



FALL 2017

<http://fss.berkeley.edu/>

**Freshman and Sophomore Seminars
University of California, Berkeley
231 Evans Hall
Berkeley, CA 94720-2922**

Freshman & Sophomore Seminars at Berkeley

UC Berkeley's Freshman and Sophomore Seminars provide an unparalleled opportunity for faculty members and small groups of lower-division students to explore a scholarly topic of mutual interest together, in the spirit of learning for its own sake. By taking a seminar a student becomes an active member of Berkeley's intellectual community. The seminars depend on the regular presence and active participation of every student. Sharing ideas in class is an important academic skill that can be acquired only through practice. The vigorous discussions that characterize the most successful seminars depend on the commitment of each and every member of the class. Students are encouraged to choose their seminars based on the pull of intellectual curiosity, a desire to explore enticing and even unfamiliar realms.

Please visit the Freshman & Sophomore Seminar website at <http://fss.berkeley.edu/> for the following:

- Updates to the seminar lists included in this document on easy-to-follow web pages
- Revisions to this document
- Pop-up menus to help students find seminars of interest based on seminar topics
- Information regarding the Food for Thought Seminar series, a wonderful way for faculty and students to get better acquainted in an informal setting before or after class

L&S Discovery Courses

The seven-course breadth requirement can be an unparalleled opportunity to explore fascinating worlds of knowledge. The Letters & Science Discovery Courses take the guesswork out of satisfying the breadth requirement. Taught by some of the most distinguished faculty on campus and deliberately designed to engage and ignite the minds of non-experts, these courses are unforgettable. For details on the Discovery Courses, see <http://lsdiscovery.berkeley.edu>.

This document was last updated on March 30, 2017.

FRESHMAN SEMINARS

The following courses, most of which are numbered 24, are limited to 15-18 students. Each is offered for one unit of credit. First-year students will be given priority for enrollment. Courses designated P/NP may be taken pass/no pass only; courses designated LG may be taken for a letter grade or on a pass/no pass basis. If a course is designated as requiring the consent of the instructor to enroll, or if you would like additional course information, contact the undergraduate assistant in the department offering the seminar.

African American Studies 24, Section I
“Mixed-Race” History, Experiences and Images in the United States (1 unit, P/NP)
Professor Stephen Small
Tuesday 2:00-4:00, 190 Barrows Hall, Class number: 22588

Meets the first 7 weeks of the semester.

People of mixed racial origins are one of the fastest growing populations in California, and across the United States. This reflects the rising patterns of inter-racial dating and marriage. This short course provides an overview of the contemporary circumstances of people of mixed racial origins; briefly considers the historical background to the current context; and describes the range of images and representations of people mixed origins in film and social media. We examine people of mixed Asian, Black, Chicano, Native American or white ancestry). The primary approach is through the disciplines of Sociology, History and Cultural Studies.

We look at the historical background in the US first. We consider the origins of the idea of ‘race’ and the creation of a ‘mixed-race’ category in the United States. We examine the historical practices and consequences of so-called ‘miscegenation’; including gender differences in ‘race-mixing’ and variations among different racial/ethnic groups. And we look at the emergence of the ‘mixed race’ movement in the 1980s and 1990s, including the introduction of a mixed race category (“two or more races”) for the first time in the US Census in 2000.

Then we turn to contemporary issues and the impact of legacies of history. We review some of the main themes in writings about people of mixed racial origins; we review some images and representations in film and social media. And we identify various sources for identifying mixed race populations, including census, biographies, interviews, literature, movies and social media. This course will equip students with basic concepts that can be utilized for other projects in African American Studies, Ethnic Studies, History, Sociology, Anthropology and Cultural Studies.

This seminar is designed for freshman students interested in thinking about people of mixed race origins in the United States.

Stephen Small, Ph.D. (UC, Berkeley) is Associate Professor in the Department of African American Studies where he has taught since 1995. He teaches courses on contemporary race and ethnic relations, public history and collective memory, globalization, people of mixed race, and qualitative research methods (including historical archives, ethnography and interviewing). His current research includes public history and collective memory, the Black Diaspora in Europe, and people of mixed origins. He has carried out research in Europe (England, Netherlands and Spain), in the Caribbean (Jamaica and Curacao) and in Brazil. His Ph.d. research was on people of mixed race in the Caribbean and the United States during slavery. He is co-editor of *Global Mixed Race*, with Rebecca Chioko King O’Riain, Minelle Mahtani, Miri Song and Paul Spickard, New York University Press, 2014. He was born and raised in Liverpool, England, a city with a large population of mixed origins. His origins are English and Jamaican.

