approach to the subject: raw data in the sense that we will work with quantities that are directly observed in order to make estimates and draw inferences, and first principles in the sense of focusing on basic mechanisms. Working backward in time, topics will include modern temperature variability, the Little Ice Age, Medieval Warm Period, and more ancient climate variations. Complimentary to study of existing datasets, the course will also involve developing quantitative inferences from historical artwork and archival information, including through a series of field trips to the Harvard Art Museums and University Archives.

E-PSCI 231 Climate Dynamics

CourseID: 119890

Faculty: Eli Tziperman

Next Term Offered: 2021 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 234 Topics in Generalized Stability Theory

CourseID: 109302

Faculty: Brian Farrell

Next Term Offered: 2020 Fall

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

E-PSCI 235 Stochastic Methods in Climate Dynamics

CourseID: 160228

Faculty: Brian Farrell

Next Term Offered: 2021 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 and Climate

CourseID: 205144

Faculty: Robin Wordsworth

Next Term Offered: 2021 Spring

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

E-PSCI 239 The Consequences of Energy Systems

CourseID: 126403

Faculty: Daniel Schrag

Next Term Offered: 2020 Fall

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

E-PSCI 241 Isotope Geochemistry and Processes of Planetary Evolution

CourseID: 146721

Faculty: Stein Jacobsen

Next Term Offered: 2021 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 242 Low-Temperature Geochemistry and Biogeochemical Cycles

CourseID: 145148

Faculty: Daniel Schrag

Next Term Offered: 2021 Spring

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

E-PSCI 243 Geochemical and Cosmochemical Thermodynamics

CourseID: 118676

Faculty: Stein Jacobsen
Next Term Offered: 2021 Spring

The laws of thermodynamics. Equilibrium and spontaneous transformations in systems of variable chemical composition. Components, phase rule and petrogenetic grids. Calculation of phase diagrams. Applications to cosmochemistry, igneous and metamorphic petrology, and environmental geochemistry.

E-PSCI 259 Dimensional Analysis and Scaling

CourseID: 207638

Faculty: Miaki Ishii

Next Term Offered: 2021 Spring

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

E-PSCI 261 Sea Level Change

CourseID: 126477

Faculty: Jerry Mitrovica

Next Term Offered: 2021 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 264 Planetary Magnetism and Dynamo Theory

CourseID: 110733

Faculty: Jeremy Bloxham

Next Term Offered: 2020 Fall

An introduction to the generation of planetary magnetic fields by self-sustaining dynamo

action. Magnetohydrodynamics: derivation of the induction equation from Maxwell's equations; the perfectly-conducting limit and frozen-flux; flux expulsion; diffusion and reconnection. Kinematic dynamo theory: Cowling's theorem; existence proofs; the Bullard-Gellman formalism; mean-field theories; fast dynamos. Dynamical considerations: the Navier-Stokes equation; rotating magnetoconvection; Taylor states; torsional oscillations and MAC-waves. Thermodynamic considerations: energy and entropy equations; the core heat flux problem. Numerical dynamo models.

E-PSCI 266 Computational Tools in Seismology

CourseID: 109414

Faculty: Miaki Ishii

Next Term Offered: 2021 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: 2020 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: 2020 Fall

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

E-PSCI 281 Great Papers in Earth Sciences

CourseID: 111685

Faculty: Peter Huybers

Next Term Offered: 2021 Spring

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

Students will read and discuss a classic paper per week and will have an opportunity to practice and improve their presentation skills.

E-PSCI 286 Current Topics in Biogeochemistry

CourseID: 126176

Faculty: David Johnston

Next Term Offered: 2020 Fall

"This seminar will explore the geochemical importance of cryptic, or "net-zero", cycles in Earth surface process, with primary emphasis on pathways mediated by microorganisms. A classic example is the deep sedimentary methane cycle, in which the net energy source is organic matter and the net sink is sulfate. Despite being nearly zero-sum, the existence of this cycle impacts the geochemical rates and signatures of other sedimentary processes. We will explore this – and other – topics from the perspective of questions such as how would the ocean-atmosphere system be different if this set of coupled reactions had not evolved? What other hidden reactions could be similarly important? We will draw from literature mainly on light stable- and radio-isotopic approaches to investigating these processes."

Economics

ECON 980AA The Rise of Asia and the World Economy

CourseID: 110116

Faculty:

Next Term Offered: 2020 Fall

This is a junior tutorial.

ECON 980BB Behavioral Economics

CourseID: 156369

Faculty:

Next Term Offered: 2021 Spring

The seminar will focus on theoretical and experimental issues in behavioral economics. We will study the relationships between the mathematical models of individual behavior (both utility maximization and psychologically motivated models) and the kinds of behavior we can observe in the lab. We will design experiments to test various theories and also study the types of behavior for which we don't have good models yet and try to understand what a good model would look like. This is a junior tutorial.

ECON 980FF Economics of the Coronavirus (junior seminar)

CourseID: 216079

Faculty:

Next Term Offered:

This course is intended for economics concentrators, ideally in their junior year. One of the primary objectives is to provide an opportunity for students to present possible topics for an undergraduate dissertation.

ECON 980P International Trade Policy

CourseID: 110067

Faculty:

Next Term Offered: 2020 Fall

Provides a discussion of the economic impacts of international trade policies and the political economy of trade policy formation. The course will focus on analytical methods and therefore requires knowledge of calculus. This is a Junior Tutorial.

ECON 980U Immigration Economics

CourseID: 126771

Faculty:

Next Term Offered: 2020 Fall

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 985LA Research in Applied Microeconomics, Development, and Health Economics

CourseID: 109235

Faculty:

Next Term Offered: 2020 Fall

Workshop for seniors writing theses. Especially for topics in development or health economics, but open to all fields. Emphasis on choice of research topics, methodology, and data sources. Part one of a two-part series; students must complete both terms of this course (parts A and B) within the same academic year in order to receive credit.

ECON 985LB Research in Applied Microeconomics, Development, and Health Economics

CourseID: 159910

Faculty:

Next Term Offered: 2021 Spring

Workshop for seniors writing theses. Especially for topics in applied microeconomics, development, or health economics, but open to all fields. Emphasis on choice of research topics, methodology, and data sources. Part two of a two-part series; students must complete both terms of this course (parts A and B) within the same academic year in order to receive credit.

ECON 985MA Research in International Trade, Education, and Public Economics

CourseID: 109236

Faculty:

Next Term Offered: 2020 Fall

Workshop for seniors writing theses. Especially for topics in international trade, education, or public economics, but open to all fields. Emphasis on choice of research topics, methodology, and data sources. Part one of a two part series.

ECON 985RA Research in Public Economics, Health, and Education

CourseID: 160584

Faculty:

Next Term Offered: 2020 Fall

Workshop for seniors writing theses. Especially for work in public economics, health, or education, but open to all fields. Emphasis on choice of research topics, methodology, and data sources. Part one of a two-part series; students must complete both terms of this course (parts A and B) within the same academic year in order to receive credit.

ECON 1017 A Libertarian Perspective on Economic and Social Policy

CourseID: 119951

Faculty:

Next Term Offered: 2020 Fall

Analyses the libertarian perspective on economic and social policy. This perspective differs from both liberal and conservative views, arguing for minimal government in most arenas. Policies addressed include drug prohibition, gun control, public education, abortion rights, gay marriage, income redistribution, and campaign finance regulation.

ECON 1083 Growth, Inequality, and the Income of Households

CourseID: 205607

Faculty:

Next Term Offered: 2021 Spring

Since the 1970s households in the United States and other advanced economies have seen their income growth slow as a result of slower overall economic growth and rising inequality—compounded in many countries by men withdrawing from the workforce. In China and many emerging economies, households have seen substantial income gains—as fast overall economic growth has outweighed the rise in inequality. This course will analyze the ways in which growth, inequality and labor force participation shape the incomes of typical households, focusing on the United States, other advanced economies, and to a lesser degree developing economies. The course will consider the causes of the changes in growth and inequality as well as their relationship—asking questions like whether higher growth inevitably entails higher inequality and whether inequality can be bad for growth. In addition, we will consider the positive and normative evaluation of policies that entail tradeoffs between growth and inequality.

This course forms a unified sequence with SUP-206 "The Causes and Consequences of Inequality" taught in the spring which provides a more microeconomic and focused perspective on inequality. While either course can be taken separately, taking them together as a sequence is recommended for students wanting to pursue a more in depth study of household incomes and inequality.

ECON 1435 Macroeconomic Policy in the Global Economy

CourseID: 126939

Faculty:

Next Term Offered: 2021 Spring

Examines fiscal policy, monetary policy, exchange rate policy, and financial regulation. Emphasizes both short-term stabilization goals and longer-term policy objectives. Considerable attention to recent policy.

ECON 1490 The World Economy: Growth or Stagnation?

CourseID: 125835

Faculty:

Next Term Offered: 2020 Fall

The world economy is gradually recovering from the financial and economic crisis that originated in the United States in 2007-2009. Despite the slow recovery of Europe and the U.S., world economic growth has continued at an accelerated pace since the mid-1990s. This is due to very rapid growth of Asian economies, especially China and, increasingly, India. China overtook the U.S. as the world's largest economy in 2014, while India surpassed Japan in 2012, becoming the world's third largest economy. The growth of the two Asian economic giants is rapidly transforming the world economy. The ultimate objective of Economics 1490 is to assess the prospects for sustainable growth of the world economy in the future. Will slower growth of the U.S., Japan, and the leading economies of Europe lead to worldwide stagnation or will the accelerated growth of the world economy continue?

ECON 1544 Foundations of International Macroeconomic Policy

CourseID: 109969

Faculty:

Next Term Offered: 2021 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 1800 The Economics of Cities

CourseID: 111292

Faculty:

Next Term Offered: 2021 Spring

Addresses the central questions of why cities exist, what roles will cities continue to play in the economy, and what determines the rise and fall of cities. Special attention is paid to cities and information, and social problems in cities.

ECON 2052 Game Theory I: Equilibrium Theory

CourseID: 113349

Faculty:

Next Term Offered: 2021 Spring

Equilibrium analysis and its applications. Topics vary, but typically include equilibrium refinements (sequential equilibrium), the equilibria of various classes of games (repeated games, auctions, signaling games) and the definition and application of common knowledge.

ECON 2147 Advanced Topics in Econometrics

CourseID: 216033

Faculty:

Next Term Offered:

ECON 2149 Computational Economics

CourseID: 119962

Faculty:

Next Term Offered: 2019 Fall

Graduate introduction to computational approaches for solving economic models. Formulate economic problems in computationally tractable form and use techniques from numerical analysis to solve them. Computational techniques in the current economics literature will be examined. Topics include solving dynamic optimization problems, computing equilibria of games and estimating structural models.

ECON 2340 Spatial Mobility and Development: Evidence and Quantitative Models

CourseID: 215901

Faculty:

Next Term Offered:

How does spatial mobility affect firms, migrants, commuters and job-seekers? What barriers hamper mobility at these different scales? What are the equilibrium implications of changes in travel costs, for example, due to infrastructure improvements? This course discusses recent research on the links between transportation and the economy, with a focus on developing countries. It focuses on the interplay between empirical evidence and quantitative models, and students will gain hands-on experience with both. The first

part of the course introduces the workhorse models and empirical tools, which we then apply to topics in infrastructure, migration, urban traffic congestion, and urban mobility and labor markets.

ECON 2392 The Political Economy of Economic Development

CourseID: 156554

Faculty:

Next Term Offered: 2021 Spring

ECON 2411 Advanced Topics in Macroeconomics

CourseID: 207820

Faculty:

Next Term Offered: 2020 Fall

ECON 2418 Political Economy of Non-Democracies

CourseID: 215796

Faculty:

Next Term Offered:

Non-democratic regimes have been the oldest and most common form of political governance. This course studies the forces of stability and forces of change in non-democratic regimes. Concerning the forces of stability, we will cover topics such as repression, hatred, state coercion, information control, corruption, co-optation, and political trust and norms. Concerning the forces of change, we will cover topics such as democratization, collective actions, conflict, nation building, reform and privatization, state capacity, bureaucracy, and the role of institutions on economic development and innovation. We will explore these topics both theoretically and empirically. Students will be exposed to various workhorse models in political economy, as well as recent advances in empirical methods such as natural experiments, field experiments, lab experiments, lab-in-the-field experiments, and text analyses.

ECON 2811 Social Economics

CourseID: 122104

Faculty:

Next Term Offered: 2021 Spring

Applies the tools of economics to explore social issues including crime, discrimination, racial and gender differences, poverty, family structure, urban problems, social interactions and peer effects, and intergenerational mobility.

ECON 3121 China Economy Seminar

CourseID: 110240

Faculty:

Next Term Offered: 2019 Spring

This seminar provides a forum for faculty, graduate students, and research fellows in economics and other fields to present and discuss research and scholarship on the economic and social transformation of China. The seminar will give special attention to the environmental, technological, and social changes that are accompanying China's extraordinary economic development and to the links between Chinese and US economies.

Ethnicity, Migration, Rights

EMR 122 Caribbean Postcolonial Thought

CourseID: 160753

Faculty: Mayra Rivera

Next Term Offered: 2020 Fall

This course examines influential works of "Caribbean Poetics" from a literary, philosophical, and political perspective. It explores the distinctiveness of this literary tradition and its contributions to thinking about race, colonialism, language and the sacred. Readings will include Édouard Glissant, Derek Walcott, and Edwidge Danticat, among others. Jointly offered in Harvard Divinity School as HDS 2430.

EMR 126 American History Before Columbus

CourseID: 203969

Faculty: Matt Liebmann

Next Term Offered: 2020 Fall

What happened in America before 1492? What were the major turning points in Native American history? Why don't we know more about the ancient history of North America? Anthropology 1080 answers these questions by introducing you to the discipline of North American archaeology. This lecture course will help you to understand how Native American societies developed in the millennia before the European invasion, why American Indian peoples live where they do today, and how their dynamic populations have changed over the course of the past 15,000 years. In the process you'll have the opportunity to examine a truly world-class collection of artifacts from the Peabody Museum, allowing you to hold the remains of American history in your own hands and investigate the past with your own eyes.

Engineering Sciences

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

CourseID: 128317

Faculty:

Next Term Offered: 2020 Fall

Students gain experience overcoming many under-represented challenges of becoming an innovator, including: identifying your intrinsic motivations, finding related good ideas, working effectively with others to develop them, and leading innovative professional projects to implementation. Students apply human-centered design processes (observing, interpreting, ideating, testing, refining, planning) to stimulate innovation, negotiate, strategize, and build and lead cooperative teams. Features guest speakers from industry, academia, and involves collaborating with cutting-edge companies.

ENG-SCI 23 The Art & Science of Making

CourseID: 211326

Faculty:

Next Term Offered: 2024 Spring

Introduces students to the making processes of some of the leading creators working today from engineering and design, to art, science, food, entertainment and more. Students develop six projects over the course of the semester — and a semester-long collaborative project — that engage the students in art & science maker processes of visiting creators and encourage skills of collaboration, expression, communication, and aesthetic appreciation. Students learn to use basic engineering and design tools including some or all of the following: CAD/CAM rapid prototyping, machine shops tools, and environmental engineering and tissue engineering lab tools and methodologies.

ENG-SCI 154 Electronic Devices and Circuits

CourseID: 143433

Faculty:

Next Term Offered: 2020 Fall

Design of electronic analog circuits using semiconductor transistors. Topics include: operational amplifiers and op-amp circuits; time and frequency domain analysis of electric circuits (RC, RL, and RLC); basic semiconductor physics; PN junctions and diodes; bipolar junction transistors (BJT); Field-effect transistors (MOSFETs); bias circuits and current sources; single-ended, differential, single- and multi-stage MOSFET amplifiers; amplifier gain and bandwidth; frequency response, feedback, noise, and stability.

ENG-SCI 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 176 Introduction to MicroElectroMechanical System

CourseID: 127589

Faculty:

Next Term Offered: 2020 Fall

This course introduces student to the rapidly emerging, multi-disciplinary and exciting field of MicroElectroMechanical Systems (MEMS). It teaches fundamentals of micro machining and Micro fabrication techniques, including planar thin-film process technologies, photolithography and soft-lithography techniques, deposition and etching techniques, and surface, bulk, and electroplating micro machining technologies.

ENG-SCI 201 Decision Theory

CourseID: 131407

Faculty:

Next Term Offered: 2021 Spring

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

ENG-SCI 203 Stochastic Control

CourseID: 143872

Faculty:

Next Term Offered: 2024 Spring

Introduction to the theory of stochastic differential equations based on Wiener processes and Poisson counters, and an introduction to stochastic modeling, stochastic approximation and simulated annealing. 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 220 Fluid Dynamics

CourseID: 146772

Faculty:

Next Term Offered: 2021 Spring

Continuum mechanics; conservation of mass and momentum, energy; stress, kinematics, and constitutive equations; vector and tensor calculus. Dimensional analysis and scaling. Navier-Stokes equations, Reynolds number. Solutions for simple flow states. Low Reynolds number flows; porous media flows; lubrication theory; gravity currents. Inviscid flows, Kelvin circulation theorem, Bernoulli integrals, Vortical flows. Waves in fluids; acoustics, shocks, water waves. Airfoil theory. Boundary layers. Flow instabilities. Mixing, and turbulence in unbounded and bounded flows.

ENG-SCI 227 Medical Device Design

CourseID: 127639

Faculty:

Next Term Offered: 2021 Spring

Project-based course on the design of medical devices to address needs identified by hospital-based clinicians. Students work in teams with physicians to develop a novel device. The design process includes: needs finding; problem identification; prior art searches; strategy and concept generation; estimation; sketching; sketch modeling; machine elements, ergonomics and prototyping.

ENG-SCI 228 Biologically-Inspired Materials

CourseID: 128321

Faculty:

Next Term Offered: 2022 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 229 Survey of Energy Technology

CourseID: 109282

Faculty:

Next Term Offered: 2021 Spring

Principles governing energy generation and interconversion. Current and projected world energy use. Selected important current and anticipated future technologies for energy generation, interconversion, storage, and end usage.

ENG-SCI 231 Energy Technology

CourseID: 125380

Faculty:

Next Term Offered: 2021 Spring

Principles governing energy generation and interconversion. Current and projected world energy use. Selected important current and anticipated future technologies for energy generation, interconversion, storage, and end usage.

ENG-SCI 236B Integrative Frameworks for Technology, Environment, and Society II

CourseID: 203601

Faculty:

Next Term Offered: 2021 Spring

Developing and implementing good solutions to real problems facing human society requires a broad understanding of the relationships between technology innovation, science, manufacturing, design thinking, environment, sustainability, culture, aesthetics, business, public policy, and government. Various frameworks for understanding these complex relationships within the context of real-world problems will be explored and discussed. Coursework will be based on assigned readings, case studies, research assignments, exercises, and class discussions.

ENG-SCI 237 Planetary Radiation and Climate

CourseID: 156547

Faculty:

Next Term Offered: 2020 Fall

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

ENG-SCI 238 Introduction to Innovation and Entrepreneurship

CourseID: 110345

Faculty:

Next Term Offered: 2021 Fall

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

ENG-SCI 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: 2021 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 249 Advanced Neural Control of Movement

CourseID: 122342

Faculty:

Next Term Offered: 2021 Spring

Students expected to meet all of the requirements of Biomedical Engineering 130 (formerly Engineering Sciences 149) and in addition to submit a term project with significant analytic content.

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: 2022 Fall

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

ENG-SCI 255 Statistical Inference with Engineering Applications

CourseID: 117628

Faculty:

Next Term Offered: 2021 Fall

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

ENG-SCI 263 Chemical Reactions and Mechanisms in the Environment

CourseID: 123682

Faculty:

Next Term Offered: 2020 Fall

In this course a framework of tropospheric chemistry will be generated that requires no previous knowledge of this topic. The goal is to develop an understanding of chemical and physical processes in the troposphere. Focus is on the main processes transforming emissions into the secondary pollutants that affect the environment, human health, and climate, in particular with respect to the role of anthropogenic influence. This will provide a foundation for the evaluation of the impact the newest scientific studies have on our understanding of processes that are important for the part of the atmosphere we live in.

ENG-SCI 267 Aerosol Science and Technology

CourseID: 124746

Faculty:

Next Term Offered: 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 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 274 Quantum Devices

CourseID: 118028

Faculty:

Next Term Offered: 2024 Fall

The focus of this course are quantum devices that have revolutionized the field of information science and technology. Particular emphasis this year will be on optical devices and communication technology. First, quantum devices that have enabled development of internet will be discussed, including semiconductor lasers, modulators and photo-detectors. Next, emerging quantum devices that will lead to so-called "second quantum revolution" and development of quantum internet and quantum computers will be introduced. These include single-photon sources and detectors, quantum memories, physical implementations of quantum gates, etc.. Topics that will be covered include quantum dots, color centers in solids, trapped ions and atoms, photon pair generation, quantum teleportation, quantum cryptography and quantum repeaters. The course is a mixture of quantum mechanics, semiconductor device physics, nanophotonics, quantum electronics and quantum optics.

ENG-SCI 276 Introduction to MicroElectroMechanical System

CourseID: 127590

Faculty:

Next Term Offered: 2020 Fall

In this course, the student is introduced to micro-fabrication techniques through the filter of the rapidly emerging, multi-disciplinary and exciting field of MicroElectroMechanical Systems (MEMS.) It is a lab based course complemented by mandatory weekly lectures. It teaches fundamentals of micro machining and fabrication techniques, including planar thin-film process technologies, photolithography and soft-lithography techniques, deposition and etching techniques as well as limited inspection and characterization technologies. Students, in teams, will build and characterize fully functional: surface acoustic wave (SAW) resonators, micro polymerized chain reaction (uPCR) amplifiers, micro pressure sensors and final projects of their own choosing. In doing so, they will be exposed to the basic principles of tools in an advanced cleanroom.

ENG-SCI 297 Professional Writing for Scientists and Engineers

CourseID: 207614

Faculty:

Next Term Offered: 2023 Fall

This course will provide students the opportunity to develop their skills in the critical reading and writing of various genres of scientific literature, including research articles, and fellowship and grant proposals.

English

ENGLISH CALR Advanced Screenwriting: Workshop

CourseID: 123934

Faculty:

Next Term Offered:

The feature-length script is an opportunity to tell a story on a larger scale, and, therefore, requires additional preparation. In this class, we will move from writing a pitch, to a synopsis, to a treatment/outline, to the first 10 pages, to the first act of a feature screenplay. We will analyze produced scripts and discuss various elements of craft, including research, writing layered dialogue, world-building, creating an engaging cast of characters. As an advanced class, we will also look at ways both mainstream and independent films attempt to subvert genre and structure. Students will end the semester with a first act (20-30 pages) of their feature, an outline, and strategy to complete the full script.

ENGLISH CNTF Character and Consciousness: Advanced Narrative Techniques Fiction Workshop

CourseID: 215738

Faculty:

Next Term Offered:

This course focuses on how artful characterization works to create complex psychological portraits in fiction. We will read fiction and criticism to understand how character informs nearly every element of storytelling craft, and we will incorporate what we've gleaned from our readings into our own writing. After review of fundamental craft elements such as imagery, dialogue and scene, we will examine more advanced narrative techniques such as psychonarration, interiority and focalization, and seek to understand how they contribute to the voice, consciousness and subjectivity of a character. The core of our practice will be comprised of short weekly assignments, in-class exercises, and character studies, culminating in one complete story and revision to be workshopped by peers.

ENGLISH 58R Poets: Wyatt to the Romantics

CourseID: 212759

Faculty:

Next Term Offered:

Description TBA

ENGLISH 66 Migrations: Narrative Setting

CourseID: 130636

Faculty:

Next Term Offered:

This course is designed for the "Literary Migrations" portion of the Common Ground curriculum. Although plot, character, and theme are the elements of narrative fiction that typically receive the most attention from readers, this course invites students to examine setting. It is likely to feature works by Defoe, Flaubert, Dickens, Melville, Poe, Fitzgerald, Faulkner, Cather, and Pynchon. In addition, some relevant secondary material will be assigned, such as portions of Watt's *Rise of the Novel*, Auerbach's *Mimesis*, and recent works of environmental criticism.

ENGLISH 90FL Fantasy Literature and the Imagined Middle Ages

CourseID: 212791

Faculty:

Next Term Offered:

Why does the Middle Ages – or a version of it – offer such fertile ground for 20th and 21st-century Fantasy Literature? What ideas and assumptions about the 'medieval' are embedded in the genre, and why? This course explores critical questions for 'medieval' Fantasy, including narrative modes, the nature of genre itself, racial & cultural nostalgia, national history, moral and ethical shaping of the reader, bildungsroman, and the genre's complicated relationship to Children's & YA literature. We will be sampling from some foundational and less well-known texts of 20th century Fantasy, exploring Fantasy's roots in medieval sagas and romance, and encountering contemporary authors who are reimagining the genre.

ENGLISH 90GW Genre Trouble: Twentieth-Century Women's Writing

CourseID: 212792

Faculty:

Next Term Offered:

This seminar studies a diverse set of literatures from twentieth- and twenty-first century British women writers, with particular attention given to the novel. As its title suggests, our conversations will revolve around the relationship between gender and genre, focusing on the ways women's writing negotiates the very structures and expectations of the novel, as well as on novelistic subgenres associated with women. Our readings will range widely, from domestic fiction, comedies of manners, biographies, the bildungsroman, historical novel, romance, and crime fiction. Authors to be considered include Rebecca West, Sylvia Townsend Warner, Virginia Woolf, Radclyffe Hall, Jean Rhys, Muriel Spark, Buchi Emecheta, Jeanette Winterson, Hilary Mantel, Helen Fielding, Sarah Waters, and Zadie Smith. These primary works will be supplemented by secondary readings such as court transcripts, diaries, and letters; wartime propaganda and welfare state reports; Mass Observation studies on postwar birthrates and families; key works in literature, sociology, and readership; theories of kinship, race, sexuality,

and gender identities; and debates around first- and third-world feminisms.

ENGLISH 103R Advanced Old English: Riddles

CourseID: 216067

Faculty:

Next Term Offered:

What deepens your grasp of Old English grammar, improves your translation skills, and ends with a creative project? At times child's play, at times deadly earnest (think of Oedipus and the Sphinx), enigmatic puzzles have fascinated us for many centuries. They were particularly prolific in the earliest literature in English, including over ninety poetic riddles in the Exeter Book. We will translate a number of such riddles, read many more in translation, and speculate on the philosophical questions they raise about language and meaning. The semester will end with a creative project. Prerequisite: one term of Old English.

ENGLISH 110FF Medieval Fanfiction

CourseID: 205152

Faculty:

Next Term Offered:

Fanfiction is a surprisingly powerful tool for examining medieval literature. It sheds light on the dynamics of rereading and reception that characterize medieval texts, which in turn deepen our own understanding of creative originality. In this class we will read some twentieth- and twenty-first century fanfiction with medievalist themes alongside medieval literary texts that rewrite, reimagine, or let their authors star in pre-existing stories. This medieval 'fanfiction' will include Arthurian romances, 'sequels' to the *Aeneid* and the *Canterbury Tales*, and Christian spiritual texts in which devout men and women imagined themselves as 'Mary Sues' in scenes from the Gospels.

ENGLISH 167BL Post-1945 British Literature

CourseID: 203074

Faculty:

Next Term Offered:

Why are we so taken by Harry Potter, Lord of the Rings, Downton Abbey, James Bond, and "Keep Calm and Carry On," and the ideas of Britain they project? This course will use this recent surge of Anglophilia as a springboard into our study of post-1945 British literature: a period whose social and political upheavals both radically redefine and conservatively re-entrench "British" as a category of analysis. Among the issues we'll be considering are war and end of empire, new patterns of migration, emerging formations based on race, gender, and sexuality, and devolution and globalization. Our readings will range from highbrow to genre fiction; from declassified MI6 files to the latest episode of Doctor Who. Authors will most likely include Caryl Churchill, Helen Fielding, Graham

Greene, Alan Hollinghurst, Kazuo Ishiguro, John Le Carré, Philip Larkin, David Mitchell, Samuel Selvon, Zadie Smith, Muriel Spark, Salman Rushdie, and Jeanette Winterson.

ENGLISH 169CF Contemporary Fiction

CourseID: 212760

Faculty:

Next Term Offered:

Description TBA

ENGLISH 276LR The Long Renaissance: The New Negro and Harlem, 1895-1934

CourseID: 212570

Faculty:

Next Term Offered:

The "new birth of freedom" that Abraham Lincoln hoped to see rise out of the death and destruction of the Civil War manifested itself during the twelve years that followed it. Reconstruction (1865 - 1877) ushered in a "Second Founding" of the nation through the ratification of the 13th, 14th, and 15th amendments to the Constitution, abolishing slavery, establishing birthright citizenship, due process and equal protection of the laws, and the right to vote for black male citizens. As revolutionary as Reconstruction was, it was also short-lived, and the long, violent roll-back against it, curiously known as the "Redemption," witnessed the curtailing of these rights and the rise and institutionalization of Jim Crow segregation in what one newspaper editor coined the "New South." A key aspect of Redemption was a propaganda war designed to debase the image of African Americans, and thereby justify the deprivation of their rights. Resisting it, African Americans, starting in the mid-1890s, employed the concept of a "New Negro" to combat racist images of an "Old Negro" fabricated by apologists for Jim Crow. Thus began what we might call America's first "social media" race war. The trope of a New Negro underwent several revisions between the 1890's and 1920's, when—in the midst of the Great Migration of African Americans from the South to the North—the Harvard-trained philosopher, Alain Locke, revised and appropriated the term to describe a remarkable flowering of art and literature that he named "The New Negro Renaissance." Later commentators would label the period "The Harlem Renaissance." Locke and his contemporaries thought that "armed with culture," as W.E.B. Du Bois wrote much later, they could efficaciously wage the struggle against anti-black racism through what an historian of the period cleverly called "civil rights by copyright." This course traces the history of the metaphor of a "New Negro" from its inception at the dawn of Jim Crow to the end of The New Negro Renaissance in the Great Depression.

Environmental Science and Engineering

ESE 109 Earth Resources and the Environment

CourseID: 121463

Faculty:

Next Term Offered: 2021 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.