**Chemical Engineering 24, Section I
Whose Science, Whose Fiction? Exploring America's Scientific Imagination (1 unit, P/NP)**

Professor Jeffrey Reimer

Monday 4:00-6:00, 100F Hildebrand Hall, Class number: 46038

Class will meet on select Mondays during Fall semester. The course calendar will be posted before the semester begins.

What do we learn about ourselves, our society, and the natural world through science fiction? Discover with Professor Reimer how space exploration and technological innovation in the mid-twentieth century spawned an explosion of books, movies and television that revealed much about the US psyche. Technological triumphalism, cultural hegemony, libertarian politics, the nature of God, sexual identity, and "war as a force that gives us meaning" are just a few of the topics that will reveal themselves in our readings and seminar time together.

Jeffrey A. Reimer received his bachelor's degree (with honors) from the University of California at Santa Barbara, and his doctorate from the California Institute of Technology. Prior to his faculty appointment at UC Berkeley he was a postdoctoral fellow at IBM Research in Yorktown Heights, New York. He is presently the C. Judson King Endowed Professor and the Warren and Katharine Schlinger Distinguished Professor and Chair of the Chemical and Biomolecular Engineering Department. Professor Reimer has won several teaching awards, including the UC Berkeley Distinguished Teaching Award, the highest award bestowed on faculty for their teaching. Professor Reimer's scholarship is in the fields of materials chemistry and engineering, with particular attention to the application of sophisticated NMR spectroscopic and physical measurements. He is recognized for these works by election as a Fellow of the American Association for the Advancement of Science, a Fellow of the American Physical Society in the Division of Materials Physics, and a Fellow of the International Society for Magnetic Resonance. In 2015 Professor Reimer was the recipient of a Research Fellowship from the Alexander von Humboldt Foundation. In addition to his ~175 research publications, Professor Reimer is co-author (with T.M. Duncan) of the introductory text *Chemical Engineering Design and Analysis* (Cambridge University Press, 1998), and the text *Carbon Capture and Sequestration* (with Berend Smit, Curt Oldenburg, Ian Bourg, World Scientific Press, 2013).

Faculty web site: <http://india.cchem.berkeley.edu/~reimer/>

**Computer Science 24, Section I
Berkeley Through the Lens (1 unit, P/NP)**

Professor Brian Barsky

Friday 12:00-2:00, 606 Soda Hall, Class number: 42405

The class will not meet every week. Professor Barsky will work out exact arrangements directly with the students.

Students in this seminar will actively examine UC Berkeley "through the lens" on a photographic journey emphasizing activism and political engagement on campus, both historically and recently. In addition to exploring photographic technique in general, this seminar will stress awareness of both historical and current events. The objectives of this class include improving skills for both photographic technique and civic engagement. This seminar will study photographs and learn photographic technique. The seminar has photography assignments: students are required to take photographs on a weekly basis. These photographs will be critiqued in class as time permits. A background and experience in photography is recommended. Students must have access to a camera to do the course assignments. Recommended specifications for the camera include manual control of exposure and focus and the capability of changing the focal length (wide-angle and telephoto). To hone photographic skills, aesthetic, semantic, and technical

aspects of photography will be discussed. As time permits, possible photography topics may include quality of light, dynamic range, exposure control, depth of field, composition and patterns, perspective, color science, the human visual system, and perception.

The seminar emphasizes civic engagement and is not intended to be primarily a photography course. Political discussion will be an integral part of the seminar. Class participation is essential. The class generally includes visits to campus museums, galleries, and archives.

Attendance at all classes and other course-related activities is required to receive a "pass" grade, except for prior arrangement with the instructor or documented emergencies. "Guidelines Concerning Scheduling Conflicts with Academic Requirements" by the Committee on Educational Policy state, "If unforeseen conflicts arise during the course of the semester students must promptly notify the instructor and arrange to discuss the situation as soon as these conflicts (or the possibility of these conflicts) are known" and "faculty may decline to enroll students in a class who cannot be present at all scheduled activities."