ESE 130 Biogeochemistry of Carbon Dioxide and Methane

CourseID: 205340

Faculty:

Next Term Offered: 2022 Spring

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

ESE 132 Introduction to Meteorology and Climate

CourseID: 156491

Faculty:

Next Term Offered: 2020 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.

ESE 162 Hydrology

CourseID: 137573

Faculty:

Next Term Offered: 2020 Fall

This course provides an introduction to the global hydrologic cycle and relevant terrestrial and atmospheric processes. It covers the concepts of water and energy balance; atmospheric radiation, composition and circulation; precipitation formation; evaporation; vegetation transpiration; infiltration, storm runoff, and flood processes; groundwater flow and unsaturated zone processes; and snow processes.

ESE 169 Seminar on Global Pollution Issues: Case Study of Lead Biogeochemistry

CourseID: 109341

Faculty:

Next Term Offered: 2021 Fall

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

Environmental Science and Public Policy

ESPP 78 Environmental Politics

CourseID: 112610

Faculty: Sheila Jasanoff

Next Term Offered: 2020 Fall

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

ESPP 90G The Law and Policy of Climate Change: Influencing Decision Makers

CourseID: 208113

Faculty:

Next Term Offered: 2021 Spring

Empirical data demonstrate that the climate is changing and that these changes could produce increasingly serious consequences over the course of this century. Governments and private actors around the world are strategizing, debating, lobbying, implementing, and defending mechanisms to both mitigate and adapt to the impacts of climate change. This course will explore (i) the legal framework in which climate change action occurs in the United States, (ii) policy tools available to regulators, (iii) impacts on regulated entities and individuals and (iv) opportunities for private stakeholders to participate in and influence climate change decisions.

Government

FAS 2066 Theories of Ideology and False Consciousness

CourseID: 213550

Faculty:

Next Term Offered:

Irrationality and self-deception are striking and troubling features of life in society. But how to understand them? This course will examine the theory of ideology as it developed in Marxist social thought before looking at some prominent recent accounts of false consciousness and its significance for politics.

GOV 94KJ tbd

CourseID: 216183

Faculty:

Next Term Offered:

GOV 94ND tbd

CourseID: 216184

Faculty:

Next Term Offered:

GOV 1002 Advanced Quantitative Political Methodology

CourseID: 123519

Faculty:

Next Term Offered:

Introduces theories of inference underlying most statistical methods and how new approaches are developed. Examples include discrete choice, event counts, durations, missing data, ecological inference, time-series cross sectional analysis, compositional data, causal inference, and others.

GOV 2001 Advanced Quantitative Research Methodology

CourseID: 124780

Faculty:

Next Term Offered:

Graduate-level version of Gov. 1002. Meets with Gov. 1002, introduces theories of inference underlying most statistical methods and how new approaches are developed. Examples include discrete choice, event counts, durations, missing data, ecological

inference, time-series cross sectional analysis, compositional data, causal inference, and others. Will require extra homework and examination problems in addition to those for Gov. 1002.

Folklore and Mythology

FOLKMYTH 106 History of Witchcraft and Charm Magic

CourseID: 109652

Faculty: Stephen Mitchell

Next Term Offered: 2022 Spring

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

FOLKMYTH 108 The Art and Craft of Scholarly Storytelling: A Workshop in Folkloristic Writing and Expression

CourseID: 210898

Faculty: Lowell Brower

Next Term Offered: 2020 Fall

Storytelling is not just an object of folkloristic study, but also a central aspect of the folklorist's job. This course asks how scholars of human communities and expressive practices might do justice to other peoples' stories while turning them into stories of their own. An intimate, supportive, writing-intensive seminar, FM 108 introduces students to a host of exciting and innovative approaches to "scholarly storytelling," allowing them to develop both practical and poetic academic writing skills as they engage in hands-on peer review workshop sessions and theoretical discussions about academic writing, narrative craft, and creative expression. Students should enter the class having already begun a larger intellectual project—be it a senior thesis, a creative project, a major research paper—and be prepared to share this project with the class and offer thoughtful feedback to their peers. Along with reading and critiquing one another's works-in-progress, we'll examine everything from classical folklore collections, to ethnographic novels, to former departmental theses, to experimental non-fiction, to yesterday's most folkloristic tweets, taking inspiration from our predecessors in our quest to become better storytellers about the communities, expressive practices, and consequential questions that we've chosen to explore.

FOLKMYTH 130 The Folklore of Emergency: Change, Continuity, and Communal Creativity Amid Crisis

CourseID: 208259

Faculty: Lowell Brower

Next Term Offered: 2021 Spring

This course tracks the maneuvers of folklore and expressive culture through crises, conflict zones, and emergency situations. By examining the creative interventions of storytellers, performers, and artists in response to a wide range of profound ruptures—from political upheaval, to genocidal violence, to forced migration, to social revolution, to ecological disaster—the course illuminates and interrogates the powers, potentials, politics, and poetics of cultural performance, communal storytelling, and ritual praxis in the face of destabilizing change. Exploring case studies from Africa to the Arctic, we'll ask how storytellers revive and revise old stories to confront new challenges, how preexisting expressive forms weather unprecedented socio-cultural storms, how individuals and communities attempt to re-narrate themselves after calamity. How do folks turn their afflictions into art, how do they make sense of their sufferings, how do they treat their traumas, and transform their tragedies? What roles can folklore play in reimagining communities, in rehabilitating selves, in remaking worlds? Course work will include close readings of expressive texts, analytic and creative projects, class excursions, and a social engagement option.

FOLKMYTH 132 The Folktale and Its Tellers: The Powers, Politics, and Poetics of Enchantment

CourseID: 213674

Faculty: Lowell Brower

Next Term Offered: 2020 Fall

In defiance of Walter Benjamin's premature 1936 lamentation that "the art of storytelling is coming to an end," this course explores the enduring powers of once upon a time in the here and now. By studying "the folktale" genre cross-culturally and trans-historically, in its myriad local forms and historical manifestations, we will explore what folktales are, how folktales move, what folktales mean, and what folktales do. On our folkloric journey, we'll meet a colorful cast of unlikely heroes, wicked stepmothers, swallowing monsters, and bawdy tricksters, as we visit with storytellers from the cattle kraals of South Africa, to the film studios of Hollywood, to the alleyways of India, to the turf fires of Ireland, to the post-genocide villages of Rwanda. Along the way we'll delve into narrative conventions, formal properties, character studies, common motifs, interpretive frameworks, literary and filmic adaptations, theories of transmission and variation, the poetics of performance, and the politics of storytelling. At the center of our investigations will be the figure of the storyteller – that master of enchantment, wielding words to change the world.

While exploring folktales from academic point of view through scholarly readings and intellectual theorization, we will also engage with storytelling on the ground, through community engagement, embodied performance, sensuous listening, and intersubjective exchange. Experimenting with both folkloristic research and folklore-in-performance, we will gain practical experience in storytelling and story-collecting. Working with local yarn-

spinners, we will try our hands at collaborative folkloristic research: documenting, presenting, and interpreting a contemporary tale-in-performance. In order to better understand the storyteller's art, we will also experiment with tale-telling and embodied performance ourselves.

Course readings will include oral-literary texts, ethnographic studies, artistic performances, theoretical works, creative writing, songs, and films. Course work will include close readings of expressive texts, analytic and creative projects, social engagement activities, and storytelling performances.

FOLKMYTH 160 Scandinavian Folklore: Trolls, Trolldom and the Uses of Tradition

CourseID: 205673

Faculty: Stephen Mitchell

Next Term Offered: 2022 Spring

Examines Nordic folklore and folklife, with an emphasis on narratives, supernatural beliefs, and material culture from the 17th to the early 20th centuries, interpreted against additional sources of information drawn from the archaeological and historical records. Key strategies used in the fields of folklore, literature, and cultural history to interpret such texts discussed in detail, and applied in analyzing our materials. Also carefully considered, the history and development of folklore studies in Scandinavia and the role of folklore (and folklore studies) as, and in, anti-colonial and nation-building movements.

FOLKMYTH 177 Assertive Stitches: Domestic Arts and Public Conflict

CourseID: 205309

Faculty: Felicity Lufkin

Next Term Offered: 2020 Fall

In January 2017, the Pussy Hat Project turned the Women's March on Washington into an eye-catching "sea of pink," but this is not the first time that needlework has played an important role in a political demonstration. Needlework's traditional associations with femininity and domesticity have made it a potent symbol in protests that are critical of traditional gender roles, or that evoke domestic morality to challenge public policy, or in some cases, both. In addition to the 2017 Pussy Hat project, we will look at cases like the ongoing NAMES Project AIDS memorial quilt, and the anti-nuclear-arms Piece Ribbon project of the mid-1980s within broader historical and theoretical contexts of needlework, of protest and demonstration, and of collective and/or community-building artistic practices.

Freshman Seminars

FRSEMR 24Q Biology of Symbiosis: Living Together Can Be Fun!

CourseID: 110305

Faculty:

Next Term Offered: 2020 Fall

This seminar examines the remarkable diversity of symbiotic associations on Earth, their ecology and evolution, and their roles in human health and disease, agriculture, and biotechnology. Symbioses - "living together" - with microbes are ubiquitous in nature, ranging from lichens to the human microbiome. Symbiosis drives evolution, resulting in "new organisms" and charges us to think about biodiversity on a new level. In this freshman seminar, microbial symbioses with animals (including humans), plants, fungi, protists will be discussed, complemented by microscopy and field trips to local environs including Boston Harbor Islands, the New England Aquarium, and your own microbiome.

FRSEMR 51Y Science As News: From the Public Sphere to Social Media

CourseID: 216120

Faculty:

Next Term Offered:

General Education

GENED 1022 Vision and Justice: The Art of Race and American Citizenship

CourseID: 203077

Faculty:

Next Term Offered: 2020 Fall

This course is organized around a guiding question: How has visual representation both limited and liberated our definition of American citizenship and belonging? Today, as we are awash with images, and as social media has allowed us to witness racially motivated injustices with a speed unimaginable until recently, we have had to call upon skills of visual literacy to remain engaged global citizens. This course will allow us to understand the understudied historic roots and contemporary outgrowth of this crucial function of visual literacy for justice in American civic life.

Sequenced chronologically, the lectures are organized into three parts, examining the role of visual representation as Civic Evidence, as Civic Critique, and as Civic Engagement (i.e. movement building and solidarity). Exploring these three categories in turn, topics include: the role of aesthetics for the invention of race, narratives supporting and critiquing Native American "removal," the abolition of transatlantic slavery, immigration, the creation of and destabilization of U.S. segregation, the New Negro Movement, Japanese Internment, and the long Civil Rights movement. Each lecture centers on case studies to show the historic roots of the contemporary interplay between visual representation and justice at these inflection points in the contestation for citizenship in America.

We are fortunate to have invaluable holdings at the Harvard Art Museums and at the Peabody Museum and via Cooper Gallery exhibitions that vividly showcase this contested relationship between art, justice, race, and culture over the course of the nineteenth, twentieth, and twenty-first centuries. Lectures will incorporate material from these holdings and sections will meet at these locations to facilitate object-based study. This course will also include guest lectures from architect Michael Murphy and artist Theaster Gates. Students will leave the course having developed rigorous skills of visual literacy and critical analysis foundational to be engaged global citizens regardless of their concentration or future field of study.

GENED 1090 What Is a Book?

CourseID: 212857

Faculty:

Next Term Offered:

You have spent much of your life since kindergarten (and perhaps earlier) reading books; and you will spend much of your time at Harvard continuing to read them. But do you even know what a "book" is? Is it merely a conveyor, a platform, for presenting a text? Can a book have a use other than being read? Does the nature of the material artifact inscribed with words shape or influence the way you understand their meaning? Do people read a scroll differently than they do a book with pages? Or a digital text on a screen? Why does the physical book persist in the digital age? To answer these questions, we will focus upon "the book of books," namely, the Bible, as it has changed and developed in Jewish and Christian tradition over the last two thousand years. This course is not about the Bible but about the book. The reason we will use the Bible as our primary example of a book is simply because it has undergone more changes as a material artifact than any other book in Western culture. Furthermore, its own impact upon Western book culture has been greater than that of any other book. We will make regular use of the manuscripts and rare printed books in Houghton Library. Direct contact with books as material objects will be the focus of the course.

GENED 1106 Why You Hear What You Hear: The Science of Music and Sound

CourseID: 215676

Faculty:

Next Term Offered:

Sound and music are integral parts of all human cultures, and play critical roles in communications and social interactions. In this course, we study the production, transmission, and perception of sound, with the aim of expanding communication, musical, and artistic horizons. The course includes many class demos and hands on tools for students to explore. Psychoacoustics (the study of how we perceive and interpret sound) is a central theme of the course, providing a lens through which we can better understand the generation, propagation, and analysis of sound. Student-selected projects (with staff consultation) are an important part of the course.

GENED 1108 Global Gandhi: Nonviolent Resistance

CourseID: 212837

Faculty:

Next Term Offered: 2021 Spring

At a time of rising tensions and fractures both within and between nations, what can we learn from the history of nonviolent political action?

This course will examine the life and the afterlives of Mohandas ("Mahatma") Gandhi, who led India's struggle for independence from British colonial rule. Gandhi's practice of nonviolent struggle was shaped by multiple influences—by reading Thoreau and Tolstoy, by his experiences as a migrant Indian lawyer and journalist in South Africa, as well as

by multiple Indian religious traditions. In turn, after his death Gandhi became an icon and an inspiration for political movements around the world, including the Civil Rights movement in the US and the anti-Apartheid struggle in South Africa.

Both in his time and subsequently, Gandhi never went unchallenged. In his lifetime, Gandhi debated proponents of armed insurrection as well as believers in indefinite imperial rule. After Gandhi's assassination in 1948, his continued relevance has been questioned both in India and elsewhere. Just last year, a statue of Gandhi was torn down at the University of Ghana, with students condemning him for having held racist views towards Africans. In India today, some Hindu nationalists condemn Gandhi's attachment to nonviolence while they celebrate his assassin.

In this course, we will delve into Gandhi's political career and his global influence. We will examine his complex—and to our eyes, often disturbing—views on sexuality, race, religion, and equality. We will trace how his example has traveled, and how particular parts of his message have resonated in different global contexts while others have fallen away. Today, Gandhi—or the myth of Gandhi—continues to be invoked in support of an increasingly diverse range of causes, notably by the environmental movement. But how helpful is it to see Gandhi as a pioneer of sustainability and ecological harmony? What relevance does Gandhi have to our lives and to the causes we care about today?

The core aim of this course is to use debates around Gandhi and his legacy to inspire students to ask searching questions about what collective action means to them. They will be confronted with a historical figure that is in some ways deeply familiar, but who becomes more unsettling upon closer study. We will turn in our discussions to the fundamental question of how we deal with difference and disagreement in public life. By starting with the initially unfamiliar context of colonial India, we will clarify and confront issues that are of urgent contemporary importance.

The course will be divided roughly in half, the first half dealing with Gandhi's own life and politics, and the second half with his global influence. In keeping with the aims of the course, assignments will help students to build a broad range of skills. These will include a short piece of creative writing, an in-class negotiation exercise, and an assignment that makes use of archives of visual material relating to the iconography of nonviolent protest.

GENED 1122 The Social Responsibilities of Universities

CourseID: 212853

Faculty:

Next Term Offered:

What do universities owe society? Since their origins in medieval Europe, universities have been granted special privileges because they have been understood to contribute to the social welfare. Do these privileges incur corresponding obligations on universities? Should they influence how universities educate their students or create, share and preserve knowledge or conduct their internal affairs? To explore these questions, we will examine normative texts about higher education's purposes, social

scientific studies of how universities function and examples from the history of U.S. higher education. For each of these three domains—the education of students, the production of knowledge, and the administration of institutions—we will analyze historical cases, such as universities' contribution to the military effort during World War I and universities role in "urban renewal" during the 1950s and '60s, as well as contemporary controversies, such as affirmative action and divestment. Students will be asked to consider these issues from the perspective of university leaders and the interests of the larger society as well as consider what it means to them as members of an academic community.

SOCWORLD 44 Human Trafficking, Slavery and Abolition in the Modern World

CourseID: 127538

Faculty: Orlando Patterson

Next Term Offered:

This course surveys the nature, types and extent of modern servitude, distinguishing broadly between those resulting from international trafficking such as trans-national prostitution, human smuggling into bonded labor, child soldiering and organ trafficking, and more intra-national forms such as debt-bondage and the domestic exploitation of women and other vulnerable groups. Examines the conceptual and theoretical issues raised in attempts to distinguish among these types of differential power relations; the empirical difficulties of estimating the magnitude of what are inherently secretive processes; and the ideological controversies surrounding the subject. Explores ethical, socio-political and practical issues raised by these trends.

Germanic Languages and Literatures

GERMAN 62 Advanced Conversation and Listening

CourseID: 120838

Faculty: Lisa Parkes

Next Term Offered: 2021 Spring

This course is designed to further students' spoken and written German at the advanced level. Students will analyze and practice the stylistic and rhetorical features of various written and spoken genres. By focusing on aspects of contemporary society in the German-speaking countries, students will broaden and refine their vocabulary and idiom, become sensitized to different registers, as well as hone points of grammar.

GERMAN 120 The Age of Goethe

CourseID: 115190

Faculty: Peter Burgard

Next Term Offered: 2021 Spring

Major movements in German literature and thought from the mid-18th to early 19th century: Enlightenment, Sentimentalism, Storm and Stress, Classicism, Romanticism. Readings include Kant, Klopstock, Lessing, Goethe, Lenz, Schiller, Hölderlin, Kleist, Schlegel, Novalis. This course meets 12-2:15.

GERMAN 140 German Social Thought from Nietzsche to Habermas

CourseID: 203280

Faculty: Peter Gordon

Next Term Offered: 2020 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 140 German Social Thought, Nietzsche to Habermas

CourseID: 126545

Faculty: Peter Gordon

Next Term Offered: 2020 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 145 Repression and Expression: Sexuality, Gender, and Language in Fin-de-siècle Literature and Art

CourseID: 116496

Faculty: Peter Burgard

Next Term Offered: 2020 Fall

Examines German and Austrian art and literature of the Turn-of-the-Century (c. 1880-1920) with a focus on the dominant topics of sexuality, gender, and language that are articulated theoretically in the work of Nietzsche and Freud and insistently exemplified thematically and formally in both the art and literature of the age.

GERMAN 164 Shaping National Identity: Cultural Trauma in Germany and the U.S.

CourseID: 207646

Faculty: Nicole Suetterlin

Next Term Offered: 2021 Spring

Explores how the catastrophic events of World War II, persecution, and segregation have shaped the identity of present-day Germany and the U.S., respectively. The course focuses on the so-called "ethical turn in memory culture," a recent global shift in remembrance strategies that initiated an unprecedented emphasis on commemorating the victims rather than the heroes of war, violence, and injustice. Post-1989 Germany proved a leader in this shift, though its controversial "memory politics" (Erinnerungspolitik) has faced increasing criticism from right-wing movements in recent years. Do we find a similar dynamic in the way the U.S. addresses its own traumatic past? What are the strategies by which a cultural identity has been reconstituted in post-Holocaust Germany and in post-segregation America? What challenges lie still ahead of us in this ongoing process of reconstitution and reconciliation? The goal of this course is to examine how the new memory ethics actively shapes the way in which Germans and Americans construct their identity today. To this end we investigate discussions of the Holocaust, slavery and segregation in German and American literature, film, art, journalism, and philosophy. Reading materials include Christa Wolf, Günter Grass, W.G. Sebald, James Baldwin, Toni Morrison, Hannah Arendt, Judith Butler, Bryan Stevenson.

GERMAN 207 Digital Medieval Mary Magdalene: Paleography and Text-Editing

CourseID: 205187

Faculty: Racha Kirakosian

Next Term Offered: 2021 Spring

The goal of this course is two-fold: in terms of research results, we will work on an

interactive online edition of a medieval Mary Magdalene legend transmitted in the Lower Rhine area; in terms of teaching practice, it will train graduate and undergraduate students in paleography, editing, and coding. Source material includes Medieval Latin, Middle Dutch, and other medieval Germanic dialects.

GERMAN 267 Dichten und Denken: Heidegger and the Poets.

CourseID: 207650

Faculty: John T. Hamilton

Next Term Offered: 2021 Spring

The seminar reads Heidegger's poetological essays both in relation to his larger philosophical project and against the poets he studies: Hölderlin, Mörike, Trakl, and Rilke. Topics include: the nature or essence of poetic discourse; the tension between philosophy and poetry; phenomenology and philosophical hermeneutics; surface reading and depth; the poetics of etymology; and other related themes. Readings in German, with discussion in English.

History of Art and Architecture

HAA 176X Prints in 20th C, America

CourseID: 212809

Faculty:

Next Term Offered:

HAA 198G Global Art: Comparative Approaches in Art History & Ethnography

CourseID: 215884

Faculty:

Next Term Offered:

The course explores art in global context, among those traditions in Africa, Oceania, and Native America, fields shared by both art history and anthropology. How does each discipline address local perspectives on art? Readings will be drawn from historical and more recent study. Issues addressed will be: approaches to field analysis, comparative perspectives, the role of history, artists, art markets, museums. Students will gain an understanding of the global art forms under consideration, and different disciplinary approaches, as well as questions important to the understanding of visual engagement.

HAA 272Z Post WW II European Art (Part II): Seminar

CourseID: 123274

Faculty:

Next Term Offered:

This term: Great Britain, Scandinavia, Austria, and the Benelux countries. Addresses the artistic responses to the legacies of Surrealism, to American mass culture, and to the impact of Fascist domination.

Human Evolutionary Biology

HEB 1250 Genetics and Human Evolution

CourseID: 202993

Faculty:

Next Term Offered: 2020 Fall

This course will explore major questions in human evolution from a genetic perspective. Students will learn how genetic data are used to reconstruct the past, to identify unique human adaptations and to understand relationships among living and archaic hominin species.

HEB 1323 The Science and History of Alcohol

CourseID: 205495

Faculty:

Next Term Offered: 2020 Fall

The course is an introduction to the chemistry, biochemistry and physiological impacts of alcohol use. We will explore the use of alcohol by other animals, including nonhuman primates and rodents. A historical perspective on human alcohol use will be woven into the scientific aspects.

HEB 1327 Ancient Diseases

CourseID: 208136

Faculty:

Next Term Offered: 2021 Spring

The seminar explores the evidence for diseases in antiquity with an emphasis on environmental determinants, modes of transmission, basic biology of organisms involved, and direct evidence from the fossil record.

HEB 1410 Gut Microbiome and Human Health

CourseID: 204010

Faculty:

Next Term Offered: 2020 Fall

Microorganisms residing in the human gastrointestinal tract outnumber our own cells and together encode at least 100 times as many unique genes. In this research seminar, we explore gut microbial contributions to human physiology in states of health and disease. We consider the pivotal roles of the gut microbiota in digestion, detoxification, energy regulation, and immunity, and discuss emerging evidence for the microbial modulation of risks and/or treatment of metabolic syndrome, cardiovascular disease, cancer, and

behavioral disorders. Students will be introduced to bench and bioinformatics techniques used to investigate gut microbial communities, allowing students to pilot projects that dovetail with topics discussed in seminar.

HEB 1417 Diet and Exercise

CourseID: 205638

Faculty:

Next Term Offered: 2020 Fall

How do diet and exercise —both past and present— affect human health? How does an evolutionary medical perspective help make sense of the confusing, often contradictory literature on how factors like sugar, salt, fat, obesity, physical inactivity, high intensity exercise and shoes affect the human body? In this seminar, weekly readings and discussion will be used to explore how ancestral diets and forms of physical activity have shaped human anatomy and physiology, and how differences between past and present diets and forms of exercise may contribute to illness, mortality, and variations in reproductive success. In doing so, we challenge popular conceptions of what it means to be "healthy."

HEB 1610 Genes and Human Adaptations

CourseID: 203909

Faculty:

Next Term Offered: 2021 Spring

Natural selection produces genetic changes that make a population better able to reproduce and survive in an ever-changing environment, a process known as adaptation. We will examine the genetic bases of adaptations common to all humans (since divergence from our closest primate relatives) and those that have occurred in particular populations and individuals as humans dispersed around the globe and responded to the challenges of novel environments, diets, parasites, and infectious diseases, including those with potential biomedical relevance. We will focus on the genetic evidence for adaptations as detected from the signals left by natural selection on the genome, including polygenic traits. To place human adaptations in broader evolutionary perspective, we will investigate adaptations in diverse non-human species (e.g., mice, *Drosophila*, stickleback fish) where the genetic and genomic bases of adaptation are often known more completely. Lastly, we will consider how artificial selection compares with adaptation, using dog domestication as an example, and how climate change impacts the genetic basis of phenotypic traits.

HEB 2480 Human Nature

CourseID: 203596

Faculty:

Next Term Offered: 2018 Fall

This course will examine the evolutionary origins, biological foundations, and psychology

underlying human behaviors including kinship, sexuality, incest, parental love, xenophobia, status, homicide, warfare, culture, cooking, language, and religion. Using a comparative approach, we will contextualize human behavior by examining both studies of non-human primates, especially chimpanzees, and the full breadth of human diversity, including both ethnographic and experimental data from hunter-gatherers, agriculturalists, and—the most unusual of all—people from industrialized societies.

History

HIST 13E History of Modern Mexico

CourseID: 159613

Faculty: Kirsten Weld

Next Term Offered: 2021 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 14H The History of Boston Through Its Built and Natural Environments

CourseID: 207837

Faculty: Zachary Nowak

Next Term Offered: 2021 Spring

This class challenges students to examine the city around them and connect its social and economic history with its shoreline, glacial hills, city parks, and segregated neighborhoods. Our subject of study will be the city of Boston as well as the inhabitants and builders of the city's historical landscapes. We will see how the city's natural and built environments shaped its history, and how Bostonians of all walks of life made and remade the city—sometimes together, sometimes fighting bitterly. Assignments include a field journal, short essays, and a group wiki entry. There are two field trips, one a "toxic tour" of Dorchester.

HIST 60O American Indian History in Four Acts

CourseID: 156667

Faculty: Philip Deloria

Next Term Offered: 2021 Fall

Both scholars and tribal people (not mutually exclusive!) have found it useful to structure American Indian history around four broad chronological categories emerging from the formation of United States Indian policy: *Treatymaking, Indian Removal, Land Allotment, and Self-Determination*. This seminar will use this "four acts" structure to offer a broad overview of American Indian history, while also considering the limitations of such category-making, including the decentering of Indian people and the blunting of historical complexity. Engaged with primary sources and historiography, the course will also allow students to engage in original research in the field of American Indian history.

HIST 79E Commodities in International History

CourseID: 125503

Faculty: Alison Frank Johnson

Next Term Offered: 2021 Fall

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 82B Fin-de-Siècle Vienna

CourseID: 120893

Faculty: Alison Frank Johnson

Next Term Offered: 2021 Spring

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 88B Medieval History and Cinema

CourseID: 126624

Faculty: Cemal Kafadar

Next Term Offered: 2021 Fall

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

HIST 89J The United States and China: Opium War to the Present

CourseID: 107972

Faculty: Erez Manela

Next Term Offered: 2021 Fall

This research seminar will focus on the history of Sino-American relations and interactions since the Opium War (1840s). It will examine major episodes such as the Boxer intervention, the first and second world wars, the Korea and Vietnam wars, the Mao-Nixon rapprochement, and the post-Mao transformations, and explore central

themes such as immigration, trade, culture, diplomacy, and security.

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

CourseID: 109928

Faculty: Ann Blair

Next Term Offered: 2021 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 97E "What is Imperial History?"

CourseID: 109930

Faculty:

Next Term Offered: 2021 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 97H "What is Urban History?"

CourseID: 110445

Faculty: Elizabeth Hinton

Next Term Offered: 2022 Spring

This section will explore the methods historians have used to understand the political, economic, and social development of cities and urban life over the past four centuries. How have historians approached the study of metropolitan regions and their inhabitants? What methods have they used to examine the ways in which social and spatial forms differ by time and place? How does urban history provide a unique vantage to analyze issues of class, ethnicity, migration, race, and gender? Readings and discussions will give special attention to cities and transformations in the United States, but we will draw comparative examples from the histories of urban centers across the globe.

HIST 97I What is Biography?

CourseID: 110446
Faculty: Jill Lepore
Next Term Offered: 2021 Spring

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

HIST 97N "What is Gender History?"

CourseID: 207521
Faculty:
Next Term Offered: 2021 Spring

This course examines how the historical framework of "gender" emerged from women's history to a field that explores relational dynamics and examines the processes by which female and male, feminine, and masculine are constituted in culturally and historically specific ways. We will look at how historians have evaluated gender formations and at the same time how they use the concept to understand historical change and processes. The course will also examine the methods of gender historians, the kinds of sources they use, research strategies, and how their methodologies intersect with other frameworks, namely those of class, race, ethnicity, religion, and citizenship.

HIST 97P "What is Indigenous History?"

CourseID: 215835
Faculty:
Next Term Offered:

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

CourseID: 204982
Faculty: Annette Gordon-Reed
Next Term Offered: 2021 Spring

This course will explore the creation of the United States after the conclusion of the American Revolutionary War through the presidency of Andrew Jackson. We will focus on politics, social and cultural life during this period. We will discuss, among other things, the concepts of republicanism and federalism, the French and Haitian Revolutions' effect on politics in the 1790s, Jefferson versus Hamilton, slavery, and attitudes toward Native Americans and women. Other topics: Jefferson's election in 1800, the War of 1812, the initial conflicts over slavery, the calls for a "white man's government" and the overall effects of Jackson's presidency.

HIST 1006 Native American and Indigenous Studies: An Introduction

CourseID: 207523

Faculty: Philip Deloria

Next Term Offered: 2020 Fall

Though American Indian people make up 1.7% of the U.S. population, their importance outweighs the census numbers. Native American history and politics define critical issues in law, energy, land management, and government, while the culture industries inevitably confront the curious hold that indigenous people have on American culture. American conquest and colonialism invite connection and comparison across a global scale, particularly in settler states such as Canada, Australia, and Aotearoa/New Zealand. This course offers a broad introductory survey of these and other issues as it explores the development and current state of the history-based interdisciplinary field known as Native American and indigenous Studies.