This seminar is not about the subject of computer science even though it is offered through the Computer Science Division. Students from all academic disciplines are welcome and encouraged to enroll.

Field trip information and Food for Thought dining details will be discussed in class. This seminar is part of the Food for Thought Seminar Series.

Brian Barsky received his Ph.D. from the University of Utah in Computer Science. His research interests include computational photography, contact lens design, computer methods for optometry and ophthalmology, image synthesis, computer aided geometric design and modeling, CAD/CAM/CIM, interactive and realistic three-dimensional computer graphics, visualization in scientific computing, computer aided cornea modeling and visualization, medical imaging, vision correcting displays, and virtual environments for surgical simulation.

Faculty web site: <http://www.cs.berkeley.edu/~barsky>

Electrical Engineering 24, Section I
An Informal Philosophy of Technology (1 unit, P/NP)
Professor Edward Lee
Tuesday 11:00-12:00, 531 Cory Hall, Class number: 46394

This seminar is about technology, how it advances, who makes it advance, and what are its limits. It will examine the complicated relationships between engineering, science, and mathematics, and between design, invention and discovery. It will study the intellectual and creative processes of engineering and look at how digital technology and software have advanced to the point where they offer a medium of creativity that is almost entirely unconstrained by physics. It will study the limits to technological advances, including fundamental limits, human imagination, and our human inability to readily assimilate new paradigms. The seminar will examine how technology revolutions come about and the role that paradigms play, updating the classic work by Kuhn and applying it to technology rather than science. The seminar will confront contemporary controversies, particularly the proposition put forth by many today that software and digital information are universal models, subsuming physics and cognition, body and soul. Students will discuss how technology, and particularly software will continue to coevolve with humans.

There are no particular prerequisites, but a strong interest in mathematics, science, and computing will be necessary to fully engage. Students will read one chapter per week of a forthcoming book and meet to discuss the ideas in the chapter.

Enrollment is limited to no more than 15 students.

Edward A. Lee is the Robert S. Pepper Distinguished Professor in the Electrical Engineering and Computer Sciences (EECS) department at U.C. Berkeley. His research interests center on design, modeling, and analysis of cyber-physical systems. He is the director of the nine-university TerraSwarm Research Center (<http://terraswarm.org>), a director of Chess, the Berkeley Center for Hybrid and Embedded Software Systems, and the director of the Berkeley Ptolemy project. From 2005-2008, he served as chair of the EE Division and then chair of the EECS Department at UC Berkeley. He is co-author of seven books and hundreds of papers. He has led the development of several influential open-source software packages, notably Ptolemy and its various spinoffs. He received his BS degree in 1979 from Yale University, with a double major in Computer Science and Engineering and Applied Science, an SM degree in EECS from MIT in 1981, and a PhD in EECS from UC Berkeley in 1986. From 1979 to 1982 he was a member of technical staff at Bell Labs in Holmdel, New Jersey, in the Advanced Data Communications Laboratory. He is a co-founder of BDTI, Inc., where he is currently a Senior Technical Advisor, and has consulted for a number of other companies. He is a Fellow of the IEEE, was an NSF Presidential Young Investigator, won the 1997 Frederick Emmons Terman Award for Engineering Education, and received the 2016 Outstanding Technical Achievement and Leadership Award from the IEEE Technical Committee on Real-Time Systems (TCRTS).

Faculty web site: <http://eecs.berkeley.edu/~eal>

English 24, Section I

Reading Walt Whitman's "Leaves of Grass" (1 unit, P/NP)

Professor Hertha D. Sweet Wong

Monday 12:00-2:00, HD--Unit 2, WADA, L08 (Channing Avenue), Class number: 46200

The seminar will meet for 2 hours for the first 7 weeks of the semester. The dates: Aug. 28; Sept. 11, 18, & 25; Oct. 2, 9, & 16.