HIST 1008 The State of Israel in Comparative Perspective

CourseID: 203044

Faculty: Derek Penslar

Next Term Offered: 2021 Spring

This course addresses controversies surrounding the history of Zionism and the state of Israel. Central to these controversies are questions of comparison. Is Zionism a movement for collective liberation, like national movements of stateless or colonized peoples, or a variety of western colonialism? Does Israeli statecraft operate within a normal geopolitical spectrum, or is it unusually expansionist and aggressive? This course seeks to answer such questions through a broad and deep analysis that spans the 19th and 20th centuries, pays close attention to Israel's social and cultural history as well as high politics and military affairs, and imbeds modern Israel into multiple global contexts.

HIST 1035 Byzantine Civilization

CourseID: 108059

Faculty: Dimiter Angelov

Next Term Offered: 2021 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 1039 First Empires: Power and Propaganda in the Ancient World

CourseID: 159593

Faculty: Gabriel Pizzorno

Next Term Offered: 2021 Spring

This course traces the continuum of socio-political and cultural developments in the Near East that led, over the course of three millennia, from stateless societies to the emergence of Assyria as the first empire in history. The class focuses on the long-term history of power centralisation, and the role of ideology and propaganda in overcoming resistance to this concentration of authority. The course material covers a broad evidentiary and chronological range. We will employ textual, visual, and archaeological sources to explore the evolution of the political and cultural landscape in the Near East and the Mediterranean, from the emergence of the first city-states in the late fourth millennium BCE to the early development of Roman imperial ideology around the start of the Common Era.

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

CourseID: 160977

Faculty: Fredrik Logevall

Next Term Offered: 2021 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: 2022 Spring

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

HIST 1284 Revolutionary Eurasia, 1905-1949

CourseID: 205075

Faculty: Terry Martin

Next Term Offered: 2021 Fall

Analyzes the wave of revolutions in the Russian, Ottoman, Persian, and Chinese imperial spaces from 1905 to 1949; the constitutional revolutions of 1905-1912; the 1917 Russian revolution and its Eurasian impact; revolution from above by Stalin, Ataturk, Reza Shah, and Chiang Kai-Shek; the communization of eastern Europe and the 1949 Chinese revolution.

HIST 1301 Western Intellectual History II: The Prehistory of Modern Thought

CourseID: 119534

Faculty: James Hankins

Next Term Offered: 2021 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: 2020 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: 2021 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 1405 American Legal History, 1776-1865

CourseID: 127948

Faculty: Annette Gordon-Reed

Next Term Offered: 2020 Fall

This course will trace the development of the American legal and political system from 1776 to 1865. We will discuss the formation of state constitutions and the Federal Constitution, slavery and law, the development of American private law, the "Revolution of 1800" and the "Age of Jefferson", the mechanisms of westward expansion, the "Age of Jackson", and the coming of the Civil War.

HIST 1511 Latin America and the United States

CourseID: 108530

Faculty: Kirsten Weld

Next Term Offered: 2021 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 1602 Modern China

CourseID: 109621

Faculty: Arunabh Ghosh

Next Term Offered: 2021 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 1623 Japan in the Modern World

CourseID: 124213

Faculty: Andrew Gordon

Next Term Offered: 2020 Fall

Explores Japan's emergence as a world power and the Japanese experience of modernity across the twentieth century. Examines politics, social movements, and culture of the imperial era. Considers the experience of empire, war and its surprising aftermath: the "rise and fall" of Japan's world beating economy, and great social and cultural transformation. Offers historical context for contemporary issues ranging from economic crisis and inequality to tension with Asian neighbors.

HIST 1878B Ottoman State and Society II (1550-1920)

CourseID: 148158

Faculty: Cemal Kafadar

Next Term Offered: 2021 Fall

Surveys the transformations of the Ottoman order in the Middle East and southeastern Europe in the early modern era and in the long nineteenth century until the demise of the state. Topics include changes in the conduct of state; social and religious movements; the impact of the new world economy and new trade routes; relations with Europe; emergence of nationalism; the 'Eastern Question.' Ethnic and religious diversity, rural society, urban popular culture, guilds, gender and family life are also examined. The importance of this era for understanding today's Middle East is stressed.

HIST 1900 Feminisms and Pornography, c 1975-1995

CourseID: 205054

Faculty: Jane Kamensky

Next Term Offered: 2020 Fall

This course focuses on the conflict among US feminists over pornography, a legal and cultural struggle that continues to inform feminist thought. Students will write article-length original essays based on archival research in the collections of the Schlesinger Library. The class meets twice weekly, once in traditional seminar format and the other time in laboratory format at the Schlesinger. In addition to their individual research and collaborative work with the class as a whole, students will participate in planning a daylong workshop on our topic, to be held the following semester, on Friday March 23, 2018.

HIST 1908 Racial Capitalism and the Black Radical Tradition

CourseID: 205076

Faculty: Vincent Brown

Next Term Offered: 2020 Fall

This course explores a history of radical responses to a world system dependent on war, empire, enslavement, and genocide. Guided by the writings of such scholars as W.E.B. Du Bois, C.L.R. James, Eric Williams, Walter Rodney, and Cedric Robinson, among others, students will examine the history of racial capitalism through the rebellions it has inspired, considering them as crucial occasions in the making of a black radical tradition.

HIST 1911 Pacific History

CourseID: 107925

Faculty: David Armitage

Next Term Offered: 2021 Fall

The Pacific Ocean covers a third of the Earth's surface and one-third of humanity lives

on its shores and islands, from Russia to New Zealand and from Southeast Asia to South America. This seminar introduces students to oceanic and global history via works in Pacific history by scholars of the Pacific Islands, Asia, Australasia, Europe, and the Americas. Themes covered include cultural encounters, exploration, migration, history of science, geopolitics, and economic history.

HIST 1916 The History of Evidence

CourseID: 110442

Faculty: Jill Lepore

Next Term Offered: 2021 Spring

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

HIST 1924 Violence, Substances and Mental Illness: African Perspectives

CourseID: 159556

Faculty: Emmanuel Akyeampong

Next Term Offered: 2022 Spring

An introduction to African perspectives on mental illness, exploring the development and practice of psychiatry as a medical field in Africa, examining the grey areas within psychiatric knowledge, and engaging the ongoing debates about the interface between race, culture and psychiatry. Will review African therapeutic systems; witchcraft, causation and mental health; substance abuse; violence and mental illness; and more recent links between HIV/AIDS, loss and depression.

HIST 1930 Literature and Social History: A View from Brazil

CourseID: 159656

Faculty: Sidney Chalhoub

Next Term Offered: 2022 Spring

The objective of this course is to study major authors and works of nineteenth-century Brazilian fiction. Writing fiction from a spot deemed to be in the "periphery" of the western world meant a difficult and complex engagement with European literary and intellectual traditions. The course will focus primarily on the evidence regarding changes in the politics of social dominance in the period –from slavery and paternalism to the worlds and meanings of "free" labor. Questions of class, gender and race in the general

context of defining and setting new limits of citizenship rights will be emphasized.

HIST 1931 Slavery, Disease and Race: A View from Brazil

CourseID: 159657

Faculty: Sidney Chalhoub

Next Term Offered: 2021 Spring

Slavery and emancipation were major issues in nineteenth-century Brazilian history. In the 1870's and 1880's, with the drama of emancipation unfolding, yellow fever meant death to European immigrants and a major obstacle to achieving a social configuration that valued the whitening ideal and excluded people of African descent from social and economic opportunities. Although the primary focus of this course is Brazil, students may opt to write a final paper that compares an aspect of the social history of slavery and/or race and/or disease in Brazil and another nation or region. Class materials will include a range of primary sources.

HIST 1937 Social Revolutions in Latin America

CourseID: 159555

Faculty: Alejandro de la Fuente

Next Term Offered: 2020 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 1939 Economic History of Modern China

CourseID: 207525

Faculty: Arunabh Ghosh

Next Term Offered: 2021 Fall

This conference course offers a close examination of the economic history of modern China set against the background of major debates in the field of world economic history and within the field of modern Chinese history. The approximate time frame covered is from the late eighteenth century to the present. Prior coursework in Chinese history (in particular on modern China) is recommended but not necessary.

HIST 2006 Readings in Native American and Indigenous Studies: Seminar

CourseID: 206979

Faculty: Philip Deloria

Next Term Offered: 2021 Spring

This course offers a survey of the historiography of Native American and Indigenous Studies. Centered on six themes—Power and the Middle Ground, Borderlands, Settler Colonialism and Sovereignty, Race and Slavery, Modernity and Futurity, and Global and Comparative Indigeneity—the course is designed to allow explorations into additional terrain, including gender and sexuality, law and policy, and comparative ethnic studies, among others. Core readings will focus on recently published scholarship. To explore field trajectories, scholarly exchange, and indigenous politics, members of the class will research and write historiographical essays that will be shared collectively, and form the basis for seminar discussion.

HIST 2014 Historiography of the Modern Middle East: Proseminar

CourseID: 208063

Faculty: Rosie Bsheer

Next Term Offered: 2021 Fall

This graduate seminar aims to familiarize students with some of the major debates in the field of modern Middle East history and pays careful attention to competing theoretical frameworks and methodological approaches. It will look at some of the most important literature on Orientalism, area studies, Ottoman rule, colonialism, nationalism, gender, and religion. This course will prepare doctoral students for the comprehensive exam in the field of modern Middle East history but is also suitable to all PhD students interested in these thematic areas of study. It will also lay the groundwork for teaching courses on the modern Middle East.

HIST 2050 Medieval Societies and Cultures: Proseminar

CourseID: 143662

Faculty: Daniel Smail

Next Term Offered: 2020 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: 2021 Fall

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

HIST 2260 Central Europe: Seminar

CourseID: 121634
Faculty: Alison Frank Johnson
Next Term Offered: 2020 Fall

Major themes include nationalism, communism, the `Polish question,' the `Jewish question,' the political and economic viability of the Habsburg Empire, cultural exchange and diplomatic relations between Austria, Germany and the Russian Empire/Soviet Union.

HIST 2272 The Soviet Union: Seminar

CourseID: 122848
Faculty: Terry Martin
Next Term Offered: 2022 Spring

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

HIST 2300 Methods in Intellectual History: Proseminar

CourseID: 124505
Faculty: David Armitage
Next Term Offered: 2020 Fall

Introduction to advanced research in intellectual history with special reference to philosophy and political thought. Readings will include primary and secondary materials drawn from East-Asian and Euro-American traditions. 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: 2021 Spring

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

HIST 2425 Black Ops: Militias, Small Wars, and Insurrections in Africa and its Diaspora: Seminar

CourseID: 207535
Faculty: Vincent Brown
Next Term Offered: 2022 Fall

Focusing on the history of imperial expansion, slaving wars, *jihads*, and liberation

struggles in Africa and its diaspora, this seminar considers conflicts dispersed over wide areas with largely undefined battle lines and blurred distinctions between civilians and combatants. In addition to classic issues of military organization, weaponry, tactics, and strategy, objects of study include the following: the definition, scope, and scale of collective violence; militarism as a social phenomenon; the relation between militancy and sex, gender, and sexuality; how violence articulates with the politics of belonging and difference; and military ecology and the built environment.

HIST 2450 History of Schooling in America: Seminar

CourseID: 126559

Faculty: Julie Reuben

Next Term Offered: 2021 Spring

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

HIST 2463 Graduate Readings in 20th-Century African-American History: Seminar

CourseID: 122157

Faculty: Evelyn Brooks Higginbotham

Next Term Offered: 2021 Fall

In this graduate seminar we will read books and articles on topics that reflect the diverse experiences and ideologies of African Americans in the twentieth century. We will discuss and analyze differing historical interpretations and methodologies. We will also explore a variety of historical writings, e.g., biography, intellectual history, race and gender studies, labor history, transnational history, etc. Students are required to write a short report on a recommended reading each week, in addition to being prepared to discuss the required reading. A historiographic paper will be due at the end of the term.

HIST 2511 Rethinking the Archive: Proseminar

CourseID: 109563

Faculty: Kirsten Weld

Next Term Offered: 2022 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: Tamar Herzog

Next Term Offered: 2020 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 Adminstrating Differences in Latin America: Historical Approaches

CourseID: 203326

Faculty: Tamar Herzog

Next Term Offered: 2021 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: 2021 Fall

This Pro-Seminar will examine developments in the field of modern Chinese history, with a particular focus on the twentieth century. Our principal goal is to gain some familiarity with the historical debates and methodological approaches that have given shaped to the field. Readings will aim to achieve a balance between classics in the field and contemporary scholarship. Topics covered include empire and semi-colonialism, rebellion and revolution, nationalism, civil society and public sphere, economic development, war, science and technology, foreign relations, and foreign relations.

This Pro-Seminar is particularly recommended for students planning an examination field in modern Chinese history. Reading knowledge of Chinese is recommended but not

a required; students must have some prior coursework in Chinese history.

HIST 2639 The History of the People's Republic of China: Research Seminar

CourseID: 202996

Faculty: Arunabh Ghosh

Next Term Offered: 2020 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: 2021 Spring

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

HIST 2690 Asia in the Modern World: Seminar

CourseID: 205131

Faculty: Sugata Bose

Next Term Offered: 2020 Fall

This graduate seminar investigates the contemporary rise of Asia in historical context with a focus on comparisons and connections between India and China.

HIST 2707 Comparative Slavery & the Law: Africa, Latin America, & the US: Seminar

CourseID: 159554

Faculty: Emmanuel Akyeampong

Next Term Offered: 2021 Fall

This seminar surveys the booming historiographies of slavery and the law in Latin America, the United States, and Africa. Earlier generations of scholars relied heavily on European legal traditions to draw sharp contrasts between U.S. and Latin American slavery. The most recent scholarship, however, approaches the legal history of slavery through slaves' legal initiatives and actions. These initiatives were probably informed by the Africans' legal cultures, as many of them came from societies where slavery was practiced. Our seminar puts African legal regimes (customary law, Islamic law) at the center of our explorations concerning slaves' legal actions in the Americas.

HIST 2708 Sources, Methodology, and Themes in African History: Seminar

CourseID: 117941

Faculty: Emmanuel Akyeampong

Next Term Offered: 2022 Spring

Seminar to equip graduate students with the necessary tools for archival research and fieldwork, as well as to introduce them to recent approaches in the historiography.

HIST 2709 Themes in Modern Sub-Saharan African History: Proseminar

CourseID: 116161

Faculty: Caroline Elkins

Next Term Offered: 2020 Fall

An in-depth study of the major themes in sub-Saharan African history from the mid-19th century to the present, including the scholarship and debates on the changing relationship between Africa and the West.

HIST 2725 History and Anthropology: Seminar

CourseID: 110313

Faculty: Vincent Brown

Next Term Offered: 2021 Spring

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

HIST 2885 Introduction to Archival Research in Ottoman History: Proseminar

CourseID: 120701

Faculty: Cemal Kafadar

Next Term Offered: 2022 Spring

A survey of archival collections related to Ottoman history. Introduction to the archives of

the central government, pious endowments, provincial administrations, and court records.

HIST 2968 History and Economics: Proseminar

CourseID: 124297

Faculty: Sunil Amrith

Next Term Offered: 2020 Fall

Examines approaches to the history of economic thought, economic history and the history of economic life through the exploration of particular topics including the political economy of empire, energy, and information.

History and Literature

HIST-LIT 90AN God Save the Queen! Ruling Women from Rome to the Renaissance

CourseID: 127654

Faculty:

Next Term Offered:

This seminar will explore female rulership in Europe from the late Roman empire to the age of Elizabeth I. Discussion of varied texts and images (most of them primary sources in translation) will reveal the role of queens within their societies, their relationship to broader social and cultural institutions such as the Christian Church, and the ways in which queens were celebrated, criticized, and imagined by writers and artists of their time.

HIST-LIT 90EC A Cultural History of the Internet

CourseID: 216225

Faculty:

Next Term Offered:

This course introduces students to the hippies, hobbyists, hackers, cyberspace explorers, and Second Lifers who embraced digital networks as a means to transcend geographic limitations and connect humans in virtual communities online since the late 1960s. We will also examine how corporate and government entities responded to the digital utopian ethos of egalitarianism, communalism, and anarchy. We will explore this history against the backdrop of the late Cold War, the Reagan era, neoliberalism and globalization, Y2K, 9/11, the 2008 global financial crisis, and 2020, and through the lens of race, gender, class, and subculture. Film, music, art, archived websites, memoirs, manifestos, fiction, and non-fiction will shed light on the ways popular culture shaped and was shaped by the rise of networked computing. While course materials are primarily rooted in the United States, we will consider both transnational connections as well as attempts to forge supranational networks in cyberspace.

HIST-LIT 90ED Music and Resistance in the Modern United States

CourseID: 216241

Faculty:

Next Term Offered:

While music is often touted as a "universal language" that generates social harmony, it also expresses dissent from and resistance to the status quo. This course asks how music works as a type of social and political resistance, and what aesthetic and formal qualities enable it to do so. We will explore the relationship between music and resistance in the twentieth- and twenty-first-century United States, in contexts that range

from Ma Rainey's defiant blues songs to Lin-Manuel Miranda's blockbuster musical Hamilton. Focusing especially (but not exclusively) on African American music and musicians, we will consider how music informs modes of resistance tied to race, class, gender, and sexuality. In addition to asking how music can resist extant arrangements of power, we will also consider the types of futures that music can imagine. By examining an array of historical sources, theoretical texts, and sonic archives, students will develop the ability to analyze music from a critical and interdisciplinary perspective. There will also be opportunities for hands-on and creative projects.

HIST-LIT 90EE Fighting the Climate Crisis

CourseID: 216227

Faculty:

Next Term Offered:

Humanity currently faces a rapidly worsening environmental situation in light of the global climate crisis: rising seas and ocean acidification, deforestation and ecosystem collapse, and species extinction at alarming rates. Behind these worrying developments, however, lies a human history of imperialism, industrialization, and globalization that remains inextricable from the so-called natural world. Recent efforts in climate justice, such as Extinction Rebellion and the Green New Deal, have sought to counter this history by imagining new visions for sustainable societies. In this course, students will explore the ways that storytelling and history intersect with the discourse on the global climate crisis, as well as the social responsibilities of artists, businesses, and citizens in effecting climate justice. The course is divided into three units: the first covers early environmental movements from 1945 to 1970, leading to the establishment of the first Earth Day; the second covers 1971 to 2001, from the 1970s oil crises to the terror attacks of September 11th, 2001; and the final unit looks at the period from 2002 to the present, tracing the increasing politicization of climate change and culminating with the United States' withdrawal from the Paris Climate Agreement. Throughout these units, we will study materials from environmental history, politics, and fiction by writers such as Ursula K. Le Guin, Octavia Butler, and Ted Chiang. While exploring these cultural and literary documents, students will reflect on historical outcomes and unrealized possibilities, as well as the delicate connections between past, present, and future—how what we do today affects what happens tomorrow.

HIST-LIT 90EF White Rage: Progress and Backlash in American History

CourseID: 216228

Faculty:

Next Term Offered:

The course examines how people struggled to achieve the full-promise of freedom throughout American history. The organizing theme of the course is the cycle of progress and retrenchment, of revolutions and counter-revolutions, that has come to define American life. The course begins with enslaved people's struggles for freedom and the white planters who created a form of representative government to maintain the

institution. From there, we proceed chronologically through American history to the present, exploring changing notions of community, strategies used to gain freedom, and the range of violent responses that groups seeking liberation encountered. Our readings will include a play by Suzan Lori-Parks, manifestos by white power advocates, George Schulyer's novel *Black No More*, literary criticism by Toni Morrison, political speeches, oral history interviews with formerly enslaved people and migrant workers, among many other historical and literary sources. While race has been an important element to every debate about political representation in American history, most debates represented overlapping interests of race, gender, class, and even sexuality. As such, we will take up each issue throughout the semester. In a presidential election cycle dominated by white rage, we will study how it has shaped American history in the past and its lasting consequences in the present.

HIST-LIT 90EG Human Rights and Ethnic Studies

CourseID: 216229

Faculty:

Next Term Offered:

Human rights is often considered a bulwark against authoritarianism and fascism, our "last utopia," but others have critiqued human rights as either a new form of imperialism or as an imposition of western values on the rest of the world. These debates demonstrate that human rights is both a powerful way of calling attention to matters of injustice as well as an idea that is itself the subject of critique. How did this come to be? In this class, we will track the increased attention on human rights in the latter half of the 20th century. Together we will explore how organizers, writers, and intellectuals in the tradition of what we broadly call Ethnic Studies have engaged the dilemmas of human rights while trying to work towards a more just world. We will cover how human rights became an important diplomatic tool during the Cold War, exploring the rise of institutions such as the United Nations and Human Rights Watch. However, we will also engage alternative, grassroots histories of human rights. For example, we will discuss how queer writers and writers of color offered their own emancipatory visions of rights. We will look at social movements such as the Third World Liberation Front Strikes of the late 1960s as calls for more expansive notions of rights. Overall, this class will ask us to confront how even the notion of "rights" has a history. It will ask us to consider that the idea that some have "rights" is often accompanied by others' "rightlessness." Ultimately, this class will provide a space for us to consider the question that activists have long asked: can rights save us?

HIST-LIT 90EH Asian American Genre Fictions

CourseID: 216230

Faculty:

Next Term Offered:

There was an explosion of works by Asian American authors on the American publishing scene near the turn of the millennium, an unexpected consequence of the Immigration

and Naturalization Act of 1965, which brought an influx of immigrants from Asia and dramatically altered the demographic composition of the U.S. The descendants of these post-1965 immigrants comprise a diverse group of Asian American authors, and in this course, we study the many different genres and forms of contemporary Asian American fiction. Asian American literature is often associated with certain themes (inter-generational conflict in families, fraught nature of immigrant identity, etc.), but this course instead emphasizes the formal qualities of contemporary Asian American writing alongside their domestic and global historical contexts. We will consider, for example, the spy narratives of Chang-rae Lee's *Native Speaker* and Viet Thanh Nguyen's *The Sympathizer*; the noir style of Suki Kim's *The Interpreter*, a murder mystery; "corporate novels" like Ling Ma's *Severance*; or works that question the expectations placed onto racialized authors, like Nam Le's short story "Love and Honor and Pity and Pride and Compassion and Sacrifice." What are the aesthetic characteristics of these works? What, if any, are their political investments? In asking these questions, this course seeks to understand, from our vantage point, just what about them is "Asian American" anyway?

HIST-LIT 90EI Islam in Early America

CourseID: 216231

Faculty:

Next Term Offered:

Muslims first arrived on the shores of the Americas at the turn of the sixteenth century, yet their long history in the western hemisphere has been largely forgotten. For centuries Islam was the second-most widely practiced monotheistic religion in the Americas, after Catholicism; some Muslims came from Spain to escape persecution at the hands of the Inquisition for continuing to practice their religion, while others were taken captive and forcibly crammed into the hulls of ships on the West African coast and transported across the Atlantic, where, in 1522, they participated in the first uprising of enslaved men and women in the Americas on a sugar plantation on the island of Hispaniola (the site of present-day Haiti and the Dominican Republic). From the very beginning of European imperialism in the Atlantic World, Muslims were integral to the history of what scholars call "Vast Early America." Their stories are entwined with the larger threads of early American history including those of missionary work, European interimperial conflict, slavery, the genocide of Native peoples, and capitalism. This course unfolds in four units that will take us from the first early modern European encounters with Islam to the stories of Muslim agents of European conquest and Muslim resistance to enslavement in the Caribbean and US South, to how the Founding Fathers thought about Islam and the status of Muslims in the early Republic. We will work with sources ranging from Laila Lalami's 2014 novel, *The Moor's Account*, to Thomas Jefferson's copy of the Qur'an, as well as the autobiography of Omar Ibn Said written in Arabic from a jail cell in South Carolina and Rhiannon Giddens's new opera based on Said's story.

HIST-LIT 90EJ Espionage: A Cultural History

CourseID: 216232

Faculty:

Next Term Offered:

Over the course of the twentieth century the spy thriller became a central part of our culture, changing the way people imagined how the state operates in secret. Why are we attracted to stories of paranoia and conspiracy? What is the history of this genre, and how is it intertwined with the history of espionage? This course will consider the historical origins of spying, exploring how the modern intelligence agencies had their origins in the project of empire. The bulk of the course will be divided into three units. The first will consider the British spy panic of the early twentieth century, in which a wave of pseudo-realistic espionage fiction, including from Erskine Childers, Baroness Orczy and William le Queux, contributed to an atmosphere of panic and paranoia about Germany ahead of the First World War. The second unit focuses on the central role played by espionage in the Cold War, from the Cambridge Five to COINTELPRO. We will consider how espionage worked in the conflict, while thinking about the role that spies played in the popular imagination, from the glamor of James Bond to the "insider" realism of Helen MacInnes, Graham Greene, and John Le Carré, to revisionist thrillers like Viet Than Nguyen's *The Sympathizer* and Lauren Wilkinson's *American Spy*. In the final unit we will explore how espionage changed during the War on Terror, considering how spying was set up as a weapon against terrorism in the popular imagination, from *Homeland* to *Zero Dark Thirty*. In the final week we will consider the idea of surveillance capitalism and the idea that espionage is now inextricably part of our everyday lives.

HIST-LIT 90EK American Noir

CourseID: 216233

Faculty:

Next Term Offered:

Midcentury America saw the explosion of a genre on the page and screen—the hardboiled crime novel and the film noir. Noir represented a foil to postwar optimism: its protagonists were cynics and loners. Filled with lurid crimes and deeds, noir suggested a dark underbelly to American society and its promises of domestic fulfillment, economic stability, and institutional support. Husbands and wives plotted each other's murders; the city streets beckoned with sin; and the police were no match for the private detective. Yet even while these stories foregrounded alienation, they also had a mass cultural appeal to American audiences. We will examine noir not only as an aesthetic—filled with brutality stylishly dressed up in beauty—but also as a political commentary on disillusionment and conformity. How did representations of the tough guy and the femme fatale reflect or shape the gender and sexual politics of the era? How were race and ethnicity imagined as criminal categories for suspicion? And how did America's anti-heroes reflect a changing conception of nationhood and citizenship in the atomic age? By looking at cultural works like film, novels, and true crime pieces next to works of sociology and psychology from the period, we will consider what audiences' fascination with violence, murder, and deceit revealed about the American identity.

HIST-LIT 90EL France and its Others

CourseID: 216234

Faculty:

Next Term Offered:

In a controversial—and bestselling—recent novel, Michel de Houellebecq imagines France's government and society taken over from within by Muslim extremists who impose Sharia law. Fears of internal "colonization"—by Muslims, immigrants, Jews, Americans, and others—are nothing new in French history. Yet, by tapping into the growing influence of the anti-immigrant extreme right in French politics over the past several decades, the popularity of Houellebecq's novel raises a number of provocative questions for contemporary French—and global—society: how has a country premised on the "equality" and "fraternity" of all of its citizens continued to exclude religious, ethnic, and racial Others? And, perhaps more perplexingly, how did what was once a global empire—whose reach extended from the South Pacific to the Caribbean, from North and sub-Saharan Africa to Southeast Asia—become so anxious about becoming "colonized" within Europe itself? Most proximately, how did the violence of France's colonial wars—in Algeria and Indochina especially—and the tumult of postcolonial migration shape the fears and fantasies of national and imperial identity? This course will address these questions by taking a longer and wider view of the (post)colonial experiences of twentieth-century France. Surveying works of history, politics, literature, anthropology, and film—from Houellebecq and Le Pen to Sartre and Cixous, Mathieu Kassovitz and Azouz Begag—we will seek to understand how perceived dangers of invasion drew and departed from the ambiguities and insecurities of imperial power.

HIST-LIT 90EM Empire and Archive in the Colonial Americas

CourseID: 216235

Faculty:

Next Term Offered:

How do we know the histories of colonialism and empire? In this course, we will study how European expansion in the Americas fueled and was fueled by the production of printed and manuscript records and representations of colonial spaces and their peoples. We will study how violence and resistance shaped the development of alternative systems of knowledge keeping among indigenous and enslaved communities, including oral histories, wampum, and vodou. Throughout our course, we will ask: what interplay of power, resistance, and chance produces an artwork, document, or memory of the past—or ensures its survival and visibility in the present? What responsibility does a historian or critic have towards the gaps and silences of the archive and what strategies might recover or reconstruct marginalized perspectives from the past? How can attending to these histories of the archive shape the stories we tell today?

HIST-LIT 90EN Latin American Revolutions

CourseID: 216236

Faculty:

Next Term Offered:

This course explores the origins, trajectory, and outcomes of three twentieth century

Latin American revolutions: Mexican, Cuban, and Nicaraguan. Students will analyze what these three revolutions shared in common, such as the causes, which included discrimination, US imperialism, state violence, economic inequity, and political marginalization, but also consider the nuances of what made them different, and in which ways the later revolutions were inspired by the previous ones. The class will rely on primary sources, such as novels, film, photographs, music, murals, and manifestos to explore how all sectors of society helped foment changes to the physical, economic, and social landscapes in these countries. Students will investigate community grassroots mobilization tactics and what the revolution meant for marginalized groups such as indigenous, women, or queer people. Learning the difficulties of implementing profound change will help students understand how resistance and democracy meant different things to different communities, and how the definition of what is meant by a revolution evolved over time. Studying Latin American Revolutions will help students grasp the complexities of our increasingly globalized society, and reconsider the efficacy of our own political systems, freedoms, and democracy.