In this seminar, we will read Walt Whitman's "Leaves of Grass" as well as an assortment of his other poems. We will consider each poem in the context of Whitman's overall themes and formal contributions to American poetry. In early October, we will attend actor, songwriter, and educator John Slade's solo performance, "Whitman Sings," a musical piece composed completely of Whitman's words, but set to "folk, gospel, and hip hop frames." In the tradition of Hal Holbrook's 'Mark Twain Tonight!' and Julie Harris as Emily Dickinson, Slade embodies another titan of American Literature, Walt Whitman. You'll have the opportunity to talk with Slade after the performance.

Hertha D. Sweet Wong is Associate Professor and Vice-Chair in the Department of English. Affiliated with American Studies, Native American Studies, Gender and Women's Studies, and Art Practice, she is author of "Sending My Heart Back Across the Years: Tradition and Innovation in Native American Autobiography" (Oxford UP, 1992) as well as numerous articles on Native American literature, autobiography, and environmental non-fiction. She is editor of "Louise Erdrich's 'Love Medicine': A Casebook" (Oxford UP, 2000) and co-editor of "Reckonings: Contemporary Short Fiction by Native American Women" (Oxford UP, 2008) and "Family of Earth and Sky: Indigenous Tales of Nature from around the World" (Beacon, 1994). Her new book, "Look Here! Readings of American Autobiography in Words and Images, 1970-Present" is forthcoming from the University of North Carolina Press. The very first journal article she published was on Walt Whitman.

Faculty web site: <http://english.berkeley.edu/profiles/75>

English 24, Section 2**Shakespeare's Sonnets (1 unit, P/NP)****Professor Alan Nelson****Wednesday 12:00- 1:00, 186 Barrows Hall, Class number: 46202**

Shakespeare's sonnets were first published in 1609, with a second edition in 1640. Although little is known about how they were received by early readers, over the years they have been the cause of almost infinite puzzlement, speculation, and delight. Over the course of the semester we will read all 154 sonnets, at the rate of approximately ten per week. All students will be expected to participate actively in seminar discussions. Each student will present one informal and one formal oral seminar report.

Alan H. Nelson is Professor Emeritus in the Department of English at the University of California, Berkeley. His specializations are paleography, bibliography, and the reconstruction of the literary life and times of medieval and Renaissance England from documentary sources. He is author of *Monstrous Adversary: The Life of Edward de Vere, Seventeenth Earl of Oxford* (Liverpool University Press, 2003). He is editor of Cambridge, *Records of Early English Drama*, 2 vols. (1989). He is one of four editors of Oxford, *Records of Early English Drama*, 2 vols. (2004). He is co-editor, with John R. Elliott, Jr., of *Inns of Court*, 3 vols., *Records of Early English Drama* (2010). He is co-editor with William Ingram (University of Michigan) of the website *The Parish of St Saviour, Southwark, 1550-1650* and has contributed essays to *Shakespeare Documented*, a project sponsored by the Folger Shakespeare Library, Washington, D.C.

Faculty web site: <http://english.berkeley.edu/profiles/96>

English 24, Section 3**African American Poetry (1 unit, LG)****Professor Bryan Wagner****Tuesday 4:00-5:00, 301 Wheeler Hall, Class number: 46203**

We will spend the semester reading, discussing, and writing about poems by African American authors including Phillis Wheatley, Frances Harper, Paul Laurence Dunbar, Claude McKay, Countee Cullen, Langston Hughes, Gwendolyn Brooks, Amiri Baraka, Audre Lorde, Nathaniel Mackey, Harryette Mullen, and Claudia Rankine.

Bryan Wagner is Associate Professor in the English Department at UC Berkeley. He received a PhD from the University of Virginia before coming to Berkeley in 2002. His research focuses on African American expression in the context of slavery and its aftermath, and he has secondary interests in legal history and popular music. He is the author of *Disturbing the Peace: Black Culture and the Police Power after Slavery* (Harvard, 2009) and *The Tar Baby: A Global History* (Princeton, 2017). His book on *The Wild Tchoupitoulas* -- a landmark recording of processional call-and-response music arranged as electric funk -- is forthcoming in the 33 1/3 Series from Bloomsbury Publishing. Current projects include a digital archive on Louisiana Slave Conspiracies and an edition dedicated to the fugitive slave, Bras-Coupé. Courses in regular rotation include both of the department's surveys in African American literature, an interdisciplinary seminar on Reconstruction, and undergraduate lectures on "Culture and Society in Silent Cinema" and "The Strange Career of Jim Crow."

Faculty web site: <http://english.berkeley.edu/profiles/74>

Environmental Science, Policy, and Management 24, Section 1**Issues in Natural Resource Conservation (1 unit, P/NP)****Professor David Wood****Friday 10:00- 11:00, 332 Giannini Hall, Class number: 23435****There is one optional field trip to Muir Woods on a Saturday or Sunday from 8:00**

am to 3:00 p.m. to be arranged.

Some of the issues to be dealt with include management and preservation of timberlands; reducing fire risk through logging; management in wilderness areas; endangered species; importation and exportation of logs; the lives of John Muir and Gifford Pinchot; trees and religion; can rain forests be saved?; killer bees; coral reefs—human threat; jobs versus spotted owls; vegetarianism; Muir Woods, past and present; garbage in the United States; biofuels; solar power; airport expansion in the San Francisco Bay Area; the competition for water; fracking; global warming and geoengineering; and many more topics to be selected by the students.

Professor Wood's research interests include host-selection behavior of forest insects, chemical ecology, the biology and ecology of bark beetles, forest pest management, the biodeterioration of wood by insects, and insect/pathogen/tree interactions. In 1995 he was awarded the Berkeley Citation for distinguished service to the University.

Among his numerous publications, he recently co-authored three research papers, one that is published in *Forest Ecology and Management*, one in *Forest Science* and one in *Environmental Entomology*.

Faculty web site: http://ourenvironment.berkeley.edu/people_profiles/david-wood/

French 24, Section I
Slow Reading Dangerous Liaisons (I unit, P/NP)
Professor Nicholas Paige
Thursday 3:00-4:00, 122 Wheeler Hall, Class number: 22668

Innocence, pleasure, pride, entrapment, consent, revenge, desire, repression, hypocrisy, deceit, aggression, force, persuasion, faith, virtue, nobility, corruption, manipulation, sex, love: all this and much, much more in one of the world literature's most diabolically intelligent novels, Laclos's *Dangerous Liaisons*. In addition to reading the novel (in English), we'll also be viewing some of the work's numerous film adaptations. Optional meetings will be arranged for students who would like to work on some passages in the original French.

Professor Paige teaches mainly classes in seventeenth- and eighteenth-century French literature and culture, with special interest in the history of the novel.

Faculty web site: <http://french.berkeley.edu/people/detail.php?person=12>

Global Studies 24, Section I
Diversity, Identity, and Social Justice: America in Global Perspective (I unit, P/NP)
Lecturer Darren Zook
Tuesday 2:00-3:00, 201 Giannini Hall, Class number: 44481

Diversity is perhaps the most important social issue in America. As a concept, diversity includes and relates to a number of other issues, such as racism, discrimination, social justice, immigration, marginality, integration, and so forth. Many a program has been put in place to address and resolve these issues, in the hope that over time, America would come together and make all of its differences work collectively as one harmonious and integrated society. For some people, this is already happening. For others, America seems more divided now than ever, and diversity has failed to deliver on its promise.

This seminar will delve into the complexities of this thing we call diversity, to explore the rhetoric and the reality of diversity as it currently exists in America. We will do this by reading accounts of diversity as it happens—not just in the news but also in a variety of different media—and then learning how to discuss critically the central issues of diversity. The goal is not just to talk about diversity, but also to learn how to

talk about diversity in ways that are both critical and constructive. Diversity is an extraordinarily sensitive issue, and too many people simply avoid the conversation to avoid the discomfort that might ensue.

Darren Zook has been a member of the faculty at the University of California, Berkeley, since 2000. He teaches in International and Area Studies and in Political Science. He has taught previously at the University of California, Davis, and at the Claremont Colleges in southern California. In 2012, he was a Fulbright Research Scholar in Singapore working on a project that focused on cybersecurity in the Asia-Pacific region.

During his time at the University of California, Berkeley, Darren Zook has taught and published on a wide variety of topics, including the politics of Asia-Pacific region, human rights and international law, terrorism and security studies, multiculturalism and diversity, and economic policy with a focus on anti-corruption programs. His research interests have continuously grown into an unusually broad portfolio of international and comparative projects, and his work has taken him to various parts of Asia, the Pacific Islands, and northern Europe.