HIST-LIT 90EO The Reinvention of New York City

CourseID: 216237

Faculty:

Next Term Offered:

The recent history of New York City is one of crisis, resilience, and rebirth. From the terrorist attacks of 9/11 to the devastation of the pandemic, New Yorkers have experienced tragedy and reinvented their city in its aftermath. This is a cycle with a deeper history: in this course we will focus on how New York City reinvented itself in the Seventies and Eighties. On October 16, 1975, New York City was on the brink of bankruptcy. With nearly five hundred million dollars of debt due the next day and only thirty-four million in its bank, catastrophe seemed inevitable. Fortunately, the city was able to raise funds and avoid bankruptcy. Nevertheless, New York City was and had been a space on fire—both literally and figuratively speaking—for at least a decade prior. Landlords burned down buildings to collect insurance; Black, Latinx and LGBTQ communities fought for the right to claim space and protections. In the midst of these fires, however, many different communities seized upon cheap rent and abandoned spaces in order to use them as sites of profound community- and art-making. This course will explore the social and historical contexts under which the residents of New York City contended with precarity in order to create vibrant spaces of living. In order to understand how individuals and communities both understood and created the city around them, students will look at a wide variety of texts, including but not limited to songs, visual art, performance pieces, editorials, and oral histories. Students will be encouraged in how the New York City they know was shaped by this history and what lessons can be drawn from this period of unprecedented creativity as the city once again faces a precarious future.

HIST-LIT 90EP The Global History of Pests

CourseID: 216238

Faculty:

Next Term Offered:

Pests have had impacts large and small on human life, serving as sources of lethal pandemics and minor annoyance alike. But what constitutes a pest has varied greatly over time and space. This course examines these themes with a focus on the late nineteenth century and early twentieth century, an era of optimism for pest eradication and visions of environmental control more broadly. It subsequently turns to the consequences of these efforts--both life-saving and deleterious--to the present. Throughout, the course contextualizes pests as products of sedentary agriculture, empire, and capitalism. Topics include mosquitoes and revolution in Haiti, street dogs and health in Istanbul, and rats and race in Baltimore. The course also touches on the broader cultural resonance of pests, by attending to how the language of pests has come to apply to invasive species, germs, and certain humans. The sources for thinking through these questions are broad, ranging from Frantz Fanon's *The Wretched of the Earth* to Disney public health reels featuring *The Seven Dwarfs* happily spraying insecticides to Rachel Carson's *Silent Spring*. In sum, the course brings together environmental history, the history of medicine, and the history of science to consider how humans have created pests and pests have created humans.

HIST-LIT 90EQ Nuclear Imperialisms

CourseID: 216239

Faculty:

Next Term Offered:

This course will examine nuclear narratives in global contexts as reminders and remainders of empire. Are nuclear futures only tied to whims of unpredictable world leaders, or are they already part of our daily realities? Whose stories of nuclear proliferation are told, and whose are suppressed? Drawing on government propaganda, activist writing, television, fiction, photography, poetry, and film from 1945 to the present, this course will explore the cultural and material legacies of radiation around the world. From American "atomic culture" of the 1940s and '50s to Cold War era peace movements in the Pacific Islands to nuclear disasters like Chernobyl and Fukushima, we will assess whether nuclear cultures have changed over time by using a place-based investigation of nuclear research, uranium mining, atomic bombs, "clean" energy, and anti-nuclear resistance. Course texts will include poetry by Kathy Jetnil-Kijiner and Craig Santos Perez, fiction by Ruth Ozeki and Robert Barclay, documentaries such as *The Atomic Café* and *The Return of Navajo Boy*, as well as popular film and television like *Dr. Strangelove* (1964), *Star Trek* (1967), and *Godzilla* (1954).

HIST-LIT 90ER Industrialization and Inequality: from the Gilded Age to the Progressive Era

CourseID: 216240

Faculty:

Next Term Offered:

Industrialization after the Civil War transformed American life in dramatic and horrifying

ways, and it transformed "literature" as a category of cultural consumption too. Some writers, like the muckrakers, believed that their work had the capacity to shape public life. Others like Henry James conceived of their writing as art that operated according to its own rules. Still others like Ambrose Bierce grew pessimistic about literature's capacity to accomplish anything whatsoever. This course will examine American literature at the turn of the twentieth century, when robber barons enriched themselves and many Americans were plunged into deep poverty. Through readings like Edith Wharton's *Custom of the Country*, Mark Twain's *Connecticut Yankee in King Arthur's Court*, and Sutton Griggs's *Imperium in Imperio*, we will consider the literary response to a range of historical developments, including the rise of consumer capitalism, the industrial nation's fascination with pre-industrial life, and the creation of African American secret societies. By studying the shifting meanings of the literary as the country moved from the unfettered capitalism of the Gilded Age to the regulatory apparatuses of the Progressive Era, we will ultimately seek to better understand the meaning of literature in our own fraught historical moment. Whether we should turn to literature to solve our problems, or whether literature is itself part of the problem, are questions we will pose over the course of the semester.

HLIT 90ED Music and Resistance in the Modern United States

CourseID: 216226

Faculty:

Next Term Offered:

While music is often touted as a "universal language" that generates social harmony, it also expresses dissent from and resistance to the status quo. This course asks how music works as a type of social and political resistance, and what aesthetic and formal qualities enable it to do so. We will explore the relationship between music and resistance in the twentieth- and twenty-first-century United States, in contexts that range from Ma Rainey's defiant blues songs to Lin-Manuel Miranda's blockbuster musical *Hamilton*. Focusing especially (but not exclusively) on African American music and musicians, we will consider how music informs modes of resistance tied to race, class, gender, and sexuality. In addition to asking how music can resist extant arrangements of power, we will also consider the types of futures that music can imagine. By examining an array of historical sources, theoretical texts, and sonic archives, students will develop the ability to analyze music from a critical and interdisciplinary perspective. There will also be opportunities for hands-on and creative projects.

History of Science

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

CourseID: 127093

Faculty: Ahmed Ragab

Next Term Offered: 2020 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 117 Inventing Science: Stars, Bodies, Books, and Beasts, 1500-1700

CourseID: 205189

Faculty: Hannah Marcus

Next Term Offered: 2021 Spring

Between 1500 and 1700, a number of hugely consequential things happened in Europe that have traditionally and collectively been called revolutionary – the Scientific Revolution. Copernicus and Galileo reconfigured the cosmos, Vesalius exposed the inner workings of the human body, Bacon and Descartes debated the fundamentals of scientific truth, and Newton reformulated the mathematical and physical world. But how should we understand events like these? Was there really a Scientific Revolution and did it really invent science? In this course, we will relate the classical moments associated with the early modern history of science to new scholarship that will allow us to ask questions about this so-called revolution's relationship to ancient and medieval science, the development of the arts in the Renaissance, the impact of print, the politics of European imperial projects, early tensions between science and religion, and the growth of new traditions of observation, empiricism, and rationalism in fields such as astronomy, medicine, and natural history.

HISTSCI 128 The Century of Physics

CourseID: 205259

Faculty: Benjamin Wilson

Next Term Offered: 2022 Spring

The 20th century was a momentous period in the history of physics. It witnessed the collapse of the classical certainties of the past and the emergence of startling new ideas about the nature of physical reality, from the special and general theories of relativity to quantum mechanics, the physics of subatomic particles, and cosmological theories of

the structure and development of the universe. These new understandings helped give rise to remarkable technological applications, from nuclear weapons to lasers. In this course, we will study the ideas, events, and personalities that shaped physics in the 20th century. Of particular interest are the entanglements between physics and the social and political currents of modern history—from the maintenance of empire to the rise of totalitarianism, from world wars to the Cold War.

HISTSCI 132 History of Environmental and Earth Sciences

CourseID: 204998

Faculty: Naomi Oreskes

Next Term Offered: 2020 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 137 Animals in History

CourseID: 160366

Faculty: Janet Browne

Next Term Offered: 2020 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 140 The Border: Race, Politics, and Health in Modern Mexico

CourseID: 204416

Faculty: Gabriela Soto Laveaga

Next Term Offered: 2021 Spring

Why does the Mexico-U.S. border continue to be a space for debate and controversy? This course examines how the creation of the U.S.-Mexico border in 1848 shaped modern Mexican society from the nineteenth century to our present. For many, the border served (and serves) as a protective barrier from poverty, violence, and, especially, disease. By the early twentieth century many Mexican bodies were perceived as "alien," "illegal," and in need of patrolling. Yet these descriptions were also used by Mexican politicians to describe and isolate groups such as Indigenous and Chinese within Mexico. By examining, for example, Mexican public health campaigns, response to epidemics, and how Mexican ideas of race and health played out within Mexico we can better understand the U.S.-Mexico border today.

HISTSCI 146 (How) Does Medicine Work?

CourseID: 207811

Faculty: David Shumway Jones

Next Term Offered: 2021 Spring

This course explores the history of medicine with a focus on therapeutics. When and why do people seek professional health care? What do patients and doctors hope that medical interventions will achieve? How do they judge the success or failure of the therapies? Answers to these questions have changed over time. By tracing social and intellectual histories of therapeutics, this course will offer perspective on vital debates about therapeutics today.

HISTSCI 146V Bodies in Flux: Medicine, Gender, and Sexuality in the Modern Middle East

CourseID: 156290

Faculty: Soha Bayoumi

Next Term Offered: 2021 Fall

This course examines how bodies, genders and sexualities in the modern Middle East, from the nineteenth century to the Arab revolts, have been shaped and represented via changing and competing discourses. Through a variety of historical, ethnographic, media and literary readings, the course studies multiple and dynamic representations of bodies in flux: medicalized bodies, gendered bodies, sexualized bodies, (re)productive bodies, aging bodies and bodies in revolt. The course pays special attention to medicine and science in their interaction with laws, traditions and religious practices. Some of the topics covered include analyzing histories of and discourses on slavery, femininity and masculinity, homosexuality, health, reproduction, disabilities, circumcision and genital cutting/mutilation and gender-based violence.

HISTSCI 147 The Changing Concept of Race in America: From Jefferson to Genomics

CourseID: 160520

Faculty: Evelyn Hammonds

Next Term Offered: 2020 Fall

This course explores changing concepts of race in American science and medicine, and examines the historical meanings and uses of these concepts in U.S. society from the 18th century to the present. The course asks the following questions: How have diverse scientific and medical disciplines historically defined, measured, and produced knowledge about "race"? How have scientific and medical concepts of race historically interrelated with key political, economic, and social institutions? How do current 21st century genomic concepts of race fit into this larger history of race and science?

HISTSCI 149 The History and Culture of Stigma

CourseID: 110099

Faculty: Allan Brandt

Next Term Offered: 2021 Spring

This course will investigate the history of a number of stigmatized conditions and diseases including, for example, cancer, mental illness, addiction, obesity, AIDS, and disability. A central goal will be to understand the stigmatization of disease and its effects in diverse historical and cultural contexts. The course will evaluate both the impact of stigmatization on health disparities and outcomes, as well as attempts to de-stigmatize conditions that are subject to discrimination, prejudice, and isolation.

HISTSCI 152 Filming Science

CourseID: 114680

Faculty: Peter Galison

Next Term Offered: 2020 Fall

Examination of the theory and practice of capturing scientific practice on film. Topics will include fictional, documentary, informational, and instructional films and raise problems emerging from film theory, visual anthropology and science studies. Each student will make and edit short film(s) about laboratory, field, or theoretical scientific work.

HISTSCI 158 Latin America as Laboratory, 1492-Present

CourseID: 207953

Faculty: Gabriela Soto Laveaga

Next Term Offered: 2021 Spring

Since 1492 outsiders have tried to explain and define the region we now call Latin America. In the fifteenth century the inhabitants of the Americas, often displayed as curiosities in the courts of Europe, served as a source of perplexed wonder. Were these humans? If so, what type? Questions about the humanity of natives led to philosophical debates about the nature of humankind and introduced the concept of race. Unknown flora, arriving on ships, sparked notions that expanded the fields of botany, biology, and

medicine. Ocean navigation and a new understanding of the relationship between land and water emerged when mariners experienced the hurricanes of the Caribbean. From royal botanical expeditions to astronomy European scientific knowledge expanded with the introduction of knowledge and raw material coming from the Americas.

In this course students will understand the role that the Americas played in building our modern world, they will broaden their understanding of knowledge circulation from the fifteenth to the twenty-first century; examine place and knowledge production; race, citizenship, and science; and how Latin America fueled Europe's Age of Reason and the Industrial and Scientific Revolutions. By placing Latin America in conversation with Europe we gain a fuller understanding of how science is produced and consumed.

HISTSCI 174 Critical Experiments in the Human Sciences

CourseID: 122167

Faculty: Rebecca Lemov

Next Term Offered: 2020 Fall

This course focuses on high-impact experiments - among them, the Milgram "Obedience" experiments and the Stanford Prison Experiment - carried out in the twentieth-century human sciences by anthropologists, sociologists, social psychologists, and/or experimental psychologists. Many dreamed of a "technology of human behavior" and conducted experiments toward this end. What were the results, and how do they continue to affect our thinking and daily lives today?

HISTSCI 178 History of the Psychotherapies

CourseID: 156325

Faculty: Elizabeth Lunbeck

Next Term Offered: 2020 Fall

Examines the history of the current psychotherapeutic landscape, looking at the development, methods, aims, efficacy, and limitations of a range of psychotherapeutic modalities from Freud's time to our own, among them psychoanalytic, psychodynamic, cognitive, behavioral, manualized, and evidence-based treatments; individual, play, family, and group therapies. Explores tensions between therapy as a quest for self-improvement and a means of relieving symptoms, between focusing on cognition and on behavior, and between mind and brain. Looks at providers and patients, at the testimonies of writers and poets, and at office-based, hospital, and computer therapies. The question of the relationship between professional practices and the rise of a popular therapeutic sensibility is central to the course.

HISTSCI 179 The Freudian Century

CourseID: 109859

Faculty: Elizabeth Lunbeck

Next Term Offered: 2021 Spring

Explores the consolidation and rise to prominence of a distinctively modern psychological perspective on human nature, motivation, and desire from 1900 to the present. Opens with the debut of therapeutic culture and the Freudian recasting of the self, with attention to dreams, sexuality, interiority, gender, and cultures of trauma. Moves to the mid-century period and beyond, the heyday of the psychological perspective in the United States, looking at the psychology of affluence, the invention of "identity," the new narcissism, and personalities and power in the workplace. Ends with an assessment of the virtues and liabilities of the 21st century expressive self.

HISTSCI 182 An American Way of War: Technology and Warfare

CourseID: 203128

Faculty: Matthew Hersch

Next Term Offered: 2021 Fall

American society has, from its founding, been transformed by the experience of warfare. This lecture course explores two interconnected ideas: the development of military technologies from the earliest settlement of North America to the present day, and the profound impact of these technologies on people, including veterans and the societies to which they returned. Beginning with an examination of bladed weapons and the psychology of killing, we will look at how supposedly revolutionary weapon systems—the gun, the tank, the airplane, the atomic bomb, the drone—came to define a distinctly American mode of warfare, and created new problems for those exposed to their lethality.

HISTSCI 184 Technology and Capitalism

CourseID: 207695

Faculty: Victor Seow

Next Term Offered: 2021 Spring

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 187 History of Information

CourseID: 208317

Faculty: Alex Csiszar

Next Term Offered: 2022 Spring

Does information have a history? If the control and manipulation of data has now become central to politics, economics, and daily life, how did we get to this point? What came before this age of information, bits, and big data? This seminar course will examine changing meanings of information from diverse perspectives including global politics, technology, gender, and materiality over the last several centuries. The course will include several site visits, from a printing workshop to a bioinformatics lab.

HISTSCI 189 The World We Made: Technology and Society

CourseID: 203610

Faculty: Matthew Hersch

Next Term Offered: 2022 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 192 The Empire Strikes Back: Science Fiction, Religion, and Society

CourseID: 160332

Faculty: Ahmed Ragab

Next Term Offered: 2020 Fall

From the seventeenth century to today, science fiction has reflected the aspirations of scientific innovation and anticipated new discoveries. It has reflected rhetorical practices by which science melds present contexts with futurism, extrapolation, and promissory logics. Authors have engaged with ethical problems, fears about innovations gone awry, and pessimism about the prospects of technological development, all while critiquing views on gender, race, and sexuality, and subverting colonial ambitions while engaging postcolonial aspirations. At the same time, science fiction has engaged religious and spiritual views, both interacting with religious imaginaries and engaging with the role of religion in society and in relation to science.

In this course, we trace science fiction through history. We analyze how it has understood science and technology, war and colonialism, sex, race and gender, health and disease. We investigate how it has interacted with religion and influenced social and cultural attitudes. We will read major works in science fiction and understand how they live with and within us. Topics include: time travel, utopias and dystopias, race, gender, and sexuality, religion and culture, embodiment and disembodiment, posthumanism). In addition to novels and short stories, lectures will incorporate film, television, graphic novels, music videos, and other science fictional subgenres.

The course will be accompanied by a film series of major science fiction films and guest speakers (film series attendance is optional).

HISTSCI 194 Scientific Sites

CourseID: 208323

Faculty:

Next Term Offered: 2022 Spring

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

HISTSCI 194 Scientific Sites

CourseID: 208185

Faculty: Peter Galison

Next Term Offered: 2022 Spring

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

HISTSCI 199 Science and Religion in America

CourseID: 203705

Faculty: Naomi Oreskes

Next Term Offered: 2021 Fall

This course examines the history of science and religion, with a focus on the United States. Science and religion are often viewed as intrinsically at odds with each other, but are they?? Or have we over-emphasized a small number of conspicuous conflicts? And why have certain controversies loomed so large in U.S. historiography? Topic will include the founding father's views of science and religion; the 19th century creation of government-based scientific agencies; the development of research universities as an alternative to denominationally-based higher education; Andrew Dickson White and the "warfare of science and religion" thesis, the trial of Tennessee school teacher John Scopes for teaching evolution and the popular interpretation of that trial; creationism in the mid-late 20th century, and religious-based opposition to climate science. We will pay particular attention to the question of how the relationship between science and religion has changed over the course of U.S. history, and the drivers of those changes.

HISTSCI 203 Communities of Knowledge: Science, Religion and Culture in Medieval Europe and Islam

CourseID: 208127

Faculty: Ahmed Ragab

Next Term Offered: 2021 Spring

How did people understand nature in the Middle Ages? Is "premodern science" a contradiction in terms? What does it mean for science to be "religious"? How did medieval "Western" and "Islamic" civilization differ? Where and in what ways did they interact, and how did knowledge circulate between them?

This course offers a new account of the history of medieval science in Europe and the Middle East. Rejecting the traditional narrative that treats Arabic science only as a "bridge" between the achievements of Greek antiquity and the Scientific Revolution, we will study western Eurasia and northern Africa as a region with a long shared history, unified by the circulation of people, objects, and ideas. In the process, we will call into question the larger conceptual framework opposing "East" (in the sense of Muslim civilization) and "West" (in the sense of Latin Christian civilization).

We will also explore the ways in which the perspectives of Islam, Judaism, and Christianity led their practitioners to emphasize differing aspects of the bodies of knowledge that they jointly inherited from the ancient world.

Reading assignments will focus on primary sources—texts, images, and objects—viewed in the context of contemporary developments in religious, cultural, and political history. We will also draw on the resources of the Harvard Map Collection, the Collection of Historical Scientific Instruments, Houghton Library, and the Harvard Art Museums. Jointly offered in the Harvard Divinity School as HDS 3340.

HISTSCI 210A Theories and Methods in the History of Science and Religion

CourseID: 210983

Faculty: Ahmed Ragab

Next Term Offered: 2020 Fall

The course addresses key questions in the historiography of science and religion. Students read and discuss different theoretical writings and workshop their work as appropriate.

HISTSCI 210B Theories and Methods in the History of Science and Religion

CourseID: 208350

Faculty: Ahmed Ragab

Next Term Offered: 2021 Fall

The course addresses key questions in the historiography of science and religion. Students read and discuss different theoretical writings and workshop their work as appropriate.

Part two of a two part series. The curriculum for this course builds throughout the academic year. Students are strongly encouraged complete both terms of this course (parts A and B).

HISTSCI 212 Death and the Body in the Age of Plague

CourseID: 207909

Faculty: Hannah Marcus

Next Term Offered: 2021 Fall

Though we all will die, ideas and practices surrounding death have differed across time and space. This course will examine death and dead bodies in an era defined by epidemic and the ravages of disease. Our graduate seminar has three interrelated goals. First, we will engage with a range of fascinating primary sources about death and dead bodies in the late medieval and early modern world. Second, we will read the most important historical literature on the topics of death, dying, and the many scientific, political, and religious uses of dead bodies. The final goal of the course is for students to produce an original research paper. Most (but not all) of the sources on the syllabus will deal with Christian death, though I very much welcome students interested in considering these themes and pursuing research about different religious and geographical contexts.

HISTSCI 219 Critical Approaches to the Study of Science and Religion

CourseID: 208255

Faculty: Ahmed Ragab

Next Term Offered: 2021 Spring

The study of science and religion has been traditionally dominated by theoretical discussions centered around the possibility of reconciling Science (capital S: often referring to Western Science) and Religion (capital R, often referring to specific traditions as understood through Western lens). In the process, science is presented as monolithic and ahistorical, and religion as equally fixed and unidimensional. This mode of investigation often fails to engage with questions of race, gender, sexuality and socioeconomic status, and is oblivious to the history of colonialism and to the concerns of indigenous populations. In this course, we deploy a critical lens in understanding and discussing different questions at the intersection of science and religion. Using a series of case studies, and engaging with a number of theoretical and methodological approaches derived from religious studies, history and philosophy of science and STS (Science, Technology and Society studies), postcolonial, critical race and queer theory, the course investigates the production of meanings and the making of intellectual,

epistemic and political authority at the intersection of scientific and religious cultures.

The course is a research workshop with a focus on training and professionalization and an emphasis on methods tools in academic writing and research. Students work on specific projects throughout the semester from topic selection, question formation, to research and writing to produce a piece of academic writing such as research papers, conference papers, articles, book reviews, prospectus, syllabi, etc. Jointly offered in the Harvard Divinity School as HDS 3346.

HISTSCI 224 Science and Security

CourseID: 207808

Faculty: Benjamin Wilson

Next Term Offered: 2021 Spring

Modern states have interpreted science as an instrument of security and a realm of special security concern. This graduate seminar contemplates security as a subject and an analytical category in the history of modern science. It considers various approaches to historical writing about ideals, concepts, and practices of security at the intersection of knowledge and power. Readings will touch on projects of imperial control and postcolonial modernization; the Cold War and the nuclear age; environmental and energy security; and broad themes including security expertise and its construction, risk, prediction, and secrecy.

HISTSCI 226 Science in the Cold War

CourseID: 205382

Faculty: Benjamin Wilson

Next Term Offered: 2022 Spring

This seminar examines the broad and multifaceted interaction between science and the Cold War. In the years between 1945 and the collapse of the Soviet Union, science was enrolled in a remarkable range of ideological, cultural, political, and technological projects. In what ways did Cold War priorities and institutions shape the development of modern science? How did modern science make the Cold War? Readings will include classic and recent works that have explored and critiqued the notion of "Cold War science."

HISTSCI 231 Transforming Technologies: Science, Technology, and Social Change

CourseID: 110280

Faculty: Naomi Oreskes

Next Term Offered: 2020 Fall

Climate change threatens severe dislocation of our environment, culture and

infrastructure, as well as substantial losses to biodiversity and natural beauty. Virtually all experts agree that to avoid extensive disruptive climate change, we must transform our energy system from one based on burning carbon-based fuels to renewables or other energy sources that are net carbon-neutral. This will require a technological transformation. This course examines that challenge in light of past and present transforming technologies. In the first part of the class, we examine past examples of technological transformation, and consider what we might learn from them. In particular, we consider the questions: where do new technologies come from? What has been the role of the free market v. the role of conscious planning? Does technology drive social change or does social change drive technological innovation? Above all, how do we get the technologies we need? Do we get the technologies we need? In the second part we examine the required energy transition to prevent anthropogenic climate change, and the obstacles to it.

HISTSCI 238 Rethinking the Darwinian Revolution: Seminar

CourseID: 122166

Faculty: Janet Browne

Next Term Offered: 2020 Fall

We will explore the new historiography of evolutionary ideas, covering the political, social, literary, and scientific commitments of 19th and early 20th century thought, and reassess the roles of Charles Darwin and Alfred Russel Wallace. There will be an opportunity to read key Darwin texts.

HISTSCI 238A Rethinking the Darwinian Revolution: In the Field

CourseID: 205270

Faculty: Janet Browne

Next Term Offered: 2020 Fall

Companion field work for graduate seminar: We will explore the new historiography of evolutionary ideas, covering the political, social, literary, and scientific commitments of 19th and early 20th century thought, and reassess the roles of Charles Darwin and Alfred Russel Wallace. There will be an opportunity to read key Darwin texts.

HISTSCI 242 Global Perspectives on the History of Medicine

CourseID: 205195

Faculty: David Shumway Jones

Next Term Offered: 2020 Fall

The seminar will design and develop a General Education course that uses a global perspective to teach key themes in the history of disease and medicine.

HISTSCI 244 Magic, Miracles, and Prophecies: Medicine and Religion in

the Medieval Islamic World

CourseID: 203614

Faculty: Ahmed Ragab

Next Term Offered: 2021 Spring

Along with herbs, pills and pastes of different tastes and colors, amulets, prayers and images of prophets and saints served as tools for healing and for medical care constituting a significant part of the landscape of medical practice. In the Islamicate context, 'Prophetic medicine' was considered the most important representation of these types of "religious healing." Relying on sayings and deeds of Muhammad and his companions, volumes of prophetic medicine discussed medical questions and offered medical advice. From the ninth century to the present, this body of literature, accompanied by certain types of foods, herbs and other preparations, continued to survive in changing shapes and forms that reflected changes in medical knowledge and in the study of prophetic traditions. This course will investigate the traditions of prophetic medicine and ask questions about the relationship of medicine and Islam from the medieval to the modern period.

HISTSCI 245 The Changing Concept of Race in Science and Medicine in the U.S.: From Jefferson to Genomics

CourseID: 108811

Faculty: Evelyn Hammonds

Next Term Offered: 2021 Spring

This course explores the history of the concept of "race" as used by biologists, anthropologists, and physicians from the 17th century to the present and social and political responses to the concept of race in these fields.

HISTSCI 247 Current Issues in the History of Medicine: Seminar

CourseID: 126322

Faculty: Allan Brandt

Next Term Offered: 2020 Fall

Explores new methods for understanding disease, medicine, and society, ranging from historical demography to cultural studies. Topics include patterns of health and disease, changes in medical science and clinical practice, the doctor-patient relationship, health care systems, alternative healing, and representations of the human body. The course will focus on historical problem-framing, research strategies, and writing.

HISTSCI 249 The Opioid Epidemic in Historical Perspective

CourseID: 207699

Faculty: Allan Brandt

Next Term Offered: 2020 Fall

This course will trace the use of opiates and other addictive substances over the last century. The goal will be to understand the historical and social contexts of the emergence and significance of the current epidemic, as well as public policies designed to address its impact. The course will also explore the social, cultural, medical, and political determinants of the rise in opioid addiction and its associated morbidity and mortality. Students will be required to write an original research paper that will be part of a multi-authored anthology on the history of the epidemic.

HISTSCI 252 Sciences of History

CourseID: 160522

Faculty: Alex Csiszar

Next Term Offered: 2022 Spring

What is historical method, and in what sense might history be made a science? Proposed answers to these questions have varied over time, in part according to changing conceptions of science and its methods. Course topics will include concepts of the event, agency, and causation; the constitution and use of archives; quantitative approaches to history; values of objectivity and completeness; and big history. Emphasis, not exclusive, on how historians of science have approached these historiographical problems.

HISTSCI 258 Latin America as Laboratory, 1492-Present

CourseID: 207952

Faculty: Gabriela Soto Laveaga

Next Term Offered: 2021 Fall

Since 1492 outsiders have tried to explain and define the region we now call Latin America. In the fifteenth century the inhabitants of the Americas, often displayed as curiosities in the courts of Europe, served as a source of perplexed wonder. Were these humans? If so, what type? Questions about the humanity of natives led to philosophical debates about the nature of humankind and introduced the concept of race. Unknown flora, arriving on ships, sparked notions that expanded the fields of botany, biology, and medicine. Ocean navigation and a new understanding of the relationship between land and water emerged when mariners experienced the hurricanes of the Caribbean. From royal botanical expeditions to astronomy European scientific knowledge expanded with the introduction of knowledge and raw material coming from the Americas.

In this graduate seminar students will broaden their understanding of knowledge circulation from the fifteenth to the twenty-first century; examine place and knowledge production; race, citizenship, and science; and how Latin America fueled Europe's Age

of Reason and the Industrial and Scientific Revolutions. By placing Latin America in conversation with Europe we gain a fuller understanding of how science is produced and consumed.

HISTSCI 261 Ethnography of Science and Technology

CourseID: 108933

Faculty: Sophia Roosth

Next Term Offered: 2021 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: 2020 Fall

In this graduate seminar we examine how the rhetoric of science was used to 'solve' problems in Africa, Latin America, and South Asia in the twentieth century. From civil engineering wonders, like the Panama Canal, to agricultural solutions, like the Green Revolution, we will discuss the unexpected consequences of foreign models in colonial and postcolonial spaces. Examining cases such as uranium extraction in African nations or glaciology in Peru can help us understand the socio-political consequences of science-on-ground when countries become laboratories for foreign-led aid.

HISTSCI 272 Big Data: Past, Present, Future

CourseID: 156326

Faculty: Rebecca Lemov

Next Term Offered: 2021 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 277 Big Data and Surveillance

CourseID: 207913

Faculty: Rebecca Lemov

Next Term Offered: 2022 Spring

This course investigates the emergence of new types of surveillance fueled by big data. The premise of the course is that these urgent contemporary issues can begin to be better understood by use of historical epistemological methods. In this spirit, first we will examine the question, "What is big data?" We will ask how it differs from other forms of knowledge, how it bears on the scientific method, and how we might best define it. Next the course will explore different historical forms of surveillance – comparing the totalized top-down forms of surveillance in, for example, East Germany, with new data-driven forms emerging today. Finally we will explore areas such as predictive policing and algorithmically-driven decision-making in many arenas and ask about their implications for freedom and subjection.

HISTSCI 280 Science and New Technologies in South Asia, Latin America, and Africa

CourseID: 205434

Faculty: Gabriela Soto Laveaga

Next Term Offered: 2021 Spring

This seminar uses examples from Latin America, South Asia, and Africa to explore key ideas in STS and history of science. Students will understand how concepts such as citizenship, race, class and poverty influence and reshape the practice of science on the ground. Co-taught with Professors Clapperton Mavhunga and Dwai Banerjee (MIT Program in Science, Technology, and Society); the class will meet at Harvard.

HISTSCI 281 Science and Technology in East Asia

CourseID: 207694

Faculty: Victor Seow

Next Term Offered: 2022 Fall

This graduate proseminar surveys developments in the field of science and technology in East Asia from the early modern period to the recent past. Through the critical reading of scholarship both classic and contemporary, we will familiarize ourselves with the main historiographical debates that have shaped the field, and think through the processes

and politics involved in writing this history. We will also discuss ways that these debates can be brought into the classroom for undergraduate teaching. Topics we will cover include the Needham question, everyday technologies, natural history and systems of classification, scientific nationalism, and technoscience under communism and capitalism. Background knowledge in East Asian history expected and required.

HISTSCI 282 Genre and Knowledge

CourseID: 156487

Faculty: Alex Csiszar

Next Term Offered: 2020 Fall

How and to what extent is knowledge shaped by the forms and genres through which it has been produced? Bringing history of science and technology together with media studies, book history, and cultural theory, we will consider histories and theories of representation, textuality, authorship, reading, illustration, translation, and the archive. Readings will include Foucault, Chartier, Latour, Kittler, Daston, Biagioli, Gitelman, Elshakry, and Kirschenbaum.

HISTSCI 283 Sources and Methods in the History of Technology

CourseID: 160503

Faculty: Matthew Hersch

Next Term Offered: 2021 Fall

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: 2021 Spring

This seminar provides graduate students with both an accelerated introduction to the history of science and technology, and to current methods for teaching this subject to undergraduates. While the course will engage with methodological questions, our principal focus will be on developing a series of explanatory frameworks for 5,000 years of techno-science, and crafting a series of discrete lessons capable of conveying important knowledge and skills to students. Intended for graduate students in any field, this course serves as both a refresher on Western technological history and a teaching

practicum intended to prepare doctoral students for oral examinations and teaching positions in the field.

HISTSCI 299 Science, State, Corporation

CourseID: 207861

Faculty: Peter Galison

Next Term Offered: 2021 Fall

In the heat of World War II, the state for the first time systematically contracted universities to advance science and technology to pursue the war effort. During the Cold War, the institutional and legal arrangements that facilitated the state-science relationship broadened to cover a vast range of disciplines and agencies, from the far reaches of theoretical physics to the most applied technologies. This course will explore the major, ongoing post-Cold War shift in this arrangement: corporations and foundations now play a powerful role in directing and supporting scientific inquiry. The seminar asks: How are the relations among state, science, for-profit corporations, and civil society changing? How do contemporary politics interplay with research funding from all sources? What is the new geography of technical-scientific work? What kind of work, what forms of knowledge are stressed or dropped? Who is engaged in its pursuit and how is it disseminated? How do law and (de-)regulation affect the newly emergent model, and how are they affected by it?

Health Policy

HLTHPOL 3002 Graduate Research Course: Mental Health Policy

CourseID: 207864

Faculty:

Next Term Offered: 2021 Spring

Participants discuss key institutional details related to the financing and delivery of mental health and substance use disorder treatment and existing research on mental health policy. **Topics include:** clinical presentation and treatment decision making; integration vs. exceptionalism; role of the government in financing and delivery of mental health and substance use disorder treatment; insurance coverage; payment; disparities in treatment; role of adverse childhood events; intersection with criminal justice; and social attitudes toward mental illness and addiction.

HLTHPOL 3050 Federal Research Funding

CourseID: 110065

Faculty:

Next Term Offered: 2020 Fall

This course focuses on federal scientific research grant applications. Students will learn about the most common forms of federal grant applications, basic components of applications, and the scientific review process for NIH / AHRQ. Students will develop a dissertation grant application, and will review actual grant applications as part of the course.

Summer School

HSCI S-176 Themes/History of Neuroscience

CourseID: 214439

Faculty:

Next Term Offered:

Humanities

HUMAN 11B The Art of Listening

CourseID: 109855

Faculty: John T. Hamilton

Next Term Offered: 2021 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 12 Essential Works In World Literature

CourseID: 110483

Faculty: David Damrosch

Next Term Offered: 2021 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.

Romance Languages and Literatures

ITAL 141 Renaissance Epic: War, Identity, Desire

CourseID: 108771

Faculty:

Next Term Offered:

We analyze the driving forces behind epic in the classic and medieval world_war, identity, and desire_and their transformation at the dawn of modernity. In order to prepare for the close reading of Torquato Tasso's *Jerusalem Delivered*, we will study and discuss selected cantos from the *Iliad*, the *Odyssey*, the *Aeneid*, the *Chanson de Roland*, Dante's *Divine Comedy*, Boiardo's *Orlando innamorato* and Ariosto's *Orlando Furioso*.

PORTUG 226 Laughter and Disaster

CourseID: 212914

Faculty:

Next Term Offered:

This course examines how the comedic and the disastrous/tragic function as modes of cultural critique and establish and contest varying conceptualizations of national identity in Portugal from the Middle Ages to the 19th century.

SPANSH 66 Reading and Writing in Latin America: Creative Genres

CourseID: 215959

Faculty:

Next Term Offered:

SPANSH 146 Tropical Fantasies: The Hispanic Caribbean and Haiti in Contemporary Literature

CourseID: 203758

Faculty:

Next Term Offered:

The Caribbean has long been portrayed as an exotic region of the world. Colonial depictions of the Caribbean imagined wild, savage creatures that ate human flesh. Travel narratives of the 19th century chronicled the region as backward, and underdeveloped while rendering Caribbean subjects, particularly women, as hypersexual and sexually available for consumption. This course proposes an analysis of the different myths and fantasies that have been created about the Caribbean and of the historical

and cultural realities surrounding these myths. Through a close reading of literary, artistic, critical, and historical texts we will examine topics such as: race, ethnic, and gender identity constructions; the rise of the plantation economy; and the emergence of modern nations. The relationship between the presence of coloniality—evidenced in the continued ties between Caribbean islands and United States and Europe—and the emergence of diasporic Caribbean voices of dissidence will be a guiding tone for our conversations throughout the semester as we unpack the links between colonialism and diaspora in the Caribbean. Although our class will mainly focus on the Hispanic Caribbean and Haiti, we will establish a dialogue with intellectual productions from other islands.

SPANSH 237 Libertades literarias: Afro-Latinoamérica escribe

CourseID: 215958

Faculty:

Next Term Offered:

Afrodesscendent writers in Latin America explore formal literary decisions as opportunities to exercise authority, no matter how unbidden the content may be. Choices of form and technique are freedoms that ignite memory, reflection, and imaginaries that outstrip existing conditions. Art presages agency in a range of social constructions.

Linguistics

LING 107 Introduction to Indo-European

CourseID: 110658

Faculty:

Next Term Offered: 2020 Spring

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

LING 114 Morphological Theory

CourseID: 111957

Faculty:

Next Term Offered: 2017 Fall

This course provides an intensive introduction to morphological theory. Students will be introduced to current research and areas of debate in morphology proper, in morpho-syntax, and in morpho-phonology.

LING 168 Introduction to Germanic Linguistics

CourseID: 122755

Faculty:

Next Term Offered: 2021 Fall

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

LING 171 Structure of Chinese

CourseID: 115947

Faculty:

Next Term Offered: 2021 Fall

Introduction to the syntactic structure of Mandarin Chinese: the basic structure of clauses and nominal constituents; words, compounds, and phrases; word order and variations; selected special topics (passives, resultatives, ba-construction, topic and relativized structures, questions, anaphora, pro drop); syntactic structure and semantic interpretation.

LING 174 Tense and Aspect in Japanese

CourseID: 123350

Faculty:

Next Term Offered: 2021 Spring

Examination of phenomena of tense and aspect in Japanese, with special attention to verbal semantics and the interaction of temporal categories with modality and transitivity.

LING 176 History and Prehistory of the Japanese Language

CourseID: 114299

Faculty:

Next Term Offered: 2017 Spring

An examination of evidence from the comparative method, internal reconstruction, and written documents for reconstructing prehistoric stages of the Japanese language and an overview of major developments in Japanese phonology and grammar from the Nara period through the present day

LING 205R The Syntax-Semantics Interface

CourseID: 114962

Faculty:

Next Term Offered: 2021 Fall

An exploration of issues related to the architecture of the grammar, with emphasis on the structures that are interpreted at the semantic interface, and how they are derived.

LING 207R Topics in Semantics

CourseID: 128096

Faculty:

Next Term Offered:

Current issues in semantics. Topics to possibly include: Scope and anaphoric properties of indefinites, quantificational variability and generic uses, long distance indefinites.

LING 226R Advanced Hittite

CourseID: 124027

Faculty:

Next Term Offered: 2021 Spring

Advanced readings in Hittite and an introduction to Cuneiform and Hieroglyphic Luvian.

LING 252 Comparative Slavic Linguistics

CourseID: 113214

Faculty:

Next Term Offered: 2021 Spring

Introduction to the historical phonology and morphology of the Slavic languages with special attention to relative chronology and linguistic geography.

Mathematics

MATH 117 Probability and Random Processes with Economic Applications

CourseID: 127947

Faculty:

Next Term Offered: 2021 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 141A Mathematical Logic I

CourseID: 207500

Faculty:

Next Term Offered: 2020 Fall

Introduction to mathematical logic focusing on the fundamentals of first-order logic (language, axioms, completeness theorem, etc.) and the basic results of model theory (compactness), Lowenheim-Skolem, omitting types etc.

MATH 141B Mathematical Logic II

CourseID: 207501

Faculty:

Next Term Offered: 2021 Spring

Introduction to the incompleteness phenomenon, covering the incompleteness theorems and the basic results of recursion theory.

MATH 145B Set Theory II

CourseID: 156120

Faculty:

Next Term Offered: 2021 Spring

An introduction to large cardinals and their inner models, with special emphasis on Woodin's recent advances toward finding an ultimate version of Godel's L. Topics include: Weak extender models, the HOD Dichotomy Theorem, and the HOD Conjecture.

MATH 156 Mathematical Foundations of Statistical Software

CourseID: 156000

Faculty:

Next Term Offered: 2020 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 212BR Advanced Real Analysis

CourseID: 120929

Faculty:

Next Term Offered: 2021 Spring

Continuation of topics in real analysis, harmonic analysis and functional analysis. Possible topics include: L^p spaces; Banach spaces and duality; weak and weak* convergence; Banach-Alaoglu Theorem; elements of the theory of distributions, methods from the calculus of variations with applications to PDE, Oscillatory integrals, Brownian motion and its application to the solution of Dirichlet's problem.

MATH 223B Algebraic Number Theory

CourseID: 123240

Faculty:

Next Term Offered: 2021 Spring

Continuation of Mathematics 223a. Topics: adeles, global class field theory, duality, cyclotomic fields. Other topics may include: Tate's thesis or Euler systems.

MATH 224 Representations of Reductive Lie Groups

CourseID: 125563

Faculty:

Next Term Offered: 2021 Spring

This course will introduce algebraic groups, along with some necessary tools from algebraic geometry. The goal of the course is to arrive at the classification of reductive groups in terms of root data.

MATH 264X Algebraic Cobordism

CourseID: 212705

Faculty:

Next Term Offered:

Mind, Brain, and Behavior

MBB 980B Exploring Addiction

CourseID: 124115

Faculty:

Next Term Offered: 2021 Spring

Course goals include an introduction to the varied and conflicting claims about the nature of addiction. Topics include (1) the characteristics of addiction as revealed in biographies, epidemiological studies, clinical research, and "natural experiments;" (2) the current "drug overdose epidemic," including an opportunity to explore its social-economic correlates; (3) genetic influences on alcohol consumption and AA; (4) drug-induced cognitive changes and their implications for drug use; (5) smoking; (6) consideration of the consequences of legalizing marijuana; and (7) an introduction to research-based, quantitative choice models (e.g., delay discounting). The section on drug overdoses includes access to EXCEL files that combine national, state-level data on drug overdoses, prescription sales, and social-economic measures (e.g., "social capital").

Molecular and Cellular Biology

MCB 68 Cell Biology Through the Microscope

CourseID: 109851

Faculty:

Next Term Offered: 2021 Spring

MCB 68 explores three fundamental fields of eukaryotic cell biology: chromosome segregation, cell motility, and neuroscience. Each topic is approached from a historic and technical perspective. Students will discover these systems as the scientific field did, learning how each successive advance in microscopy revealed new biological details. Students will come away with a theoretical and hands-on understanding of microscopy as well as a grasp of the biological findings each technology revealed.

MCB 101 Human Genetics

CourseID: 156009

Faculty:

Next Term Offered: 2020 Fall

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

MCB 157 Developmental Genetics and Genomics

CourseID: 108338

Faculty: Craig Hunter

Next Term Offered: 2020 Fall

Our goal is for students to gain a fundamental understanding of the genetic control of development in four genetically accessible animal models; the nematode *C. elegans*, the fruit fly *Drosophila melanogaster*, the zebra fish *Danio rio*, and the mouse *Mus musculus*. A focus of the course is to compare and contrast genetic analysis of and the genetic control of developmental processes and mechanisms in these four organisms. The course consists of lectures, student presentations, and written assignments.

MCB 188 Chromosomes

CourseID: 114864

Faculty:

Next Term Offered: 2021 Spring

Chromosome morphogenesis in prokaryotic and eukaryotic organisms. Topics will include chromosome structure, interactions between chromosomes (sisters and homologs), DNA recombination and repair, topoisomerases, transposable elements and site-specific recombination, epigenetic inheritance. Genetic, cytological, and biochemical approaches will be integrated. Lecture, reading, and discussion of classical and current literature and consideration of future experimental directions.

MCB 195 Foundations of Systems Biology and Biological Engineering

CourseID: 123837

Faculty:

Next Term Offered: 2021 Spring

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

MCB 290A Current Topics in Molecular, Cellular and Organismal Biology

CourseID: 127009

Faculty:

Next Term Offered:

This class teaches students how to publicly present scientific papers to a diverse audience with emphasis on contextualizing the scientific problem under discussion, critically presenting the essential data, and using an engaging presentation style.

MCB 321A Multicolor and Time-Resolved Electron Microscopy

CourseID: 215843

Faculty:

Next Term Offered:

MCB 321B Multicolor and Time-Resolved Electron Microscopy

CourseID: 215844

Faculty:

Next Term Offered:

Medieval Studies

MEDVLSTD 111 Sex, Love, and Marriage in the Middle Ages

CourseID: 205890

Faculty:

Next Term Offered: 2020 Fall

This class explores the relationships of passion, love, and obligation that bound men and women over the course of nearly two millennia, from Rome in the first century B.C.E. to sixteenth-century Italy. In particular, it focuses on how those relationships were organized legally and institutionally, on the social roles created by such relationships, and on the connection (or lack thereof) between marriage, love, and sexual passion. Although marriage in the West long was viewed as an exclusively heterosexual estate, the course also considers how homosocial and homosexual desires have affected it throughout history.

MEDVLSTD 250 At Cross Purposes: The Crusades in Material Culture

CourseID: 109230

Faculty:

Next Term Offered: 2020 Fall

Crusading expeditions in the Holy Land, Spain and Eastern Europe from 1096 until the end of the Middle Ages shaped the political, socio-economic and cultural map of Europe and the Middle East. This course explores the multifaceted encounters between crusaders, Byzantines, Jews, Armenians and Muslims through the material traces they left behind: architecture, Byzantine objects dispersed across Western Europe, coins, sculptures, frescoes, and manuscripts from the East and the West.

Music

MUSIC 26 The Music of Women Creators

CourseID: 216083

Faculty:

Next Term Offered:

MUSIC 30 Music, theater and dance of South Asia

CourseID: 204974

Faculty:

Next Term Offered: 2021 Fall

Music, Theater and Dance of South Asia will focus on the unified arts of South Asia. In ancient times, music was understood as part of a larger unit that included literature, drama, and dance (muttami in Tamil and sangīta in Sanskrit)—analogous to mousiké in ancient Greece. The course will examine vernacular musical forms ranging from tribal music in South India, to Nepali drumming, to folk song of Northern Pakistan. Part of the course will be devoted to the vigorous literature on classical dance in relation to courtesanship and nationalism. Throughout the course, students will have the opportunity to do at least one assignment involving art-making or critical media practice. The entire class will participate in a set of workshops that constitute the highlight of this first offering: a visit to Harvard of a Kudiyyattam troupe. Kudiyyattam is the only living Sanskrit theater form today, found in the South Indian state of Kerala and normally performed for multiple days in connection with temple festivals. A UNESCO masterpiece of the oral and intangible heritage of humanity, Kudiyyattam is rarely seen outside of India. Students in this class will learn to perform a little bit of abhinaya (conventional facial and bodily expressions), basic postures for standing and sitting, and transitions from one persona to another. If the students are inspired to do so, they may include a brief performance inspired by this visit (and the other course materials) in their final projects.

MUSIC 152 Post-Tonal Analysis

CourseID: 113890

Faculty:

Next Term Offered: 2021 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: 2021 Spring

MUSIC 158R Interpreting Musical Performance

CourseID: 117569

Faculty:

Next Term Offered: 2021 Fall

Analyzing Performance. Analysis of pieces aimed at discovering and evaluating possibilities for execution and perception. Repertory includes fully notated music and music that has no tradition of notation. Questions addressed are those of perception, notation, and adequacy of conventional analytic categories.

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

CourseID: 121897

Faculty:

Next Term Offered: 2020 Fall

The Music of Alvin Lucier

MUSIC 173R Creative Music: Critical Practice Studio

CourseID: 110311

Faculty:

Next Term Offered: 2021 Fall

This course is an intensive, research-oriented workshop environment for advanced improviser-composers. Open to both undergraduate and graduate students. Through critical listening, readings, term papers, and collaborative musical projects, students will engage with a range of contemporary musical perspectives and practices. Graduate students are welcome.

MUSIC 176A Music and Dis/ability I

CourseID: 160644

Faculty:

Next Term Offered: 2021 Spring

Through field work, readings, discussions, and presentations, this course will explore topics related to disability in music history, music theory, and performance studies, and examine recent developments in neuroscience, music therapy, and music education. Defining disability as a cultural construction rather than as a medical pathology, the course will also consider the practice of music as a vehicle of empowerment, reflecting on music's generative role in shaping communities and advancing social justice and human rights. Students will partner with inclusive and democratic community music projects and nonprofit organizations.

MUSIC 176B Music and Dis/Ability II

CourseID: 208098

Faculty:

Next Term Offered: 2021 Spring

Music and Disability II continues the inquiry presented in Music and Disability I (Music 176a), exploring music and disability studies, inclusive music education, and disability arts, among other topics. We will consider cultural ideas—and ideals—of satisfaction and beauty through the lens of non-normativity while interrogating established and conventional artistic practices, canons, and relationships with disability aesthetics as our resource. The Engaged Scholarship approach of the course will aim to develop new projects and nurture on-going initiatives that facilitate sustainable creative practice, empowering individuals and communities through active engagement with the arts. Students from other departments welcome. Course will include weekly participation in a community-music ensemble project.

MUSIC 179R Advanced Electronic Music

CourseID: 203252

Faculty:

Next Term Offered: 2021 Fall

Improvisation with Live-Electronics. This course is aimed towards improvising musicians and composers working with electronics. We will explore different existing improvisation strategies from the 20th century and develop new pieces. Composers and interpreters alike will contribute to the concepts from solo to ensemble works. Section time will be used to further our tools for live sound processing in Max/MSP.

MUSIC 195R Topics in Music from 1900 - Present

CourseID: 128047

Faculty:

Next Term Offered: 2021 Spring

The Gospel Imagination. The class will explore African American gospel performance, focusing on the tradition's braiding together of music, movement, and belief. When these three expressive dimensions are engaged together, what emerges is "the gospel imagination," the complex of words and music, sound and belief that sustains many expressions of African American Christian worship. How might this integrated notion of gospel performance inform an analytical paradigm? Relatedly, how might this approach inspire performance? This course brings together material and approaches from the fields of musicology, music theory, ethnomusicology, homiletics, and theology to pursue these questions. Through a combination of weekly reading, listening and writing assignments students will immerse themselves in this way of patterning sound as an expression of belief. Alongside these assignments, students will undertake composition in the gospel style, culminating in a masterclass with a nationally-renowned gospel artist.

MUSIC 195RS Topics in Music from 1900 - Present

CourseID: 208060

Faculty:

Next Term Offered: 2021 Spring

Women Creators in Music. In spite of significant gains in gender equality over the last half century, women creators remain dramatically underrepresented in the music world, in all genres of music and in all categories of musical production: as composers, improvisors, producers, conductors, and even as performers. This new course focuses on the contributions of female and non-binary musicians who have composed, improvised, or collaboratively created music in the 20th and 21st centuries.

We will listen closely to their music, asking questions such as: what were the historical, institutional, cultural and educational factors that supported or hindered their work? How do they define their gender identities, gender roles, and sexual orientation, and to what extent do they relate these to their work? How do these identities function intersectionally with others, such as racial, class, national, and transnational identities? How has their work been received? What structures have historically enabled inclusion or fostered exclusion into the musical canon?

The course is not just a history of individuals overcoming obstacles; it is intended to celebrate and acknowledge the contributions of women creators to the history of music. We will also talk about activism: how to "move the needle" and work towards great representation of women's music in different genres today.

We will consider a wide range of women creators from the early 20th century to the present, with examples from classical, jazz, and popular music. Students will help generate the syllabus, but the list could include: Florence Price, Ruth Crawford Seeger, Elisabeth Lutyens, Nina Simone, Pauline Oliveros, Meredith Monk, Younghi Pagh-Paan, Carla Bley, Irène Schweizer, Mary Lou Williams, Laurie Anderson, Tanya Leon, Chaya Czernowin, Björk, Nkeiru Okoye, Okkyung Lee, Reena Esmail, Nicole Mitchell, Maria Schneider, Caroline Shaw, and Alex Temple.

Guests include composers and scholars who are experts on women and music (TBA).

MUSIC 208RS Ethnomusicology: Seminar

CourseID: 108992

Faculty:

Next Term Offered: 2021 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: 2021 Spring

MUSIC 216R 18th-Century Music: Seminar

CourseID: 119785

Faculty:

Next Term Offered: 2021 Spring

MUSIC 218R 20th-Century Music: Seminar

CourseID: 117766

Faculty:

Next Term Offered: 2021 Spring

Race and American Musical Theatre 1900-1950. This seminar explores the complex history of African Americans in musical theater, beginning in the late nineteenth century and concluding in the first half of the twentieth. It encompasses shows with all-black casts and creative teams (In Dahomey 1903; Shuffle Along 1921) and those with black casts and white creative teams (notably Porgy and Bess 1935). The gradual (and fitful) racial desegregation of casts is also explored, beginning with Show Boat (1927); and the persistence of (and resistance to) racial stereotypes is analyzed. Early in the semester, we will attend The Black Clown at A.R.T., and central figures from the production will visit class.

MUSIC 218RS 20th-Century Music: Seminar

CourseID: 120033

Faculty:

Next Term Offered: 2020 Fall

Groove. This seminar explores the phenomenon of groove, both as a topic of musicological discourse and an element within various musical practices. Common as the notion may be, groove resists simple definition. In certain contexts, "groove" may refer to relatively large-scale recursive structures (to which James Brown's "Play the groove!" makes reference). In other contexts, "groove" refers to the effect engendered by minute variations between sonic elements (summoned when performing musicians talk about "being in the groove"). What, then, is the relationship between these two conceptions of groove? What tensions arise from the term's multiple meanings? And how might the notion of groove be generalized beyond the contexts of popular music?

This course seeks to examine these and other questions, in part, by showing how the syntactical and the sensory, the formal and the phenomenological dimensions of groove work together to animate various musical genres.

MUSIC 219RS 19th and 20th Century Music

CourseID: 121135

Faculty:

Next Term Offered: 2021 Spring

Classic Texts and Current Trends in American Music. Explores the historiography of American music, with emphasis on recent developments. What is "American" music, and how does it fit into the world? The course cuts across time and deals with diverse genres, with explorations of race as a binding thread. Class projects will focus on local archives and resources, as well as the quickly growing realm of digitized sources.

MUSIC 220R History of Music Theory

CourseID: 127184

Faculty:

Next Term Offered: 2021 Spring

MUSIC 222R Schenkerian Analysis I

CourseID: 113613

Faculty:

Next Term Offered: 2020 Fall

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

MUSIC 223R Neo-Riemannian Analysis

CourseID: 119074

Faculty:

Next Term Offered: 2021 Spring

Neo-Riemannian Analysis. Explores the new body of transformational analytical techniques usually grouped as "Neo-Riemannian Theory." Analysis of pertinent musical passages, discussion of key texts (Riemann, Lewin, Hyer, Cohn, Kopp), context and limits of these ideas.

MUSIC 225R Approaches to Analysis

CourseID: 134274

Faculty:

Next Term Offered: 2022 Spring

Dialectics of the Sonata Form

MUSIC 241R Musicology Special Topics

CourseID: 160693

Faculty:

Next Term Offered: 2021 Spring

Genre. This graduate seminar explores the concept of genre, a topic that is central both to specialized disciplinary conversations and public discourse. In its various guises, genre is used to police music, as a gatekeeper of taste, and as a path through music histories. In order to examine the work genre does for contemporary music studies—to attend to what it clarifies and what it obscures—we will survey theoretical work on genre in music, literature, film; analyze performances that problematize the notion of genre; and tease out genre's function in musicological work on Blues, Jazz, Contemporary gospel, Beethoven string quartets, New Music, and 18th century Italian opera seria. Alongside, we will see how particular implicit and explicit formulations of genre are shaped by conceptions of history, race, place, and belief. Taken together, the course's components will repeatedly call attention to relationships between systems of sound and groupings of people, and to how these arrangements of sound are bound up with the performance of identity.

MUSIC 244 Film Music/Film Sound

CourseID: 000244

Faculty:

Next Term Offered: 2022 Spring

This seminar explores film sound and music in classic American and European cinema, concentrating on the 1920s to the 1960s, though jumping well beyond that frame at times. We deal with specific sound technologies, as well as differing approaches to the relation between music, sound, and image. Individual topics cover both technical and theoretical issues, and sociological-historical issues. They include: mechanical procedures that integrated sound and music with image; cultural work done by music in Orientalist movies; operetta movies and insouciance in the 1930s; theories of rendered sound and the audio-visual contract. Hyperattentive listening is required (we use notated music very infrequently). There are five evening film screenings during the semester (times TBA).

MUSIC 266R Creative Music Seminar

CourseID: 156122

Faculty:

Next Term Offered: 2021 Fall

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

MUSIC 270R Special Topics

CourseID: 113372

Faculty:

Next Term Offered: 2021 Spring

New Music Analysis.

MUSIC 280R Theorizing Improvisation

CourseID: 156365

Faculty:

Next Term Offered: 2022 Spring

The Problem of Presence. This is a cross-disciplinary research seminar in critical improvisation studies, focusing on the three interrelated topics of interest from the last few decades: temporality, embodiment, and improvisation. Their common underlying "discovery" is the very problem of presence. In our studies, recent scholarship in African diasporic music and aesthetics will join a larger conversation on improvisation across multiple areas of inquiry in the arts, the sciences, and the humanities. Through this range of readings, we will examine improvisation as a central feature of individual and collective subjectivities.

MUSIC 281R Musicality

CourseID: 211139

Faculty:

Next Term Offered: 2022 Spring

The term Musicality has at least two senses. In the realm of aesthetics, it connotes "musicalness", a communicative/affective value, whereas in the so-called music sciences, it is used to posit a biologically determined capacity for musicmaking. At issue is the instability of music as a category, which aligns with the instability of the very category of the human; both designations are as ideological as they are scientific, with membership in each category variously conferred or revoked across axes of difference and power. In this research seminar, we reconsider "musicality" as a critical concept (like "aurality" or "vocality") that can lead to broader inquiries into the human animal, the inhuman animal (including those relegated to the margins of the human category), and more generally, the animate. Readings from a variety of fields that question the ontologies of music and "humanness" will guide us in exploring new ways of thinking about music.

MUSIC 292R Topics in Musicology

CourseID: 000292

Faculty:

Next Term Offered: 2022 Spring

Music and Philanthropy. Philanthropy, or the desire to promote human welfare through donations of money, time, labor, and influence, is a central means of assisting art that might not otherwise exist if left to the capitalist marketplace. The roots of philanthropy come from some measure of charity, generosity, and social conscience, just as its existence is rooted in ever increasing global wealth and power inequality. With the exercise of any source of economic, social, or cultural capital, an examination of power is necessary. In this course, we will understand what role philanthropy has played in supporting music in the United States and Western Europe through historical and present-day case studies, including the philanthropy of individual patrons like Isabella Stewart Gardner, non-profit organizations, and large institutions like the Ford and Rockefeller Foundations. Guest visitors to the class will deepen our awareness of how decisions are made on personal and practical levels. We will engage in historical, theoretical, and moral discussions concerning philanthropy and its role in civil society, in order to gain a better understanding of how money speaks in music, as well as learn how to think *critically about the impact and efficacy of philanthropic endeavors.*

Neuroscience

NEURO 101MA Pleasure, Pain and Everything Between: How Touch Encodes the World Around Us

CourseID: 216045

Faculty:

Next Term Offered:

We rely on our sense of touch for essential tasks and behaviors, including feeding, object recognition, avoiding physical harm, mating behaviors, and child rearing. This course covers the neural components and circuitry that underlie our sense of touch. From skin to the cortex, we will explore touch and its role in development, diseases, and most importantly, in our everyday life.

NEURO 131 Computational Neuroscience

CourseID: 207731

Faculty:

Next Term Offered: 2021 Spring

Follows trends in modern brain theory, focusing on local neuronal circuits as basic computational modules. Explores the relation between network architecture, dynamics, and function. Introduces tools from information theory, statistical inference, and the learning theory for the study of experience-dependent neural codes. Specific topics: computational principles of early sensory systems; adaptation and gain control in vision, dynamics of recurrent networks; feature selectivity in cortical circuits; memory; learning and synaptic plasticity; noise and chaos in neuronal systems.