Zook has recently completed a book, entitled *Ourselves Among Others: Crafting Diversity for a New America*, which is an engaged critique of current diversity policy and practice in the United States and elsewhere in the world. It is intended for publication in 2016.

History 24, Section I

Endangered Children and Youth in Africa: Documentaries (1 unit, P/NP)

Professor Tabitha Kanogo

Wednesday 2:00-4:00, 235 Dwinelle Hall, Class number: 15006

Seminar will meet two hours per week for the first half of the semester.

Scheduled to meet for the first half of the semester only, this once-a-week two-hour seminar will analyze documentaries that explore and expose the endangerment of children and youth in Africa. Documentaries on child trafficking and enslavement, child brides, child laborers, street children and youth, victims of FGM, child soldiers, HIV/AIDS orphans and urban youth gangs will be viewed in class. The goal of the seminar is to examine the complex local, regional, and at times global factors behind the extensive abuse and endangerment of children and youth in Africa. In order to historicize and contextualize the study, we shall, in addition to the documentaries, refer to a limited number of published articles. **This course is open to all freshman students regardless of their intended major.**

I am a professor of African History at the Department of History. I am a social historian whose research interests include gender, women, missions, labor and social movements, children and youth, and biographies.

Faculty web site: <http://history.berkeley.edu/people/tabitha-kanogo>

Industrial Engineering and Operations Research 24, Section I

A Short History of Innovation in American Business and Technology (1 unit, P/NP)

Professor C. Roger Glassey

Thursday 3:00-4:00, 30 Wheeler Hall, Class number: 46271

We will discuss "The Business of America" by John Steele Gordon. This is an unusual history because it consists of vignettes of individual people who were significant innovators. I expect each student to have a copy and be prepared to participate in discussions by reading the assigned articles before class. **This seminar is part of the Food for Thought Seminar Series.**

Professor Glassey's undergraduate degree was from Cornell in Mechanical Engineering, followed by a year at the University of Manchester, England, three years in the Navy, and six years as an engineer for

Eastman Kodak. During this time, he completed a MS in Applied Mathematics at the University of Rochester. He then returned to Cornell for a PhD in Operations Research. Professor Glassey joined the Berkeley faculty in 1965. His research interests included planning and scheduling of semiconductor manufacturing, solid waste management, and modeling of energy-economic interactions. In 1980, he spent two years in the Energy Information Administration in Washington where he directed a group of individuals who built and ran several large-scale models to study that topic. Since retiring, he has taught robotics for undergraduates, using Lego Mindstorms kits.

Integrative Biology 24, Section 2

Night (and Day) in the Museum: What Really Goes on in Berkeley's Museum of Vertebrate Zoology? (1 unit, P/NP)

Professor Eileen Lacey

Wednesday 4:00-6:00, 3101 Valley Life Sciences Building, Class number: 15832

NOTE: The seminar will begin on Wednesday, August 23, 2017. There will be a mandatory 4-hour field trip to Tilden Park on Saturday, August 26. The seminar will conclude on Wednesday, September 27, 2017.

Ever wonder what museum curators really do? Through a combination of tours, hands-on exercises, and student projects, we will explore the diverse activities encompassed by modern natural history museums. This is a rare chance to go behind the scenes at one of the top vertebrate natural history collections in North America . . . and learn how you could become involved in museums-based studies of vertebrate evolution and conservation. We are hoping to attract freshmen interested in potential long-term involvement in the Museum of Vertebrate Zoology community as students, interns, and research assistants. This includes (but is not limited to) students interested in museum science, vertebrate biology, field research, ecology and evolution. Are you a natural history nut? If so, this seminar is for you!

Eileen Lacey is a behavioral ecologist who studies the ecological and evolutionary bases for sociality in vertebrates, with an emphasis on mammals. Currently, Dr. Lacey's work focuses on the reasons for group living and cooperation in several species of South American rodents. Her analyses combine field studies of the behavior and ecology of these animals with molecular genetic analyses of patterns of parentage and kinship within social groups. At Berkeley, Dr. Lacey teaches courses in animal behavior, behavioral ecology, and mammalogy, and she is Curator of Mammals in the Museum of Vertebrate Zoology.

Faculty web site: <http://ib.berkeley.edu/labs/lacey/>

Integrative Biology 24, Section 3

The Age of Dinosaurs: What Do We Know? (1 unit, LG)

Professor Kevin Padian

Wednesday 12:00-1:00, 1101 Valley LSB, Class number: 46310

Dinosaurs were big funny animals, and "Jurassic Park" was cool. But what's behind all this? In this seminar we use dinosaurs to explore how we know what we know about extinct life, and the methods and approaches that scientists use to study evolution in general. We also explore common myths, such as the idea that dinosaurs were slow and slow-witted, and that an asteroid drove them to extinction. Berkeley's Museum of Paleontology is the largest collection of fossils in any university in the world, and we use it on a weekly basis in this course. A notebook, some writing, and strong initiative in participation are required. **Students don't need any preparation for this course except an interest in the subject and the desire to understand how science is constructed. This course is designed to be taken for a letter grade. Students who elect to take this seminar should enroll under the letter grade option.**

Students interested in the class should add themselves to the waitlist and send the instructor a paragraph explaining their interest in the class by August 1, 2017 (to kpadian@berkeley.edu). Enrollment is limited to 8 students and applications will be accepted on a rolling basis.

Kevin Padian has been teaching at Berkeley for thirty-six years, mostly courses in evolution, paleontology, and the history of these fields. Research in his lab centers on how large-scale changes get started in evolution, particularly the major new adaptations in vertebrates such as flight, the emergence of dinosaurs, and the evolution of unusual structures and behaviors. He also spends a lot of time on the creation-evolution issue, educating the public about what science is and isn't.

Faculty web site: <http://ib.berkeley.edu/people/directory/detail/5468/>

Integrative Biology 24, Section 4

How and Why Do Birds Sing (1 unit, P/NP)

Professor George Bentley

Wednesday 2:00-3:00, 4110 Valley Life Sciences Building, Class number: 15833

Do you ever wonder why some birds sing and others just call? Would you like to know how songbirds produce such melodious tunes? What about the dawn chorus? Sexual attraction? Aggression? It's just the day-to-day life of songbirds. Come and learn about the anatomy and physiology of birdsong, from the specialized organs to highly evolved brains. Find out how bird song can cause hormones to surge. This seminar will cover the hows and whys of vocal communication in birds with an emphasis on what classic and cutting-edge research has taught us.

George Bentley received his B.Sc. in biology (1993), and his Ph.D. in zoology (1996) at the University of Bristol in the United Kingdom. Following receipt of his doctorate, Dr. Bentley joined the Behavioral Neuroendocrinology Group at Johns Hopkins University, initially as a postdoctoral fellow and later as an associate research scientist. In January 2000, Dr. Bentley moved to Professor John Wingfield's laboratory at the University of Washington as a research associate in the Departments of Psychology and Biology. Dr. Bentley moved to Berkeley in June of 2005, where he is an Associate Professor in the Department of Integrative Biology and his lab focuses on how the brain detects environmental cues and turns them into hormonal signals. These signals in turn affect the behavior and physiology of the organism itself, or organisms to which the behavior is directed. For example, a male bird's song can cause a female to solicit copulation and change her hormonal status. Exactly how the brain performs this feat is largely unknown, but birds are an excellent model for this type of research as they have extravagant auditory and visual displays. The research in Dr. Bentley's lab is mostly performed on birds, but is not limited to this vertebrate class. Current projects in the lab involve sheep, horses, rats, mice, hamsters and humans; many of these projects are in collaboration with other labs around the world (Japan, New Zealand, Germany, United Kingdom). Undergraduates are especially encouraged to get involved in active research projects. Currently, there are nine undergraduates working in the Bentley lab on neuroendocrine mechanisms of regulation of reproduction and on the neural basis of song behavior.