NEURO 141 The Physics of Sensory Systems in Biology

CourseID: 207730

Faculty:

Next Term Offered: 2020 Fall

Living organisms use sensory systems to inform themselves of the sights, sounds, and smells of their surrounding environments. Sensory systems are physical measuring devices, and are therefore subject to certain limits imposed by physics. Here we will consider the physics of sensory measurement and perception, and study ways that biological systems have solved their underlying physical problems. We will discuss specific cases in vision, olfaction, and hearing from a physicist's point of view.

NEURO 145 Neurobiology of Perception and Decision Making

CourseID: 212830

Faculty:

Next Term Offered: 2021 Spring

One of the current goals of neuroscience is to understand neuronal circuits underlying perception and behavior. Recent advances in neuroscience have allowed us to glimpse neuronal processes that link perception and decision making. How is sensory information processed in the brain? How does an animal choose its action? How does an animal learn from ever-changing environments and adjust their behavior? The course will examine neurophysiological studies in perception and decision-making.

NEURO 146 Experience-Based Brain Development: Causes and Consequences

CourseID: 212831

Faculty:

Next Term Offered: 2021 Spring

At no time in life does the surrounding environment so potently shape brain function as in infancy and early childhood. This course integrates molecular/cellular biology with systems neuroscience to explore biological mechanisms underlying critical periods in brain development. Understanding how neuronal circuits are sculpted by experience will motivate further consideration of the social impact on therapy, education, policy, and ethics.

NEURO 1303 The Human Brain Then and Now

CourseID: 212833

Faculty:

Next Term Offered: 2020 Fall

This course will explore the "mismatch" between our ancestral brain and the modern world. After covering the evolution of the human brain, the bulk of the course will focus on case studies including how drugs hijack the normal function of brain systems, how the Facebook age places stresses on social systems that evolved to handle close-knit groups of 25 or so individuals, and how the brain degenerates as we live unexpectedly long.

Organismic and Evolutionary Biology

OEB 58 How to Build an Animal

CourseID: 204989

Faculty: Stephanie Pierce

Next Term Offered: 2020 Fall

Ever wonder why you and other animals have eyes? What about teeth or even skin? "How to Build an Animal" answers your questions by exploring the wonders of animal biology. Each week, we consider a prominent feature of animal anatomy; study its variation in form and function; and how it's made during embryonic development. To facilitate student learning, each topic is accompanied by a 'hands-on' activity that illustrates the concepts discussed in the lecture. Further, the course introduces a number of scientific areas, including comparative anatomy, functional morphology, phylogenetics, genomics, and experimental embryology. The overall goal is to provide a basic understanding of animal evolution and development and how these processes combine to shape the diversity of life on Earth.

OEB 59 Plants and Human Affairs

CourseID: 143445

Faculty: Charles Davis

Next Term Offered: 2021 Spring

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 103 Plant Systematics and Evolution

CourseID: 144583

Faculty: Charles Davis

Next Term Offered: 2021 Fall

An introduction to the diversity and evolution of vascular plants. The course focuses mainly on flowering plants because of their dominant role on the earth, but lycophytes, ferns, and gymnosperms are studied as well. A phylogeny of vascular plants provides the framework for their evolution and diversification. Related subjects, including plant habitats, biogeography, phylogenetics, herbaria, nomenclature, and pollination biology are also presented in lecture and laboratory.

OEB 115 The Developmental Basis for Evolutionary Change

CourseID: 144999

Faculty: Mansi Srivastava
Next Term Offered: 2021 Spring

A lecture course in evolutionary developmental biology. This course will focus on the molecular and cellular bases of how embryos generate adult body plans in order to understand how form, physiology, and life history strategies are modulated over the course of evolution. We will discuss insights from both invertebrate and vertebrate animal model systems as well as plants. We will investigate the forces driving change at both micro- and macro-evolutionary time scales. Particular emphasis will be placed on how changes in development underlie major evolutionary transitions and the origin of innovation in organismal evolution. The course will also emphasize learning of experimental design, molecular tools, and phylogenetic methods currently used by researchers in the field of evolutionary developmental biology.

OEB 120 Plants and Climate

CourseID: 156118
Faculty: Noel Holbrook
Next Term Offered: 2020 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: 2021 Spring

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 130 Biology of Fishes

CourseID: 140830
Faculty: George Lauder
Next Term Offered: 2021 Spring

Fishes inhabit diverse aquatic environments including deep seas, intertidal zones, coral reefs, polar waters, the vast Amazonian basin, and great East African lakes. A single fish species may occupy diverse environments through extraordinary long distance horizontal and vertical migrations. To explore this unparalleled diversity, the course emphasizes bridging traditional academic boundaries with integrative analyses of the biology underlying rapid evolutionary radiations and stasis.

OEB 141 Biogeography

CourseID: 145864

Faculty: Gonzalo Giribet

Next Term Offered: 2020 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 207 The Fishy Aspects of the Human Body

CourseID: 211177

Faculty: Stephanie Pierce

Next Term Offered: 2021 Spring

Explore how the human body evolved through an analysis of the award-winning non-fiction book, *Your Inner Fish: A Journey into the 3.5 Billion-Year History of the Human Body*, by evolutionary biologist Neil Shubin. We will read and discuss each chapter in turn and discover how different parts of the human body can be traced back to creatures that lived eons ago. By the end of the course students will gain a better appreciation for how all life on Earth is interrelated and how our own bodies are a result of millions of years of evolutionary history.

OEB 230 Comparative Genomics

CourseID: 145414

Faculty: James Mallet

Next Term Offered: 2021 Spring

This discussion-based course will survey modern ideas about evolution and speciation, and how they have changed as a result of genomic approaches. As well as readings and discussions in class, the course will utilize some live online video sessions with major players in the field of evolutionary and comparative genomics.

OEB 242 Population Genetics

CourseID: 145409
Faculty: Michael Desai
Next Term Offered: 2021 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: 2020 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: 2021 Spring

This course will cover broad topics in adaptation including the causes and consequences of local adaptation, plasticity, genotype by environment interactions, genomics/genetics of adaptation, and adaptive radiations. This will be a discussion-based course focused on primary scientific literature.

Philosophy

PHIL 20 Happiness

CourseID: 205077

Faculty:

Next Term Offered: 2021 Spring

Should we pursue happiness, and if so, what is the best way to do it? This course will critically assess the answers to these questions given by thinkers from a wide variety of different places, cultures, and times, including Stoicism, Epicureanism, Buddhism, Daoism, and contemporary philosophy, psychology, and economics.

PHIL 24 Ethics of Climate Change

CourseID: 205079

Faculty:

Next Term Offered: 2021 Spring

How should governments respond to the problem of climate change? What should happen to the level of greenhouse gas emissions and how quickly? How much can the present generation be expected to sacrifice to improve conditions for future generations? How should the costs of mitigation and adaptation be apportioned between countries? Should significant funds be allocated to the study of geo-engineering? We will consider these and other questions in an effort to understand our responsibilities in respect of climate change, with a special focus on the structure of the analytical frameworks that have been dominant among policymakers.

PHIL 33 Ethical Issues in Social, Cultural, and Artistic Representation

CourseID: 000033

Faculty:

Next Term Offered: 2021 Spring

In this course we will examine a range of issues which we might, very loosely, term questions of social, cultural, and artistic representation. For instance, the construction, deployment, and celebration of historical narratives are a familiar part of the political pageantry in the life of nations. What are the ethical constraints and imperatives relating to the representation of these national histories? How do these injunctions relate to present political norms of equality and inclusivity and the demands of social cohesion? Consider, also, representational questions that arise in relation to norms of social interaction. What, for instance, might be considered wrong with cultural appropriation? When is it wrong to allow social stereotypes to inform one's interpersonal interactions, and should this wrong be understood in primarily moral or epistemological terms? Finally, consider ethical issues relating to our engagement with (construed broadly) artistic representations. How can we ethically enjoy tragedy? On the face of things it

would appear paradoxical or else the mark of a sadist. Are pornographic representations of immoral acts wrong to consume and enjoy? Are there any special ethical constraints on what may be represented in a video game? Can we ethically represent the Holocaust in any artistic medium? Can we continue to enjoy the products of artists who have engaged in immoral actions? Although we should not expect a set of master principles to govern this range of topics, we might realistically hope that the answers we give, and the philosophical difficulties we encounter in any one topic will help illuminate our treatment and investigation of the others.

PHIL 102 Aristotle's Theoretical Philosophy

CourseID: 112252

Faculty:

Next Term Offered: 2020 Fall

According to Aristotle's classification, philosophy is 'theoretical' if it concerns things we wish to know simply for the sake of knowing, not for the sake of doing or making anything. This course will be a close reading of selected passages from Aristotle's works of theoretical philosophy, especially his *Physics*, *On the Soul*, *Metaphysics*, and his logical works. We'll build up an understanding of his overall world picture, according to which the cosmos is eternal, finite in size, harmoniously ordered, and characterized by natural teleology (that's to say, things naturally are as they are for the sake of what is good). Above all, we will seek to understand the key concepts that Aristotle bequeathed to theoretical philosophy, such as substance, accident, essence, potentiality, necessity, and priority.

PHIL 117 Medieval Philosophy

CourseID: 156021

Faculty:

Next Term Offered: 2020 Fall

This course will examine three great traditions in medieval philosophy (Neoplatonism, Scholastic-Aristotelianism, and Nominalism) through each tradition's greatest proponent (Augustine, Aquinas, and William of Ockham). Specific topics will include skepticism, knowledge, human nature, divine nature, language, realism, conceptualism, and happiness. Students in the course will acquire a firm understanding of the major currents in one of the most important – if still neglected – periods in western philosophy.

PHIL 122 British Empiricism

CourseID: 114331

Faculty:

Next Term Offered: 2021 Spring

The seventeenth and eighteenth centuries were among the most exciting and revolutionary periods in the history of western philosophy. Among the most prominent

philosophers working in that period, Locke, Berkeley and Hume have traditionally been grouped together under the label "British Empiricists" in virtue of their rejection of innate ideas and emphasis on experience as a source of knowledge. This undergraduate level course aims to provide an overview of the development of early modern empiricism while exploring in detail a number of central issues, arguments and controversies. Optional readings will place our three central figures in the larger context of philosophical developments in the early modern era. Topics will include the theory of ideas, the nature of body, personal identity, human agency, skepticism, and naturalism.

PHIL 125 Beyond Dualism: Descartes and His Critics

CourseID: 121954

Faculty:

Next Term Offered: 2020 Fall

We will explore Descartes' dualism in its historical context. After examining the transformation that Descartes brought about in our conceptions of body and mind (and ourselves), we will consider some of the notorious metaphysical problems his dualism gives rise to and some 17th- and 18th- century attempts to push back against it in the figures of Princess Elizabeth of Bohemia, Henry More, Margaret Cavendish, Anne Conway, and Anton Amo.

PHIL 136 Phenomenology of Lived Experience

CourseID: 000136

Faculty:

Next Term Offered: 2020 Fall

In this course, we will explore phenomenological approaches to lived experience, i.e., the experience we have, as embodied beings, who are embedded in a world and entangled with others. We will begin by looking at treatments of the phenomenology of lived experience in general in texts by Franz Brentano, Edmund Husserl, Martin Heidegger, and Maurice Merleau-Ponty. We will then address attempts to work out the phenomenology of specific modes of lived experience in Simone de Beauvoir's *The Second Sex*, Frantz Fanon's *Black Skin, White Masks*, Emilio Uranga's "Essay on an Ontology of the Mexican," and Sara Ahmed's "Orientations: Towards a Queer Phenomenology."

PHIL 138 Heidegger's Being and Time

CourseID: 000138

Faculty:

Next Term Offered: 2020 Fall

A close reading of Martin Heidegger's *Being and Time*. Topics from Division I of the book include: In what sense, and on the basis of what, is the world we inhabit intelligible? In what sense do we inhabit such an intelligible world? And what, after all, is the relation

between what is and what we understand there to be? Division II of the book addresses existential issues such as: death, guilt, authenticity, history, and temporality. We aim to read the entire book.

PHIL 145 Modal Logic

CourseID: 156023

Faculty:

Next Term Offered: 2020 Fall

Modal logic in the first instance is the study of the logical properties of modal words like 'must', 'may', 'necessarily', and 'possibly'. The standard way of explaining the meanings of modal idioms like 'necessarily' --in terms of "truth at a possible world" --has been taken over by many linguists as a tool to analyze meaning in natural language (so-called 'possible worlds semantics'). It has also been used to study the nature of provability in formal systems, to analyze programs in computer science, and to model temporal processes.

This course is first and foremost a course in logic, but one that attends to modal logic's uses in philosophy and the study of language. One of the goals of the course is to introduce you to doing metatheory--proving things like completeness and soundness for logical systems. We also look in some detail some applications of modal logic and its semantics, discussing such things as: semantics for counterfactual conditionals; mutual knowledge and conversational context; the use of modal logic to model such things as computer programs and non-standard (e.g., intuitionistic) mathematical systems.

The course does not suppose that you know any logic. We do move pretty fast through elementary logic; you may find the course challenging unless you have taken and remember some of an elementary logic course like EMR17. Grades will be determined by: class attendance, four to six problem sets, a take home final. The primary text for the course is Hughes and Cresswell, *A New Introduction to Modal Logic* (Routledge).

PHIL 149Z Philosophy of Science

CourseID: 114427

Faculty:

Next Term Offered: 2020 Fall

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 150 Philosophy of Probability

CourseID: 156133

Faculty:

Next Term Offered: 2020 Fall

Probability, remarked Bishop Butler, is "the very guide of life." In this course we will investigate the extent to which probabilistic tools can help answer basic questions like these: How should I choose among my options? What should I believe? How should I revise my beliefs upon acquiring new information? Does it make sense to believe in God? No background in math is necessary; the beginning of the course will cover the essentials of probability theory.

PHIL 158A Mind, Brain, and Behavior Proseminar: Inference and Memory

CourseID: 118752

Faculty:

Next Term Offered: 2020 Fall

In this MBB proseminar we will study both philosophical and psychological theories of episodic memory. Much work in psychology analyses episodic memory in terms of inference. We will spend some time studying different approaches to inference in philosophy. Readings will include but not be limited to selections from philosophers Shoemaker, Michaelian, Martin, Campbell, and Debus, and psychologists Tulving, Schachter, and Neisser.

PHIL 169 Nozick's Philosophical Explanations: Proseminar

CourseID: 000169

Faculty:

Next Term Offered: 2021 Spring

A close reading of Harvard philosopher Robert Nozick's neglected masterpiece *Philosophical Explanations*. Topics include philosophical methodology, the identity of the self, why there is something rather than nothing, knowledge and skepticism, free will and determinism, the foundations of ethics, and the meaning of life.

PHIL 173X Practical Reasons

CourseID: 203456

Faculty:

Next Term Offered: 2021 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 175W The Wisdom of Work: Proseminar

CourseID: 000175

Faculty:

Next Term Offered: 2021 Spring

Human beings spend much of their waking lives at work. We invest much of our early lives and education thinking about and preparing for work, and as adults we regard the quality of our work as highly important. Yet we rarely reflect on what work even is or what role it can or should play in a fulfilling existence. Particularly since technological and economic changes seem to portend a future of radically different possibilities for work, questions related to the meaning of labor are receiving increased attention. Does work have a place in a philosophically and spiritually informed life? How does work relate to its ostensible opposite, leisure? Does work contribute to or distract from the highest human purposes? This course will consider contemporary questions like these in light of the tradition of Western philosophical reflection. The course will consider the foundational perspectives of Plato and Aristotle on work and leisure as well as the contributions of Augustine and Aquinas. Readings from a host of modern thinkers will be drawn from thinkers as diverse as Martin Luther, John Locke, Karl Marx, Simone Weil and Hannah Arendt.

PHIL 176G Groups and Political Philosophy: Proseminar

CourseID: 000176

Faculty:

Next Term Offered: 2021 Spring

In this course we will be examining the role and significance of groups (social, cultural, and institutional) in various areas of political philosophy. Although we will consider a variety of issues we will concentrate on two principal topics. Firstly, we will consider the significance of groups in relation to the claims and demands of social and political justice. Should social groups be thought to have a fundamental normative significance in political philosophy or must we reduce all political claims and interests to the claims and interests of individuals? What is the significance of social groups to questions of distributive justice? What sort of social groups are relevant to questions of distributive justice and why are they relevant? Are there group membership rights? What is the nature and foundation of these rights, and do these rights conflict with liberal political thought? The second dimension of the course concerns the significance of groups as subjects to the demands of justice. Is it only the political community, taken as a group,

that is answerable to fundamental principles of social justice, or do these principles also govern the individual conduct of a political community's members? Do national groups bear responsibility as a group for what the group does? Can social groups in a society be deemed collectively responsible for certain social and political outcomes? What is the nature and mechanism of this group responsibility? Finally, we will consider the moral status and responsibilities of corporate 'group agents'.

PHIL 179 Race and Social Justice

CourseID: 124577

Faculty:

Next Term Offered: 2021 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?

PHIL 188 Philosophy and Literature: Proust

CourseID: 127792

Faculty:

Next Term Offered: 2021 Spring

The course will attempt to achieve a sense of Proust's great novel, *In Search of Lost Time*, as a whole, necessarily in an abbreviated form, but with the aim of tracing the plan that Proust worked out when he began the project. The bulk of the reading will be in Proust's text, but there will be regular secondary readings in philosophy and in the critical literature on Proust. Philosophical themes to be emphasized will include: the nature of subjectivity and the problem of other minds, the strategies of solipsistic desire, freedom and dependence, *amour-propre* and the desire for approbation, the nature and limits of the will (including 'involuntary memory'), personal identity and artistic vocation, the will to knowledge and self-deception.

PHIL 202A Aristotle

CourseID: 000202

Faculty:

Next Term Offered: 2020 Fall

A close study of Aristotle's conception of modality and its employment across philosophical contexts.

PHIL 222 British Empiricism

CourseID: 114435

Faculty:

Next Term Offered: 2021 Spring

A graduate course that will run in parallel with Phil 122. We will cover the same material but with an eye toward teaching and research. You do not need to attend Phil 122 to take Phil 222.

Physics

PHYSICS 140 Introduction to the Physics of Living Systems

CourseID: 127814

Faculty: Aravinthan Samuel

Next Term Offered: 2021 Spring

We will discuss how theoretical and experimental tools derived from physics - e.g., statistical mechanics, fluid mechanics - have been used to gain insight into molecular and cellular biology including the structure and regulation of DNA, genomes, proteins, the cytoskeleton, and the cell. Students will gain an intensive introduction to biological systems, as well as physical and mathematical modeling.

PHYSICS 141 The Physics of Sensory Systems in Biology

CourseID: 121885

Faculty: Aravinthan Samuel

Next Term Offered: 2020 Fall

Living organisms use sensory systems to inform themselves of the sights, sounds, and smells of their surrounding environments. Sensory systems are physical measuring devices, and are therefore subject to certain limits imposed by physics. Here we will consider the physics of sensory measurement and perception, and study ways that biological systems have solved their underlying physical problems. We will discuss specific cases in vision, olfaction, and hearing from a physicist's point of view.

PHYSICS 216 Mathematics of Modern Physics

CourseID: 127815

Faculty: Arthur Jaffe

Next Term Offered: 2021 Spring

Introduction to functional integral methods relevant for problems in quantum and statistical physics, and quantum information. Properties of linear transformations on Hilbert space. Generators of continuous groups and semigroups. Properties of Green's functions and matrices. Uniqueness and non-uniqueness of ground states and equilibrium states. The KMS condition and its consequences.

PHYSICS 248R Topics in Experimental Particle Physics

CourseID: 109993

Faculty:

Next Term Offered: 2020 Fall

Topics in the elementary particle physics, focusing on experimental studies of the

Standard Model and new physics beyond the Standard Model in the past 20 years. Half of the course will review ongoing experimental research in particle physics, with or without accelerators. The other half will cover particle detector technologies and data analysis methods.

Prerequisite: Physics 145 or equivalent, i.e. a course at the level of Griffiths, Introduction to Elementary Particles.

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 271 Topics in the Physics of Quantum Information

CourseID: 121970

Faculty: Mikhail Lukin

Next Term Offered: 2020 Fall

Introduction to physics of quantum information, with emphasis on ideas and experiments ranging from quantum optics to condensed matter physics. Background and theoretical tools will be introduced. The format is a combination of lectures and class presentations.

Psychology

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 1303 The Human Brain Then and Now

CourseID: 108478

Faculty: Randy Buckner

Next Term Offered: 2021 Spring

This course will explore the "mismatch" between our ancestral brain and the modern world. After covering the evolution of the human brain, the bulk of the course will focus on case studies including how drugs hijack the normal function of brain systems, how the Facebook age places stresses on social systems that evolved to handle close-knit groups of 25 or so individuals, and how the brain degenerates as we live unexpectedly long.

PSY 1304 Brain Damage as a Window into the Mind: Cognitive Neuropsychology

CourseID: 116622

Faculty: Alfonso Caramazza

Next Term Offered: 2020 Fall

Examines the patterns of perceptual, motor, cognitive, and linguistic impairments resulting from brain damage. The focus is on the implications of the various types of neuropsychological deficits (such as visual neglect, dyslexia, and aphasia) for theories of the mind and the functional organization of the brain.

PSY 1352 Foundations of Cognitive Neuroscience Research

CourseID: 121887

Faculty: Randy Buckner

Next Term Offered: 2020 Fall

Intended for undergraduates or those with limited background in cognitive neuroscience. Students will attend and participate in laboratory research and in a seminar that includes discussion of active scientific projects, recent important journal articles, and didactic lecture on technical aspects of methods central to cognitive neuroscience research. Readings will be assigned that survey basic principles of system neuroscience, cognitive science, and methods including functional MRI, MEG, and single unit physiology.

PSY 1358 Cognitive and Neural Aspects of Object and Action Knowledge

CourseID: 127902

Faculty: Alfonso Caramazza

Next Term Offered: 2021 Spring

Knowledge of objects and actions encompasses their perceptual and motor properties as well as more abstract properties such as information about their function (e.g., what they are used for, the goal of an action). How is this knowledge represented and organized in the brain? We will read and discuss key papers on object and action representation and critically evaluate results from behavioral, neurophysiological, neuropsychological, neuroimaging, and computational studies. The seminar will provide a critical review of the current literature and identify important challenges that await future research.

PSY 1555 Wired to Connect? The Neuroscience of Social Understanding and Interaction.

CourseID: 126848

Faculty: Mina Cikara

Next Term Offered: 2021 Spring

By some accounts, the large expansion of the human brain evolved due to the complex demands of dealing with social others—competing or cooperating with them, deceiving or empathizing with them, understanding or misjudging them. This discussion-based seminar surveys the emerging field of social cognitive neuroscience and its multi-level, multi-method approach to understanding the brain in its social context. We will review current theories and methods guiding the field and recent research examining the neural bases of social processes, including: theory of mind, empathy, morality, social decision-making, intergroup relations, among others.

PSY 1556R Research Seminar in Implicit Social Cognition

CourseID: 127489

Faculty: Mahzarin Banaji

Next Term Offered: 2020 Fall

An introduction to research on implicit social cognition, with special focus on attitudes, beliefs, and identity and in some cases its applications to law, business, medicine, and government. Students will be paired with individual researchers to work on ongoing projects that can turn into more independent projects. In addition to weekly work in the laboratory, students are expected to attend biweekly discussion groups focusing on current issues and directions in the laboratory as a whole.

PSY 1857 Psychotherapy: Science and Practice

CourseID: 160646

Faculty: John Weisz

Next Term Offered: 2021 Spring

Would you pay someone to help you change? Millions of people do, every week. Psychotherapy is a healing art, a subject of scientific inquiry, and—for many—a business venture. In this course we will bring these strands together, focusing on how psychotherapy is practiced in the real world and how clinical science is used to test claims of success. We will examine competing models of therapy, evaluate their scientific status, and dig into case examples of each. We will also explore hot topics in the field, including whether all therapies have about the same effect (the "dodo bird" hypothesis), whether internet-based therapies actually work, and how to get effective therapies to traumatized people in war-ravaged and low-resource countries.

PSY 2030 Bayesian Data Analysis

CourseID: 160667

Faculty: Patrick Mair

Next Term Offered: 2021 Fall

Bayesian statistics is becoming more and more popular in psychology. This class covers basic and advanced topics of Bayesian statistics with a strong focus on applications in Psychology. Formulas and technical details are kept on a minimum — it is all about how to integrate Bayesian concepts into your everyday research.

The first part of the course introduces students to the Bayesian paradigm of inferential statistics (as opposed to the frequentist approach everyone should be familiar with). To have a good understanding of this idea, we need to elaborate on various concepts of probability theory (e.g., Bayes' theorem) and statistical distributions. We then introduce the key components of Bayesian inference (prior, likelihood, posterior), and discuss Bayesian hypothesis testing as well as Bayes factors.

Subsequent units focus on Bayesian regression (including model checks and model comparison) and mixed-effects models which, within a Bayesian context, belong to the family of Bayesian hierarchical models. There we also elaborate on modern approaches

like integrated nested Laplace approximation (INLA) that allow us to efficiently estimate complex nonlinear, spatio-temporal models.

After midterm we look at what's going on under the hood: Markov chain Monte Carlo (MCMC). We introduce Stan, a probabilistic programming language for full Bayesian inference, which interfaces with R. We will then use Stan for some tasks related to Bayesian cognitive modeling. The last three units focus on the following special topics: Gaussian process regression and latent Dirichlet allocation (LDA), selected methods from Bayesian psychometrics, and Bayesian networks.

All topics covered will be supported by corresponding computations and illustrations in R.

PSY 2050 History of Psychology: Seminar

CourseID: 118993

Faculty: Richard McNally

Next Term Offered: 2020 Fall

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 2080 Statistical Learning

CourseID: 110487

Faculty: Patrick Mair

Next Term Offered: 2021 Spring

The first series of lectures (units 1-4) covers advanced regression techniques. We extend the linear mixed-effects model in terms of non-linear effects which leads to generalized additive mixed-effects models (GAMM), with spline specifications at its core. At this point we will also introduce cross-validation as a tool for assessing predictive accuracy of a model while avoiding overfitting. This is followed by shrinkage/regularization techniques (Lasso) which are attractive for regression scenarios with many predictors. In the time series unit we introduce strategies for finding patterns in time trajectories and making corresponding predictions (ARIMA models, Holt-Winters smoothing).

In Unit 5 we model trajectories using concepts from functional data analysis (FDA) where each single individual is represented by a function (e.g. growth curve, EEG signal, etc.). Graphical models (Unit 6) allow us to model dependencies in complex multivariate datasets (e.g., studying relationships among clinical symptoms). In the subsequent units

we move into Machine Learning territory. We start with unsupervised learning which is essentially clustering. Basic approaches such as hierarchical clustering techniques and k-means are explained. We proceed with borderline unsupervised/supervised approaches such as association rules and Kohonen networks. In Unit 9 we learn more advanced parametric clustering techniques (mixture distributions) which we will then integrate into a regression framework (mixture regression). Hidden Markov models will be introduced within this context as well.

The remaining three units are all about supervised learning where our aim is classification/prediction. Unit 10 presents tree-based approaches (decision/regression trees), model-based recursive partitioning (i.e., finding optimal predictor splits in e.g. a mixed-effects regression model), and ensemble tree learning (random forests).

In Unit 11 we briefly introduce discriminant analysis and extend it to support vector machines (SVM), often applied on fMRI data. Finally, we will cover neural networks and some modern "deep learning" flavors.

PSY 2301 Theories of Learning

CourseID: 207497

Faculty: Samuel Gershman

Next Term Offered: 2021 Fall

This course provides a tour of foundational topics in learning from a theoretical perspective. It covers a diversity of learning processes, aiming for breadth over depth (although it inevitably neglects several important forms of learning). Each meeting will consist of student-led presentations of two papers. Experience with computational modeling is not required, but students should have some familiarity with basic math (algebra and probability).

PSY 2420 Cognitive-Behavioral Treatment of Psychological Disorders

CourseID: 144980

Faculty: Jill Hooley

Next Term Offered: 2020 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 2451 Psychology of Racism, Prejudice, and Discrimination

CourseID: 108488

Faculty: James Sidanius

Next Term Offered: 2020 Fall

This course provides an in-depth and comprehensive exposure to the theoretical and methodological issues within the social psychology of racism and prejudice research. Approaches will include sociology, political science, and anthropology.

PSY 3500 Psychological Science: Talking Points

CourseID: 118609

Faculty: Steven Pinker

Next Term Offered: 2021 Spring

A graduate companion course to "Psychological Science," which explores the theories and controversies in greater depth. Topics include genetics, evolution, cognitive neuroscience, perception, development, consciousness, social psychology, personality, psychopathology, violence, sex, and morality.

PSY 3560 Professional Development

CourseID: 110489

Faculty: Matthew Nock

Next Term Offered: 2021 Spring

Religion, The Study of

RELIGION 48 Catholicism Faces the Challenges of Modernity

CourseID: 109983

Faculty: Francis Fiorenza

Next Term Offered: 2020 Fall

This lecture course will analyze the major classics and debates of twentieth-century Roman Catholic Religious Thought up until the present century. The seminar will seek to introduce major religious thinkers primarily through an analysis of the arguments of a major work and debates. It will discuss the reasons for their significance and the extent of their controversies. Among those considered will be Alfred Loisy, George Tyrrell, Jacques Maritain, Henri de Lubac, Yves Congar, Bernard Lonergan, John Courtney Murray, Joseph Ratzinger (Pope Benedict XVI), Karl Rahner, Gustavo Gutierrez, John Paul II, Pope Francis. Others to be considered. Jointly offered with the Divinity School as HDS 2477.

RELIGION 62 Indian Religions Through Their Narrative Literatures

CourseID: 117604

Faculty:

Next Term Offered: 2020 Fall

An examination of the religious traditions and communities of South Asia through the stories they tell. This semester's focus will be the epics - the Mahabharata and the Ramayana - in their numerous textual, regional, sectarian, and performative tellings.

RELIGION 64 Krishna and Christ: Text, Practice, Person, Experience

CourseID: 208033

Faculty:

Next Term Offered: 2021 Spring

For centuries, people have compared and contrasted Jesus Christ, the central figure of Christian faith, and Krishna, a supreme deity of Hindu tradition, both understood as loving, saving figures who descend into this world and are embodied here, gather followers and offer instructions, and are to be approached by love and devotion. Yet they are also figures in very different cultures, histories, social and intellectual contexts. What have been their positions in their faith traditions? Who do the faithful believe them to be? How are they similar and different? Can they be beneficially understood by those who do not believe in them? Course readings will deal with great scriptural texts, worship practices, devotions, images, and their destinies as universal figures. Larger questions

related to the nature of God, of religions, and of theology itself will be raised. The course proceeds by key readings, discussed vigorously in class. Course requirements include brief weekly written responses to readings, and two 12-page course papers, but no final examination. Jointly offered with the Divinity School as HDS 3070.

RELIGION 1059 God, Hindu and Christian

CourseID: 124879

Faculty:

Next Term Offered: 2020 Fall

This course examines the processes by which theologians study theologies across religious boundaries, bringing this learning into dialogue with home traditions, by careful comparison, dialogical reflection and, ideally, a well-informed theological understanding of what it means to belong to one tradition and learn from another. Readings include (by way of the necessary example) Hindu primary texts and texts from the Roman Catholic traditions, but students are encouraged to bring their knowledge of and interest in other traditions into the discussions. Prior knowledge of either tradition, though desirable, is not required.

RELIGION 1095 Ritualization and Transitional Phenomena

CourseID: 108503

Faculty:

Next Term Offered:

The focus of this course is less on institutionalized rituals, viewed as framed and identifiable forms of social action, than on *ritualization* - on the everyday strategies, tactics and routines of 'playful' and 'magical' action whereby people manipulate words, gestures, emotions, bodies, objects and images in an effort not only to control and comprehend their relationship with the world but to change the way the world *appears* to them, particularly in times of separation and transition, change or crisis. Like play and fantasy, the process of ritualization is an intrinsic aspect of everyday life, evident in the ways human beings compose stories, furnish and clean their home-spaces, cook and eat meals, read a newspaper, court, joke, argue, mourn, give gifts and converse. Crucial to all these actions is the process of transferring or projecting thoughts and emotions onto non-immediate objects or persons in an attempt to symbolically or vicariously grasp and transform confusing, contradictory or chaotic inner experiences. Jointly offered with the Divinity School as HDS 3818.

RELIGION 1250 Judaism: Text and Tradition

CourseID: 205396

Faculty:

Next Term Offered: 2021 Spring

A general and wide-ranging exploration of the Jewish religious tradition, from its inception in biblical Israel through its rabbinic, medieval, and modern iterations. The central focus lies on the literary meanings and existential questions of the classical tradition, as well as on the relationships between texts, religious claims, and practices. We shall also consider some of the restatements, reformulations, and challenges to tradition that have arisen in modern times. Open to undergraduates, including first year students, by permission.

RELIGION 1448 Mystical Theology

CourseID: 156030

Faculty:

Next Term Offered: 2020 Fall

This course will examine the history of mystical theology in early and medieval traditions of Christianity. Through a close reading of primary texts in translation students will engage questions of divine mystery, transcendence, and hiddenness; the practice of affirmation (kataphasis) and negation (apophasis); mystical union; and the limits of language. Jointly offered in the Divinity School as HDS 2003.

RELIGION 1538 Liberal and Liberation Theologies in Dialogue

CourseID: 126762

Faculty:

Next Term Offered: 2021 Spring

This course will explore the possibilities for fruitful interchange between classic liberal theologies and contemporary theologies of liberation. We will begin with major texts of American liberal theology (Channing, Emerson, Bushnell, Rauschenbusch), then turn to the defining liberationist texts (Gutierrez, Cone, Daly), and conclude with several attempts to integrate the traditions.

RELIGION 1543 Nineteenth Century Religious Thought: Theology and the Critique of Religion

CourseID: 109865

Faculty:

Next Term Offered:

The nineteenth century formulated many of the questions and frameworks that continue to dominate theology and religious reflection in the West. This course considers the developing interplay between modern Christian theology (primarily continental) and the principal philosophical and social critiques of religion in the nineteenth century. Topics include human nature, religion, the divine-human relationship, religious knowledge, the

social, and historicity. Readings from Lessing, Kant, Schleiermacher, Hegel, Marx, Feuerbach, Kierkegaard, Nietzsche, Harnack, and Troeltsch. Jointly offered with the Divinity School as HDS 2431.

RELIGION 1554 The Religious History of American Women: Seminar

CourseID: 156294

Faculty:

Next Term Offered: 2021 Spring

The numerical dominance of women in most religious groups is the point of departure for an exploration of American history focusing on the interrelation of gender systems and religious world views. Topics include witchcraft, African American women evangelists, ideologies of domesticity, and the relation of gender to religious dissent, among others. The course emphasizes historical research methodology using gender as a category of analysis.

RELIGION 1562 Alternative Spiritualities in the United States

CourseID: 127678

Faculty:

Next Term Offered: 2021 Spring

This course surveys spiritual practices and movements that have been labeled as metaphysical, esoteric, occult, harmonial, and New Age. We will begin with a historical survey of esoteric spirituality from colonial-era astrology and alchemy to New Age and neopagan traditions, then consider some leading constructive thinkers within alternative spiritual traditions, such as Starhawk and Joanna Macy. The course will also feature field trips to a variety of spiritual organizations and communities. Jointly offered with the Divinity School as HDS 2360.

RELIGION 1577 Ecotheology

CourseID: 213595

Faculty:

Next Term Offered: 2020 Fall

This course will survey constructive religious reflection that is informed by an ecological

worldview and accountable to various forms of environmental activism. Readings will be drawn from a variety of religious and spiritual traditions, among them Christianity, Judaism, Islam, Buddhism, Paganism, Unitarian Universalism, religious naturalism, and metaphysical spirituality. We will pay special attention to the interplay between ecotheology and various theologies of liberation. Students will be invited to develop their own constructive theological or atheological proposals in dialogue with the assigned readings. Jointly offered in the Divinity School as HDS 3166.

RELIGION 1660 The Brhadaranyaka Upanisad with Sankara's Commentary

CourseID: 125635

Faculty:

Next Term Offered: 2021 Spring

This seminar is for students interested in the study of primary Indian/Hindu texts, read in translation and in the context of a comparative dynamic of reading across the boundaries of traditions. The Brhadaranyaka Upanisad, Sankara's commentary on it (plus excerpts from Suresvara's Vartikas), will be read (in English) along with short examples from Christian theological/commentarial literature.

RELIGION 1661 Yoga Sutras in a Comparative Perspective

CourseID: 126783

Faculty:

Next Term Offered: 2020 Fall

This seminar is for students interested in the study of primary Indian/Hindu texts, read in translation and in the context of a comparative dynamic of reading religiously across the boundaries of traditions. The Yoga Sutras – the 195 sutras – is the focus of the course, along with its primary commentary (Vyasa's Bhasya), plus selections from other classic commentaries, and the modern Light on the Yoga Sutras by BKS Iyengar. All these will be read (in English). Some comparisons will be made, by way of noticing parallel Hindu and Buddhist versions of yoga, and instances of Muslim and Christian reception of the Sutras. No language prerequisite, but students who know Sanskrit will be encouraged to make use of their expertise.

RELIGION 1701 Introduction to Buddhist Scriptures and Their Critical Interpretations

CourseID: 124399

Faculty:

Next Term Offered: 2020 Fall

An introduction to basic issues in the contemporary understanding of textuality, history, and interpretation and their relevance to the study of Buddhist scriptures. Examples of

Buddhist scriptures will be drawn primarily from the Mahayana traditions.

RELIGION 1714 Studying Buddhism Across Time and Place

CourseID: 213596

Faculty:

Next Term Offered: 2020 Fall

This class studies the basic elements of Buddhist thought, practice, and historical communities, and their vision of the nature of human experience and flourishing. We will study Buddhist classic writings as well as later literary gems from South, Central and East Asia on the nature of meditation, discipline, and creativity. Key themes of our readings are the relationship between self and other, the education of the emotions, paths of self-cultivation, and the (im)possibility of perfection. We will be especially attentive to how the approach to such things has shifted as Buddhism spread through Asia, and more recently to the rest of the world, as in its reception by the Transcendentalists, the Beat poets, and socially engaged religion. Throughout the course we will consider the relevance of this material to our own views of the world and how we should lead our lives. Jointly offered in the Divinity School as HDS 3830.

RELIGION 1722 Buddhist Ethics

CourseID: 125677

Faculty:

Next Term Offered: 2021 Spring

A systematic exploration of Buddhist views of moral anthropology and the place of moral reflection in Buddhist thought and practice. The scope of the course is wide, with examples drawn from the whole Buddhist world, but the emphasis will be given to the particularity of different Buddhist visions of human flourishing. Attention will also be given to the challenges and promises of describing Buddhist ethics in a comparative perspective.

RELIGION 1741 Modern Buddhism and Fiction

CourseID: 125675

Faculty:

Next Term Offered: 2020 Fall

An examination of how fiction is a vehicle for religious reflection in the modern Buddhist world. The genres of fiction will include both the novel and the short story, with examples drawn widely from across the Buddhist world.

RELIGION 1802 Introduction to Islamic Mystical Traditions

CourseID: 113442

Faculty: Ali Asani

Next Term Offered: 2020 Fall

This course offers an introductory survey of mystical traditions of Islam, popularly labelled as "Sufism." It explores the fundamental concepts, practices, and institutions associated with these traditions, their historical development and their influence on the devotional, cultural and social lives of Muslim communities through the centuries. Through case studies drawn from the Middle East, South Asia, West Africa and North America, the course examines ways in which these traditions have developed and promoted alternative perspectives on what it means to be Muslim, challenging in recent times sectarian, legalistic and politicized understandings of Islam such as Wahhabi, Islamism and jihadism. The course assumes no prior knowledge of Islam.

RELIGION 1812 Islam and Religious Diversity

CourseID: 207014

Faculty:

Next Term Offered: 2020 Fall

The problem of religious diversity recurs in all of the major branches of Islamic thought and appears in complex permutations in diverse cultural contexts. Focusing primarily on pre-modern Islam, this course invites students to investigate perspectives on the religious other in the Quran, Islamic law, theology, philosophy and Sufism. In the final portion of the course we will look at Muslim Spain, Mughal India, and the Muslim-Confucians of late imperial China as examples of how these complex dynamics played out on the ground. The larger aim of this course is for students to develop interpretive skill in dealing with the internal complexity of a number of Islamic discourses and contexts by pursuing a single problematic across them. To this end the course will be taught in seminar format and participants will be encouraged to engage creatively with primary and secondary sources to develop their own scholarly points of view.

RELIGION 1814 Muslim Devotional Literatures in South Asia: Qawwalis, Sufiana Kalam (Sufi Poetry) and the Ginans

CourseID: 161217

Faculty: Ali Asani

Next Term Offered: 2021 Spring

This course explores traditions of Islamic spirituality in South Asia through the lens of three genres: the qawwali, concerts of mystical poetry; sufiana kalam, Sufi romantic epics and folk poems; and the ginans, hymns of esoteric wisdom recited by the Satpanthi Ismailis. Since these genres represent examples of language, symbols and styles of worship shared across Islamic and non-Islamic denominational boundaries, we will also examine their relationships with other Indic traditions of devotion, particularly those associated with the so-called sant and Hindu bhakti movements. Special emphasis will be given to the impact of contemporary political ideologies, globalization and the revolution in media technology on the form and function of these genres and their relationship with contemporary communities of faith in South Asia and beyond.

RELIGION 1816 Ismaili History and Thought

CourseID: 125910
Faculty: Ali Asani
Next Term Offered: 2021 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. Jointly offered with the Divinity School as HDS 3939.

RELIGION 2063 South Asian Religious Aesthetics: Seminar

CourseID: 118446
Faculty:
Next Term Offered: 2021 Spring

An examination of South Asian theories of aesthetics and their relevance for understanding Hindu, Buddhist, and Jain discourses of ethics, literature, and theology. Prerequisite: Previous coursework in the religious history of South Asia. Jointly offered with the Divinity School as HDS 3925.

RELIGION 2492 Disobedience: The Defiance of Genre in Contemporary English Language Poetry

CourseID: 203930
Faculty:
Next Term Offered: 2020 Fall

"Poetry is the new space of possibility and everyone knows it," writes Eileen Myles, thereby defining poetry as possibility rather than anything whose boundaries can be prescribed. As Myles explains, "a lot of things that people like are beginning to need to happen in the same pieces of writing and those things may be gossip, theory, sexual description, or simply an implication that it's there or just happened (art)." We will explore this principled disobedience – an aesthetic, philosophical, and perhaps also a theological act – through the reading of important pieces by contemporary artists, among them Eileen Myles, Susan Howe, Alice Notley, Claudia Rankine, Maggie Nelson, Dana Ward, Rob Halpern, and Bhanu Kapil.

Slavic Languages and Literatures

RUSS AH Russian for Heritage Speakers

CourseID: 114640

Faculty:

Next Term Offered: 2020 Fall

Grammar and vocabulary review for students with a Russian-speaking family background. The course covers the entire case system, verb conjugation, aspect, motion constructions, and other essential grammar topics. Emphasis on reading, writing, spelling, and word formation.

RUSS ATA Elementary Russian through Authentic Texts: Russian through Pushkin I

CourseID: 109273

Faculty:

Next Term Offered: 2020 Fall

Part one of a two part introductory course to Russian language and culture through a selection from the verse and prose works of Russia's greatest poet, Alexander Pushkin (including *The Bronze Horseman*, excerpts from *Eugene Onegin*, shorter poems, and prose in *The Queen of Spades*). This literary and linguistic approach to Elementary Russian has a strong emphasis on reading authentic Russian, but all four major communicative skills (speaking, listening comprehension, reading, writing) are stressed. Covers all of the basics of Russian grammar, including all six cases, verbal conjugation, and verbs of motion.

RUSS ATB Elementary Russian through Authentic Texts: Russian through Pushkin II

CourseID: 159636

Faculty:

Next Term Offered: 2021 Spring

Part two of a two part introductory course to Russian language and culture through a selection from the verse and prose works of Russia's greatest poet, Alexander Pushkin (including *The Bronze Horseman*, excerpts from *Eugene Onegin*, shorter poems, and prose in *The Queen of Spades*). This literary and linguistic approach to Elementary Russian has a strong emphasis on reading authentic Russian, but all four major communicative skills (speaking, listening comprehension, reading, writing) are stressed. Covers all of the basics of Russian grammar, including all six cases, verbal conjugation, and verbs of motion. Assumes no previous knowledge of Russian.

RUSS BTA Intermediate Russian through Authentic Texts: Russian through Bulgakov I

CourseID: 146663

Faculty:

Next Term Offered: 2020 Fall

Part one of a two-part intermediate course in Russian language and culture through reading of what is arguably 20th-century Russia's greatest novel, Mikhail Bulgakov's *"The Master and Margarita"*. This literary and linguistic approach to Intermediate Russian has a strong emphasis on reading authentic Russian, but all four major communicative skills (speaking, listening comprehension, reading, writing) are stressed as students learn to use the language both as a means of communication and as a tool for reading and research. Further development of vocabulary and oral expression within a comprehensive review of Russian grammar. Systematic study of word formation and other strategies are taught to help free students from excessive dependence on the dictionary and develop confidence in reading.

RUSS BTB Intermediate Russian through Authentic Texts: Russian through Bulgakov II

CourseID: 159659

Faculty:

Next Term Offered: 2021 Spring

Part two of a two-part intermediate course in Russian language and culture through reading of what is arguably 20th-century Russia's greatest novel, Mikhail Bulgakov's *"The Master and Margarita"*. This literary and linguistic approach to Intermediate Russian has a strong emphasis on reading authentic Russian, but all four major communicative skills (speaking, listening comprehension, reading, writing) are stressed as students learn to use the language both as a means of communication and as a tool for reading and research. Further development of vocabulary and oral expression within a comprehensive review of Russian grammar. Systematic study of word formation and other strategies are taught to help free students from excessive dependence on the dictionary and develop confidence in reading.

SLAVIC 114 Squaring the Circle: Russia, Art, Revolution

CourseID: 208135

Faculty:

Next Term Offered: 2021 Spring

Wherever an avant-garde movement sprang up, its artists would announce they were there to change the world. Nowhere did this promise come closer to fruition than in Russia of the 1920s. This course explores Russian and Soviet avant-garde art and its most radical manifestations in literature and dance, on stage and screen, in visual arts and in the ways of life. We will examine the way art and political revolution impact each other and focus on the many "isms," avant-garde and otherwise, that shaped society and the arts during a period of rapid modernization and experimentation: Futurism,

Suprematism, Constructivism, Productivism and others. We will look at works by Malevich and Meyerhold, Tatlin and Mayakovsky, Rodchenko and Stepanova, Nijinsky and Meyerhold, Vertov and Eisenstein.

SLAVIC 115 The Russian Novel

CourseID: 212750

Faculty:

Next Term Offered:

SLAVIC 130 Russian Poetry and Its Borders: Conference Course

CourseID: 205636

Faculty: Stephanie Sandler

Next Term Offered: 2021 Fall

Without borders, can there be poetry? A white paper border surrounds printed poems; digital poems are bounded by the screen on which they are read; national boundaries keep cultural and linguistic traditions distinct; and aesthetic conventions create genres and demarcate poetry from music or dance or film. How Russian poetry perversely challenges such limits, and how it thrives at the edges of the permissible, will be the subject of this course.

We will study the cultural practice of poetry as it crosses four kinds of borders – performative, linguistic, geographic, and aesthetic. That yields four large topics: poetry in public places (how does poetry speak of politics, and how does it write collective trauma?); poetry and translation (how does translation change poetic practice? how to read mixed-language poems?); poetry and emigration/ exile (what happens to identities and allegiances when poets cross geographical borders? What happens to the poet's language?); and poetry and the other arts (how have music, film, drama, paintings, photography, and the philosophical essay been felt in poetry? can poems become visual artifacts, or scripts for performance?).

Examples from the work of Aygi, Brodsky, Dragomoshchenko, Goralik, Glazova, Kaminsky, Khlebnikov, Mandelstam, Mnatsakanova, Nabokov, Pushkin, Sedakova, Slutsky, Vvedensky. Comparisons to American poets, including Susan Howe and Anne Carson, and to films by Tarkovsky and others.

SLAVIC 131 Dostoevsky

CourseID: 207565

Faculty:

Next Term Offered: 2021 Fall

Survey of Dostoevsky's greatest novels, including *Notes from Underground*, *Crime and Punishment*, *The Devils (The Possessed)*, and *The Brothers Karamazov*, as well as his

most important short stories and journalistic writing from *A Writer's Diary*. Lectures will discuss, among other topics, why Dostoevsky chooses the form of the novel to elaborate his ideas on philosophy, religion, politics, crime, and terror.

SLAVIC 148 Strange Russian Writers

CourseID: 115702

Faculty: Stephanie Sandler

Next Term Offered: 2021 Fall

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 175 Introduction to Polish Culture

CourseID: 205086

Faculty:

Next Term Offered: 2020 Fall

In the sixteenth and seventeenth centuries, Poland was one of the largest countries in Europe and a multi-ethnic commonwealth; just two centuries later, it had been erased from the map, occupied by three different empires and subjected to constant struggles for independence. Today, it is a medium-size monolithic nation state in the middle of Europe, closely watched for its political developments.

Our course will survey key topics in Poland's 1000-year history by examining important works of literature, art, architecture, and film. We will consider how the past, both celebrated and contested, can shape a country's contemporary politics and cultural landscape. We'll also examine the interplay between local, national, and international geographies as we track Poland's ever-changing borders; students will create a personal travel guide and symbolic map of Polish culture, considering the contributions and histories of Poles, Jews, Lithuanians, Ukrainians, Belarussians, Germans and Russians in what was one of Europe's most multi-ethnic and multi-confessional spaces.

SLAVIC 182 The Political Novel

CourseID: 205018

Faculty:

Next Term Offered: 2021 Spring

No novel can be reduced to a set of political beliefs, and yet we often feel that novels speak to our political theories and practices. What makes a novel "political"? Can the novel make a contribution to political theory? How does our understanding of political

power change when we imagine detailed and dramatic confrontations between individuals and the state, individuals and empire, or individuals and global ideologies? How does narrative form reinforce or undermine ideology? What archetypal dramas—protest against authority, the loss of political innocence, the battle between tolerance and conviction—have shaped the political novel in its various traditions from the nineteenth century to the present?

For spring 2019, our readings will include works by Pushkin, Dostoevsky, Conrad, Koestler, Kundera, Gordimer, and others.

SLAVIC 183 Reading Anna Karenina

CourseID: 110329

Faculty:

Next Term Offered: 2022 Spring

In this course we will conduct a close reading of Tolstoy's novel Anna Karenina — and a few additional short works of fiction and criticism. Readings are in Russian.

SLAVIC 189 The Other Russia: Twenty-First Century Films, Fictions, States of Mind

CourseID: 205015

Faculty: Stephanie Sandler

Next Term Offered: 2022 Spring

Russia is in the news these days for its politics and espionage, but what about the daily lives of Russian people? Nothing gets at that reality in all its pettiness and grandeur better than Russian literature. The stories, poems, plays, movies, memoirs, and documentaries of the last twenty-five years are the subject of this course. We will trace the chaotic transitions of the 1990s, the disparities of wealth and polarized politics of the 2000s, the rise of religious thinking (Orthodox, Islam, Jewish), and the several conflicts at Russia's borders. The impact of travel, diaspora, and the internet on breaking down old walls that once isolated the USSR will be as important as changes in the legal order. The different fates of former Soviet republics will be compared, with examples from Ukraine, the Caucasus, and the far North.

Writers include Svetlana Aleksievich, Joseph Brodsky, Elena Fanailova, Linor Goralik, Alisa Ganieva, Boris Khersonsky, Viktor Pelevin, Liudmila Petrushevskaya, Vladimir Sorokin, and Serhiy Zhadan. Films to include *Leviathan*, *Four*, *Alexandra*, *My Joy*, and *Maidan*. Students will also interview and create portraits (visual, verbal, and video) of émigrés from the former Soviet Union living in the Boston area, using the interviews as a context for the cultural representations of life in and beyond Russia.

SLAVIC 197 The Power of the Powerless: Dissidents from Socrates to Václav Havel

CourseID: 123117

Faculty: Jonathan Bolton

Next Term Offered: 2020 Fall

From Socrates and Antigone to Pussy Riot and Ai Weiwei, we are fascinated by the courage of dissidents who oppose tyrannical regimes. But who are dissidents, and where do they gain the conviction, imagination, and political skill to stand up for their beliefs? In this course, we will investigate the role of non-violent dissent in political and cultural life, looking at both historical figures and political actors in the world today. After considering some classic statements of dissent (including Socrates' *Apology*, Sophocles' *Antigone*, and Martin Luther King's "Letter from Birmingham Jail"), we will turn to recent and contemporary dissidents to think about their paths into protest, their strategies of political and cultural protest, their complicated relationship with their fellow citizens, and their portrayal in domestic and international media.

Our focus will be on individuals rather than on social movements, and on non-violent rather than violent or revolutionary protest. Drawing examples from the Soviet Union and Eastern Europe during the Cold War, contemporary Russia, China, and other countries, we will consider figures such as Václav Havel, Aleksandr Solzhenitsyn, Vladimir Bukovsky, Liu Xiaobo, Ai Weiwei, Pussy Riot, and others.

SLAVIC 241 Russian Futurism and Formalism

CourseID: 159557

Faculty: Daria Khitrova

Next Term Offered: 2020 Fall

Follows the development of two major movements in Russian literature – Futurism and Formalism - in close conjunction with each other and in the context of Russian Modernism at large. Examines poems, manifestos, theoretical writings, visual arts, theater productions, films. Key questions include: how could Futurism, with its scandalous manifestos and "transrational" poems, evolve into the Formalist theory with its cult of science and rigorous methodology? How to make sense of the transrational? What made Futurists paint their faces? Works by Bely, Khlebnikov, Mayakovsky, Kruchyonych, Shklovsky, Tynianov, Jacobson, Larionov, Malevich, Zdanevich, Rodchenko, Vertov.

South Asian Studies

SANSKRIT 200AR Advanced Poetic Sanskrit

CourseID: 113324

Faculty:

Next Term Offered: 2020 Fall

Selected readings from classical Sanskrit literature.

SANSKRIT 200BR Advanced Literary Sanskrit

CourseID: 120377

Faculty:

Next Term Offered: 2021 Spring

Selected readings from classical Sanskrit literary theory.

Stem Cell and Regenerative Biology

SCRB 15A CRISPR Cas9: Precision Genetics and Gene Therapy

CourseID: 203604

Faculty:

Next Term Offered: 2020 Fall

This year-long hands-on laboratory course hones skills essential for researchers in developmental biology. Students will learn genome editing tools, cell culture techniques, and phenotypic analyses in both cell lines and model systems while addressing unknown questions in the field. SCRБ 15 is designed to complement material found in SCRБ 10, and is best taken during the sophomore year. Students are strongly encouraged to complete SCRБ 15B in the spring.

SCRБ 15B CRISPR Cas9: Precision Genetics and Gene Therapy

CourseID: 203924

Faculty:

Next Term Offered: 2022 Spring

This year-long hands-on laboratory course hones skills essential for researchers in developmental biology. Students will learn genome editing tools, cell culture techniques, and phenotypic analyses in both cell lines and model systems while addressing unknown questions in the field. SCRБ 15 is designed to complement material found in SCRБ 10, and is best taken during the sophomore year.

SCRБ 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.

SCRБ 152 SCRБ TBA

CourseID: 215895

Faculty:

Next Term Offered:

SCRB 155 Epigenetic Regulation in Development

CourseID: 215900

Faculty:

Next Term Offered:

TBA

SCRB 155 Epigenetic Regulation in Development

CourseID: 126154

Faculty:

Next Term Offered: 2021 Spring

Cloning of Dolly the sheep suggests that all of our cells have exactly the same genes as a fertilized egg. If this is true, then how is it that each of our cells reads out those genes differently? This course will explain the developmental events that regulate the expression of genes, as well as how this developmental expression is established and maintained.

SCRB 180 Development, Plasticity, and Regeneration in the Mammalian Brain

CourseID: 125803

Faculty: Jeffrey Macklis

Next Term Offered: 2020 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: 2020 Fall

This course will cover concepts and theories on evolutionary changes in nervous system regenerative capacities of different organisms. Material will be taught in a dynamic setting combining lectures and brainstorming of the literature with hands-on experience in the laboratory. Students will become familiar with classic, paradigm-changing experiments that have shaped how we think about brain regeneration and repair and also consider the newest theories on cellular reprogramming as a way to regenerate the nervous system.

SCRB 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.

Social Studies

SOC-STD 68CT The Chinese Immigrant Experience in America

CourseID: 159824

Faculty:

Next Term Offered: 2022 Spring

Uses the history of Boston's Chinatown as a case study to examine the experiences of Chinese immigrants in the U.S. from the 1880s until the present. Employs historical, anthropological, and sociological perspectives to examine major themes related to the social and economic development of U.S. Chinatowns and Chinese immigrant communities throughout the 20th and 21st centuries. This course is an Engaged Scholarship course, limited to students who are concurrently participating in a Harvard-affiliated service program in or around Boston's Chinatown. Class discussions and assignments will make active links with students' service work. Open to students in all concentrations.

SOC-STD 68HJ Justice in Housing

CourseID: 205517

Faculty:

Next Term Offered: 2022 Spring

How do theories of justice deal with the problem of housing? What use does American housing policy and politics make of ideas about "fairness" and "justice"? This course will juxtapose contemporary philosophical debates about distributive justice with current concrete problems in housing policy, using the Boston/Cambridge area as a case study. Seminars will feature guests from a number of local housing-focused organizations, and students' final papers will assess real housing policy examples in light of a chosen framework of justice. As this is an Engaged Scholarship course, preference will be given to students involved in direct service to housing-insecure populations (whether in shelters, the public schools, urban summer camps, etc.).

SOC-STD 98JL Global Social Movements

CourseID: 123874

Faculty:

Next Term Offered: 2021 Spring

Social movements are often considered a driving force behind political, social, and cultural change. This course explores the major conceptual models and empirical approaches used in the social sciences to understand social movements. The course will examine a range of case studies from around the globe, including movements dealing with human rights, economic and environmental justice, and armed revolutions. Particular attention will be paid to transnational activism. This is a junior tutorial.

SOC-STD 98OX Fascism and the Far Right in Europe and Beyond

CourseID: 203438

Faculty:

Next Term Offered: 2021 Spring

What is fascism? How did fascists come to power in some states in interwar Europe? What are the legacies of fascism? Who are Europe's radical right parties today, and what explains the appeals of a new wave of radical right politics that appears to be sweeping advanced democracies? These are the core questions we will address in this course. This is a junior tutorial.

SOC-STD 98QD Media, Power, and Resistance

CourseID: 205458

Faculty:

Next Term Offered: 2021 Spring

Media and power are inextricably linked. On the one hand, mass forms of communication, such as national television and mainstream dailies, circulate hegemonic discourses and give legitimacy to state ideologies. On the other hand, nicknamed the "Fourth Estate," news organizations can act as watchdogs, monitoring the performance of the government and holding it accountable to the people. This course examines this dual role of the media in reproducing existing power relations and providing a forum in which citizens can critically discuss public matters. Using social theory and anthropology, we will pay close attention to the performativity of different media forms; consider how the media achieves effects of truth in its depiction of reality; and analyze situations in which it becomes a tool in the hands of those who seek to challenge official narratives and governance regimes. This is a junior tutorial.

SOC-STD 98QJ Secularism and Its Critics

CourseID: 205481

Faculty:

Next Term Offered: 2022 Spring

Often heralded as the antidote to religious conflict, "secularism" has come under attack in recent years by scholars across the political spectrum. This course explores these debates as they have taken shape around reappraisals of the "secularization thesis" – a once-dominant theory asserting the declining importance of religion in the modern world – since the Cold War. Our goal will be to explore the relation of religion to democratic thought and practice by reading both recent critics and defenders of secular modernity in the fields of history, philosophy, anthropology, and political theory. While the course will focus on Europe and the United States, it will also seek to understand how the legacies of colonialism and globalization have shaped the face of religion and the secular today. Two central questions of the course will be: Is secularism dead as a political program? If so, what ought to replace it? This is a junior tutorial.

SOC-STD 98RA Topics in African American Political Thought

CourseID: 207900

Faculty:

Next Term Offered: 2022 Fall

This tutorial will closely examine influential figures and texts in the history of African-American political thought from the immediate post-emancipation period to the present. We will critically evaluate, assess, and constructively critique a range of African American authors and their interlocutors across genres (e.g., philosophy, literature, music, etc.) to better understand the development of key traditions, themes, and concepts. This year's seminar will focus especially on African American accounts of "nationalism" and "crime" as problems for politics, ethics, and social theory. This is a junior tutorial.

SOC-STD 98RB Theorizing the Postcolony

CourseID: 207901

Faculty:

Next Term Offered: 2021 Spring

This course investigates what is distinctive about postcolonial political theory and what lessons it holds for political and social theory in general. We will revisit authors from Social Studies 10a and 10b, reading them alongside recent work in postcolonial thought. In so doing, we will ask: What are the different ways in which the postcolony has been understood? Does postcolonial politics display any particular characteristics? Can the extant idiom of political theory capture the varieties of postcolonial political imaginaries? How does postcolonial thought problematize our reading of the canonical history of political thought? Salient themes of the course include modernity, nationalism, democracy, religion, and questions of authority and freedom. Several weeks will be devoted to understanding the postcolonial experience of South Asia, the Caribbean, North Africa, and Latin America. This is a junior tutorial.

SOC-STD 98RD The Problem of Work

CourseID: 207903

Faculty:

Next Term Offered: 2022 Spring

We are often told that the nature of work is changing. But how should we think about it? From the work ethic to emotional labor, housework to service work, welfare to the strike, this tutorial will explore the history of political ideas about work in the twentieth century. We will combine readings in classic texts in the history of social and political theory, intellectual history and feminism to provide students with the major conceptual tools for understanding the transformation of work in the twentieth century, and in our own. This is a junior tutorial.

Sociology

SOCIOL 90EC Research Lab: Economic Sociology - Careers

CourseID: 207647

Faculty:

Next Term Offered: 2020 Fall

College students navigate complex social and economic dynamics when deciding what to do after graduation. These include pressure to join "elite" fields or organizations, the need to maximize earnings to support family members, a desire to pursue advocacy or activism, and applications to post-graduate programs. In this course, students will use theories and concepts from economic sociology explore how upcoming and recent college graduates make their post-graduation plans. Students will develop qualitative research projects and collect and analyze interview data to understand how financial concerns, social context, and relationships shape graduates' employment and educational choices.

SOCIOL 90EI Research Lab: Ethnicity and Immigration

CourseID: 207692

Faculty:

Next Term Offered: 2020 Fall

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 98MD Junior Tutorial: Social Networks

CourseID: 207704

Faculty:

Next Term Offered: 2020 Fall

Relationships among persons, organizations, places (physical and virtual alike), and countries make up social networks. Networks are involved when people get help (jobs, advice, support), circulate information and gossip, signal status to one another, form opinions and identities, or collaborate in workplaces, social movements, crimes, or other covert activities. Companies and activist groups coordinate and compete with one another in interorganizational networks. International networks depict exchanges of goods and services among countries, as well as alliances and agreements. Networks are important constituents of what has come to be known as "social capital." Both the "social worlds" surrounding individual people and the "social structure" of groups—both formal and informal—can be informatively conceived of and represented as social

networks. Among group-level social phenomena that involve social networks are segregation, status processes, the diffusion of ideas and information, social support, and social influence.

This tutorial will introduce social network phenomena and research in sociology. We begin by studying some theoretical ideas on which much network research draws. Next, we will study individual or "egocentric" networks, group-level networks, and networks that link individuals to groups or other entities. Substantively, the seminar will cover diverse fields of sociology: possibilities include community and social support, crime and delinquency, social movements, behavior in and around organizations, education, the organization of science, new media and networks, migration, and the "small world" phenomenon, and more. [The particular fields will be selected before the beginning of the semester. They will be chosen to illustrate a variety of different approaches to studying networks.]

All junior tutorials in sociology seek to develop both substantive knowledge and research skills. Social science network studies use many methodological approaches to collecting and analyzing data. Students will gain some experience in assembling network data and in working with different sources that contain information about actors and their social relationships. They will also learn to use software for visualizing network data and carrying out basic network analyses. Each tutorial session will examine some research studies, asking both what was learned and how it was learned. During the second half of the semester, students will gradually develop and conduct research about social networks in a field of interest to them, and present their findings in both oral and written form.

SOCIOL 156 Quantitative Methods in Sociology

CourseID: 145331

Faculty:

Next Term Offered: 2024 Fall

Introduces quantitative analysis in social research, including principles of research design and the use of empirical evidence, particularly from social surveys. Descriptive and inferential statistics, contingency table analysis, and regression analysis. Emphasis on analysis of data and presentation of results in research reports.

SOCIOL 1027 Introduction to Social Movements

CourseID: 109656

Faculty:

Next Term Offered: 2020 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 1104 Higher Education: Institutions, Inequalities, and Controversies

CourseID: 203333

Faculty:

Next Term Offered: 2020 Fall

This undergraduate seminar explores modern higher education systems and institutions through sociological lenses. We identify major issues and controversies in contemporary higher education – such as rising student debt, inequality in access, grade- and degree "inflation", commercialization of higher education, what students learn and more. We also look backstage to student experience at Harvard. We explore these issues drawing on the seminal works and concepts from the six domains of inquiry in this field: college impact, study of inequalities, universities and colleges as organizations, academic profession, higher education politics, and higher education culture. This is a research-intensive seminar and each students conducts research leading to a final paper. Students also participate as co-teachers in parts of the course. This is an opportunity to gain perspectives into established and emerging areas of research into higher education and insights into today's changing higher education landscape at Harvard, in the United States and across the world.

SOCIOL 1105 Sports and Society

CourseID: 109896

Faculty:

Next Term Offered: 2022 Spring

This course will examine the institution of sports and how it is shaped by society. Is

sports a level playing field and meritocracy where the best person or team wins? Or is sports a mirror of an unequal society where power and wealth shape social life? How do class, race and gender shape the sports we play and how we play them? We will consider sports and higher education in the U.S. and at Harvard. We will also look at youth sports, sports as a business, the media and sports, and sports and health. Students will do an in depth research project on the topic and will actively discuss readings in class each week.

SOCIOL 1181 Social Change in Modern Korea

CourseID: 109680

Faculty:

Next Term Offered: 2020 Fall

This course explores the incredible transformation of Korean society in the modern period. We begin with the demise of the Chosŏn Dynasty at the end of the 19th century before covering the Japanese colonial period (1910-1945), the emergence of two Korean nation-states (1945-1948), the Korean War (1950-53), and the contemporary period (1960-present). The course is divided into two distinct parts. In the first part of the course we discuss Korea's political and economic transformation and in the second, we cover social and cultural change. Upon completion of the course, students should have a thorough grasp of the vast social changes Korea underwent in the 20th century.

SOCIOL 1182 Law and Society

CourseID: 203485

Faculty:

Next Term Offered: 2020 Fall

Justice Oliver Wendell Holmes wrote: "The life of the law is not logic, but experience." While law school curriculum focuses on legal doctrine, law-in-action often diverges from law-on-the-books. For instance, although civil rights laws make workplace discrimination illegal, such laws are not often enforced. This gap between law-on-the-books and law-in-action has prompted social-legal scholars to examine the latter more closely. Adopting a law-in-action approach, this course examines the relationship between law and society. We will survey major theoretical perspectives and empirical studies that analyze the dynamics between law and legal institutions and their social, political, economic, and cultural contexts. Topics that will be discussed include but are not limited to: (1) concepts and theories of law and society; (2) the experiences of different actors in the legal system, particularly, lawyers, judges, jurors, law enforcement agents, litigants, and citizens; (3) legal consciousness and legal culture; and (4) the relationship between law and social change. A major focus of the course will be civil rights. We will explore, for example, the extent to which court decisions on civil rights have brought about social change in the United States.

SOCIOL 1189 Democracy and Social Movements in East Asia

CourseID: 109681

Faculty:

Next Term Offered: 2020 Fall

Social movements are an important part of both democratic and non-democratic societies. This course assesses the state of civil society in East Asia by surveying contemporary social movements in China, Taiwan, Hong Kong, Japan, and South Korea. We start the course by discussing the main concepts and analytic approaches in social movement theory. We then apply these theoretical frameworks to specific mobilization efforts in East Asia, keeping in mind each country's unique historical context. With the theoretical and empirical tools gleaned from the lectures and readings, students will pursue a case analysis of an East Asian social movement of their choosing.

SOCIOL 1198 Introduction to Social Network Methods

CourseID: 207219

Faculty:

Next Term Offered: 2020 Fall

This course covers foundations for studying networks comprised of social relationships, stressing underlying concepts together with quantitative approaches to representing and understanding patterns in network data. Among the topics treated are visualization, centrality, homophily, identification of subgroups or "communities", "egocentric" or "personal" networks, networks based on individual-group relationships, and the "small world" phenomenon. Students will develop familiarity with software for undertaking basic analyses of network data.

SOCIOL 2211 Analysis of Longitudinal Data: Seminar

CourseID: 131333

Faculty:

Next Term Offered: 2021 Spring

This course takes an applied approach to the analysis of longitudinal data. Lectures will provide an overview of a variety of techniques, including fixed effects models, multilevel models, and duration models. Students will develop their own empirical projects and receive support as they begin to work with longitudinal datasets.

SOCIOL 2218 Sociology Research Methods for Social Science Genetics

CourseID: 213369

Faculty:

Next Term Offered:

A growing number of social science data sources are providing molecular genetic data, and social scientists have increasingly become interested in utilizing this information in order to better understand various social and demographic phenomena. In this week-

long intensive course, students will learn about the history of behavioral, statistical, and social science genetics, will engage with and discuss the ethics involved in such work, and will become familiar with understanding and applying the cutting-edge research methods in social science genetics on real genetic data. The course will depart from other workshops and courses on this topic in its adherence to understanding the ethics, misinterpretations, and potential social implications of social science genetics. Rather than simply learning and applying a method, we will consider how statistical parameters from genetics research can so easily be misinterpreted or misunderstood.

At the completion of this course, students should expect (1) to have a basic understanding of the fundamental advantages and disadvantages of integrating genetics into social science research; (2) to begin to be able to think about how to incorporate genetic tools like polygenic scores into their own social scientific research within an ethically-straightforward framework; (3) to understand and be able to correctly interpret the basic technical terms from quantitative genetics literature; and (4) to be able to read, interpret, and critique social science genetics studies.

At the beginning of each course day, we will discuss literature relevant to social science genetics methods and research, and then in the afternoon we will transition to hands-on tutorials where students will learn how to clean and analyze genetic data and apply methods from statistic genetics, including genome-wide association studies, heritability and genetic correlation estimation, polygenic score construction and use, etc. We will consider ethics throughout the course and work to build a more ethical framework for social science genetics together. In doing so, we will hear from important scholars working in bioethics and the history of science, and from scholars who have been heavily involved in the communication of social science genetics topics.

Students interested in taking this course should have completed a one-year sequence in statistics and should have some introductory familiarity with statistical software like Stata or R. While we will spend some time at the beginning of the course with introductions to the Linux computing environment, R, and the command line, materials and tutorials will be circulated well before the course. Students should complete these in order to gain familiarity with the computational environment and software we will be working with.

Although the course is intended for sociologists, students from other departments may contact the instructor at rwedow@broadinstitute.org to discuss taking the course.

SOCIOL 2274 Culture, Inequality, and Black Youth

CourseID: 139026

Faculty:

Next Term Offered: 2020 Fall

The seminar examines the complex situation of black youth in America with an emphasis on the matrix of cultures that support, enrich and, in conjunction with racial and structural forces, undermine their life chances. We will attempt to unravel the sociological puzzle of the socio-economic disconnection, hyper-segregation, violence, gender conflicts, familial fragility, and high incarceration rate that beset a significant minority of them, on the one

hand, and, on the other, their remarkable prominence and integration in the nation's popular culture. We tackle the complex and controversial problem of how best to understand, theoretically and pragmatically, the interactive role of culture in disentangling this conundrum. We conclude with a review of the best policies and practices aimed at improving their condition.

SOCIOL 2296B Proseminar on Inequality and Social Policy II

CourseID: 112354

Faculty:

Next Term Offered: 2021 Spring

Deals with causes and possible cures for economic inequality, including skill differences, discrimination, immigration, household composition, residential segregation, and the welfare state.

SOCIOL 3316 Politics and Social Change

CourseID: 203921

Faculty:

Next Term Offered: 2020 Fall

The Politics and Social Change Workshop promotes the development of a community of scholars interested in how power relations shape social patterns in societies around the world. We define 'politics' broadly to include everything from gender politics within the household to state politics within a transnational system. Our participants' interests span a wide range of topics including political sociology, political economy, political violence, political behavior, governance, democracy, state welfare, education, social movements, civil society, NGOs, protest, race, ethnicity, gender, sexuality, class, the media, the environment, and development, among others. We meet twice a week. During most meetings, group participants take turns discussing their works in progress. Once or twice a semester, we also bring in outside speakers to discuss topics of interest to our members.

SOCIOL 3318 Quantitative Methods in Sociology

CourseID: 109750

Faculty:

Next Term Offered: 2020 Fall

This workshop provides a forum in which graduate students and faculty can present in-progress work to a substantively diverse group that shares an interest in quantitative methods. The practice of quantitative social science requires training not only in formal statistical methods but also in research design, model specification, management of complex survey data, and the interpretation of results. While Sociology graduate students receive training in statistical methods, many of the other tools of quantitative research are best taught through example and hands-on experience. This workshop fills

a gap in the curriculum, providing an opportunity for students to receive methods-directed feedback on their research projects. Cultivating a sense of the types of concerns that get raised with quantitative social science and good practices for addressing those concerns, this workshop will contribute to building an informal community of quantitative students and faculty who can serve as resources to one another. Although intended primarily for graduate students and faculty in the Harvard Department of Sociology, the workshop is open to faculty, researchers, and students from other disciplines at Harvard and other schools throughout the Boston area.

SOCIOL 3319 Workshop on Mixed Methods of Empirical Analysis

CourseID: 156057

Faculty:

Next Term Offered: 2020 Fall

The graduate workshop on mixed methods is a forum for graduate students and faculty to present their empirical work—qualitative, quantitative, or mixed-methods—and get feedback on the empirical veracity of their claims. Individuals of all methodological persuasions are welcome. We are particularly interested in exploring synergies that can occur across methodological boundaries, either in the context of mixed-methods projects or in the context of collaboration between qualitative and quantitative researchers.

SOCIOL 3322 Qualitative Research and Practice

CourseID: 207242

Faculty:

Next Term Offered: 2020 Fall

Qualitative Research and Practice.

SOCIOL 3328 Gender Inequality Workshop

CourseID: 205150

Faculty:

Next Term Offered: 2020 Fall

The Gender Inequality Workshop features presentations by graduate students and faculty on issues related to gender inequality in the workplace, family, economy, and polity in postindustrial societies.

Statistics

STAT 100 Introduction to Quantitative Methods for the Social Sciences and Humanities

CourseID: 113431

Faculty:

Next Term Offered: 2020 Fall

"Introduction to key ideas underlying statistical and quantitative reasoning. Topics covered: methods for organizing, summarizing and displaying data; elements of sample surveys, experimental design and observational studies; methods of parameter estimation and hypothesis testing in one- and two-sample problems; regression with one or more predictors; correlation; and analysis of variance. Explores applications in a wide range of fields, including the social and political sciences, medical research, and business and economics."

STAT 123 Quantitative Finance

CourseID: 126048

Faculty:

Next Term Offered: 2021 Spring

Introduction to financial derivatives and the probabilistic techniques used to analyze them. Topics include: forwards, swaps and options; replication, no-arbitrage and risk-neutrality; martingales, numeraires and the fundamental theorem of asset pricing; and an introduction to interest-rate derivatives and their valuation. Provides a rigorous but accessible treatment of the elegant theory underpinning quantitative finance, motivated by real problems from the financial industry.

STAT 234 Sequential Decision Making

CourseID: 205213

Faculty:

Next Term Offered: 2021 Spring

This graduate course will focus on reinforcement learning algorithms and sequential decision making methods with special attention to how these methods can be used in mobile health. Reinforcement learning is the area of machine learning which is concerned with sequential decision making. We will focus on the areas of sequential decision making that concern both how to select optimal actions as well as how to evaluate the impact of these actions. The choice of action is operationalized via a policy. A policy is a (stochastic) deterministic mapping from the available data at each time t into (a probability space over) the set of actions. We will consider both off-line and on-line methods for learning good policies.

Mobile health is an area that lies within multiple scientific disciplines including: statistical science, computer science, behavioral science and cognitive neuroscience. This makes for very exciting interdisciplinary science! Smartphones and wearable devices have remarkable sensing capabilities allowing us to understand the context in which a person is at a given moment. These devices also have the ability to deliver treatment actions tailored to the specific needs of users in a given location at a given time. Figuring out when and in which context, which treatment actions to deliver can assist people in achieving their longer term health goals. In the last 15-20 minutes of many of the classes we will brainstorm about how the methods we discussed during that class might be useful in mobile health.

This course will cover the following topics: Markov Decision Processes, on-policy and off-policy RL, least squares methods in RL and Bayesian RL, namely posterior sampling. Most of the course will focus on Bayesian RL via posterior sampling. This is particularly useful in mobile health as posterior sampling facilitates off-policy and continual learning. Also the Bayesian paradigm facilitates use of prior data in initializing an RL algorithm. Other topics from statistics, machine learning and RL that I think are potentially important in mobile health but that we won't cover are (you could consider in your class project) include: 1) transfer learning (using data on other similar users to enable faster learning); 2) non-stationarity (dealing with slowly changing or abrupt changes in user behavior); 3) interpretability of policies (enabling communication with behavioral scientists by making connections to behavioral theories); 4) using approximate system dynamic models to speed up learning, 5) hierarchical RL, 6) experience replay and 7) multi-task learning.

Theater, Dance, and Media

TDM 105 Introduction to Dramaturgy (American Repertory Theater 2018-19 Season)

CourseID: 118876

Faculty: Ryan McKittrick

Next Term Offered: 2020 Fall

This course introduces students to the fundamentals of dramaturgy and the role of the dramaturg, with a special focus on the American Repertory Theater's 2018-19 season. Students will analyze a range of plays, musicals, productions, and works in development at the A.R.T.; study theories of adaptation and write their own adaptations for the stage; meet with artists developing work at the theater; and see productions on A. R.T. stages.

TDM 110 Foundations in Acting: Points of View

CourseID: 112880

Faculty: John Kuntz

Next Term Offered: 2021 Spring

An exploration of the basic techniques of acting, beginning with exercises that flex the imagination and heighten observation; the course will then move towards work on rhythm, an actor's instincts, focus, concentration, and character with an ongoing emphasis in improvisation. The play "Waiting for Godot" by Samuel Beckett will be used as a point of reference for the work. The latter part of the course will concentrate on selected scenes from that play. Especially suitable for first-year and sophomore students.

TDM 114K Squaring the Circle: Russia, Art, Revolution

CourseID: 208135

Faculty:

Next Term Offered: 2021 Spring

Wherever an avant-garde movement sprang up, its artists would announce they were there to change the world. Nowhere did this promise come closer to fruition than in Russia of the 1920s. This course explores Russian and Soviet avant-garde art and its most radical manifestations in literature and dance, on stage and screen, in visual arts and in the ways of life. We will examine the way art and political revolution impact each other and focus on the many "isms," avant-garde and otherwise, that shaped society and the arts during a period of rapid modernization and experimentation: Futurism, Suprematism, Constructivism, Productivism and others. We will look at works by Malevich and Meyerhold, Tatlin and Mayakovsky, Rodchenko and Stepanova, Nijinsky and Meyerhold, Vertov and Eisenstein.

TDM 117 Acting Chekhov

CourseID: 123900

Faculty: Remo Airdi

Next Term Offered: 2021 Spring

An exploration of Chekhov's plays from an actor's point of view in order to develop a practical approach to any dramatic text. We will balance the use of analytical skills - playable actions, active verbs, subtext and beats - with the need to free the actor's creative imagination, through exercises and improvisations. A variety of acting techniques will be used in scene work from the plays, including the techniques of Stanislavski, Michael Chekhov, Strasberg, Adler and Meisner as well as non-text-based approaches.

TDM 124X Acting, Theory, and Public Speech

CourseID: 206861

Faculty: David Levine

Next Term Offered: 2021 Spring

This practice-based class treats works of art criticism and theory as dramatic texts, monologues to be analyzed, learned, invested with desire, and performed. Over the course of the term, students will examine a set of key texts in 20th century art history and criticism, from Greenberg to Benjamin to Krauss. Each will select a text to learn, prepare and perform, culminating in a final, site-specific, roaming performance at Harvard Art Museums. Open to concentrators and non-concentrators, visual and performance artists, art historians, actors, and students of literature, theory, and public speaking.

TDM 128X Death of a Salesman (or Two)

CourseID: 203087

Faculty: David Levine

Next Term Offered: 2020 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 133 Directing Film: Telling the Story and Working with Actors

CourseID: 109653

Faculty: Marcus Stern

Next Term Offered: 2021 Spring

In this course students will produce short films. Includes the study of scenes in film and instruction in the techniques of directing, working with actors, and video production. Emphasis will be placed on clarity of storytelling, eliciting performances from actors, and visceral impact of the filmed events.

TDM 140R Fundamentals of Improvisation and Composition: Dance

CourseID: 107422

Faculty:

Next Term Offered: 2020 Fall

This course explores the fundamental skills of improvisation and composition. Using wide-ranging music, experimentation, problem solving, and an equal curiosity about both success and failure — this course investigates the processes of analytical and intuitive decision making in the dancing body. Students will learn a series of specific physical tasks, tools, and systems taught through intensive exercises, guided improvisations and rigorous real-time composition. Physical research and written work in the course connect dance to architecture, the visual arts, mathematics, philosophy, science, theater, and literature in ways which link the mind and body to innovation. Fall 2017 will focus on site-specific research.

TDM 141 Movement Lab

CourseID: 161233

Faculty: Jill Johnson

Next Term Offered: 2020 Fall

This course explores the practice of choreography in a dynamic research environment. Students will learn interdisciplinary tools for devising, modifying, and editing motion for the stage, screen or site-specific work. Compositional discernment and keen visual evaluation skills will be developed through: extensive studio practice creating and interpreting movement phrases and gestures; discussion and feedback of individual movement composition assignments; viewing and analyzing the structure, dramaturgy, music, set and lighting design in seminal dance and theater pieces from around the world (e.g. Fabre, Naharin, Jones, Graham, Bausch, Goebbels, Petipa, Pite, Kahn); and examining how new media can be utilized for appraising, capturing and documenting motion in the 21st century. Classes will be held in the seminar room and studio.

Class size: 20. No prior dance experience required. Enrollment determined by short interview during the first week of class (shopping week).

TDM 145A Repertoire for Advanced Dancers

CourseID: 205359

Faculty: Mario Zambrano

Next Term Offered: 2020 Fall

Over the course of the semester students will learn, study and rehearse excerpts from choreographic works by renowned artists in contemporary dance. Excerpts by Mats Ek, Jiri Kylian, Paul Lightfoot & Sol Leon, William Forsythe, George Balanchine, and Crystal Pite will be covered. Class will begin with a 45-minute technique warm-up designed specifically for the choreographic excerpt scheduled for study. This is an advanced course in practice, with a written component, intended for students with prior dance experience.

TDM 145B Contemporary Repertory: Dance Authorship in the 21st Century

CourseID: 207880

Faculty: Mario Zambrano

Next Term Offered: 2020 Fall

A dance technique and choreographic repertory class that will focus on contemporary traditions and the repertory of three choreographers: Crystal Pite, Peter Chu, and Sidra Bell – three choreographers engaging in the current discourse of contemporary dance. In several four-week modules, students will learn, study, and practice the technique and choreographic language of these artists. Each choreographer's work will be examined based on specific technical approaches and compositional structure employed in the piece, including: historical context, the derivation of movement language, dramaturgy, and the choreographer's research interests. Each class will begin with a 45-minute class designed to specifically frame the study of each choreographer.

TDM 146 Dance on Camera: In Studio

CourseID: 205367

Faculty:

Next Term Offered:

This course encourages and supports the creation of video projects with the moving body as subject. What does dance mean in this context? Are dance and motion different? How is movement captured, and for what purpose? What role does choreography play in the motion of the subject and the camera? A brief, comprehensive study on the use of editing software (Final Cut Pro) will be covered at the start of the semester, followed by a study on dance film as genre, paying close attention to works by previous dance film awardees from the annual Dance on Camera Film Festival. The course will include storyboarding, shooting, conceptual thinking vs. literal representation, pre/post video editing, and culminate in a final dance film project.

TDM 148 Motion for Performers

CourseID: 207572
Faculty: Jill Johnson
Next Term Offered: 2020 Fall

For actors, choreographers, dancers, directors, and writers, this course aims to build a skillset in the physicality of roles for stage, screen, and installations. The course considers how and in what ways a performer can capture and inhabit a character, develop embodied stakes, cultivate dexterity and nuance in a role – through and with the body. From the pedestrian to highly stylized or improvised movement, students will conduct in-depth research and physical practice in a studio lab environment, focusing on motion expression and physicalizing a role. The course will include a rigorous study in body awareness, task-based improvisation, staging/choreographic exercises, and cultivate communication skills for effective feedback and direction. Professor Mario Zambrano (TDM/Dance) will teach several classes. Guest artists and directors, site-specific research on campus, including in artist Teresita Fernandez's installation *Autumn (...Nothing Personal)*; and several colloquia will be a part of the course.

TDM 153 Introductory Theater Design: Lighting, Audio, and Video

CourseID: 204029
Faculty: Justin Paice
Next Term Offered: 2020 Fall

The process of making theater is a collaboration between different people and different crafts. This course will introduce students to the basics of design and production for three of those crafts: Lighting, Audio, and Video. Through lectures, hands on work, and practical projects, students will explore these three crafts as tools to help tell a story onstage and on screen. Students will learn not only about the technology and methods used in these design fields, but also the underlying principles of design that are universal across these three, and many other crafts.

TDM 168L Tools for Virtual and Real Perceptions

CourseID: 211207
Faculty:
Next Term Offered: 2021 Spring

This class will examine how the current media culture affects the perception of the physical reality, identity, and relationship to other humans as a starting point for individual projects. We will read writings and watch relevant films, artworks in addition to meeting and talking with guest artists/speakers. The tools taught in the class are Unity 3D and After Effects. One or more of these programs should be used to create the final project. Some of the themes to think about in the class are virtual reality, gender and community, dreams as virtual reality, phantom limb, extension of body and sensorial organs. This course is formatted as a seminar and studio class, thus the critique and presentation of students' work are essential.

TDM 184L Disability, Debility and Performance

CourseID: 208116
Faculty: Debra Levine
Next Term Offered: 2020 Fall

This course will serve as an introductory exploration of the intersection between the field of disability studies with theater and performance. We will investigate examples of how disability has been represented on the stage and in expressive culture; how theater, performance, and expressive culture have contributed to notions of which bodies are considered disabled in different contemporary and historical cultures; and how the aesthetics of popular forms of theater and performance have historically invalidated the premise that disabled bodies are rhetorical and virtuosic. Through reading and viewing theater and performance art (both live and digital) that engages with disability and disability culture, we will survey the impact of disability activism on what now constitutes "normal" embodiment and the expansion of who is allowed to flourish in society. We will consider the contribution of resistant discursive frameworks such as "crip" and "queer." And finally, we will reflect on performances that highlight how liberal frameworks of disability and disability pride have become weaponized by nation-states that have adopted debility as a form of biopolitical oppression. Queer theorist Jasbir Puar distinguishes state-inflicted injury on civilian populations – the state's assumption of the "right to maim," where the state designates certain populations available for injury and privileges the disabled status of others – as the phenomenon that limits and revises frameworks of disability identity, rights, and culture. By watching, reading, and making theater, dance and performance that intersects with these concerns, we will contend with how disability functions at the intersection of imperialism and racialized capital.

TDM 192 Total Theater

CourseID: 203544
Faculty: James Stanley
Next Term Offered: 2020 Fall

This class will take a space-specific and deeply collaborative approach to theater making. Our goal will be to interrogate, through readings (in history, theory and critique) and through practice (by making our own piece of theater) the contemporary drift toward immersive theatrical forms. Starting with Wagner's articulation of *gesamkunstwerk* – as theater as the Total Work of Art – and Adorno's blistering critique of it, we will trace thinking on immersive art and cultural forms and responses to them throughout the modern and postmodern periods. Concurrent with our readings, we will discuss contemporary immersive works, including Jim Findlay's *Dream of the Red Chamber*, Michael Counts' escape room *Paradiso*, and Punch Drunk's immersive juggernaut *Sleep No More*.

Meanwhile, employing all of the theatrical tools at our disposal (light, sound, space, song, movement, dance, language) we will come together as a company to create a site specific immersive theater piece of our own. This is a class for performers, directors, designers, dancers, choreographers and media artists who are game to participate across disciplines. Our class will culminate in a public performance of the piece we

create.

Women, Gender, and Sexuality, Studies of

WOMGEN 1234 A Voice of One's Own: Creative Writing in Women, Gender, and Sexuality

CourseID: 108569

Faculty: Linda Schlossberg

Next Term Offered:

How does one balance the demands of "politics" with the subtleties of "artistry?" In this course, we'll write and analyze short stories, paying close attention to key writing concepts such as characterization, voice, point of view, dialogue, and setting, while also investigating thematic issues related to women, gender, and sexuality studies. In addition, we'll read secondary readings by authors such as Audre Lorde, Dorothy Allison, and Adrienne Rich that illuminate the ways in which issues of power, agency, and voice have emerged as key themes in feminist writing. Frequent writing assignments, including written evaluations of peers' stories.