Faculty web site: <http://ib.berkeley.edu/people/faculty/bentleyg>

Integrative Biology 24, Section 5

Ethnobiology, Nutrition, and Global Food Systems (1 unit, P/NP)

Professor Thomas Carlson

Tuesday 10:00-11:00, 4110 Valley Life Sciences Building, Class number: 15834

We will explore the ethnobiological systems around the world that generate thousands of different species of plants and animals eaten by humans. We will examine the historical, cultural, commercial, and biological factors that have resulted in the worldwide consumption of certain plant and animal species. We will also compare the nutritional qualities, health effects, and carbon footprint of conventional

industrial food, organic food, locally grown food, and food that is hunted or gathered. In this seminar we will read Michael Pollan's *Omnivore's Dilemma* and view the documentary film *Food Inc.* **Any interested Freshmen are welcome.**

Thomas Carlson is a physician and ethnobotanist who is on the faculty of the Department of Integrative Biology and is Curator of Ethnobotany in the University and Jepson Herbarium at the University of California, Berkeley. He has conducted food plant and medicinal plant research with, and provided medical care for, over forty different ethno-linguistic groups in fifteen different countries in South America, Central America, North America, Africa, Asia, and Pacific Islands. Tom's multidisciplinary work with diverse institutions, biocultural environments, and communities has helped illuminate how local indigenous ethnobotanical systems contribute to human health and ecosystem health.

Faculty web site: <http://ib.berkeley.edu/people/faculty/carlsont>

Linguistics 24, Section 2

One State, Many Voices: Linguistic Diversity in California (1 unit, P/NP)

Professor Line Mikkelsen

Tuesday 1:00-2:00, 134 Dwinelle Hall, Class number: 22756

The goal of this seminar is to give you a sense of the linguistic landscape of California. The questions we'll be addressing include What languages are there in California? How do these languages relate to each other linguistically? How, where, and when did they come to be spoken in California? And what factors and pressures have shaped the linguistic landscape of California today?

Line Mikkelsen grew up in Denmark and came to California in 1998 for graduate studies in linguistics. Since joining the UC Berkeley linguistics department in 2004, she has become involved in California Indian language reclamation work and generally interested in the linguistic richness of California and its peoples. She is a native speaker of Danish and also enjoys speaking English, German, Karuk, and Spanish, and learning about other languages in the state and their speakers.

Linguistics 24, Section 3

Voices of Berkeley: Everybody has an Accent (1 unit, P/NP)

Professor Sharon Inkelas

Monday 2:00-3:00, 233 Dwinelle Hall, Class number: 46196

No two people speak exactly alike; each person has their own unique "accent". This class will explore how our diverse backgrounds, personalities, and current experiences affect the way we speak (or use signed languages). We will examine how the concept of accent is presented in literature and media (often in the guise of stigmatizing some group) and the extent to which individuals are able to change their accents over time or across different settings. Through discussing this topic, we will touch on some basic areas of linguistics. However, no prior knowledge of linguistics is assumed or required - just bring an open mind!

Sharon Inkelas is a Professor in the Department of Linguistics, which she served as Department Chair from 2005-2013. She received her PhD in Linguistics from Stanford University in 1989. Her research focuses on phonology (sound systems) and morphology (word structure) of the world's languages, focusing on cross-linguistic patterns and differences. She has also conducted research in child language acquisition.

Faculty web site: <http://linguistics.berkeley.edu/~inkelas>

Mechanical Engineering 24, Section I
Art and Science on Wheels (1 unit, P/NP)
Professor Benson Tongue
Friday 10:00-11:00, 214 Haviland Hall, Class number: 39677

This seminar will examine two devices near and dear to my heart—the automobile and the bicycle. Both of these have undergone a long history of change and innovation; both inspire passion in their users; and both embody technical as well as artistic excellence. Some issues we will look at will be efficiency, alternative power sources, environmental impact, dynamics, aerodynamics and handling. Along the way we'll dispel some myths, and ideally people will leave with a deeper appreciation for what bicycles and cars truly represent. **Upright bipeds with bilateral symmetry preferred. Hopefully mammalian.**

Benson likes to profess in the Department of Mechanical Engineering. His interests lie in the fields of vibrations, dynamics and controls, not to mention Scottish dancing, bicycling, fast cars, bird watching, photography and playing around with Photoshop. His books, Principles of Vibrations and Dynamics: Analysis and Design of Systems in Motion, make great bedtime reading.

Faculty web site: <http://www.me.berkeley.edu/faculty/tongue/>

Middle Eastern Studies 24, Section I
Current Events in the Middle East (1 unit, P/NP)
Professor Emily Gottreich
Monday 2:00-3:00, 340 Stephens Hall, Class number: 22194

This seminar will ask students to engage with Middle Eastern and North African political, cultural, and environmental issues as presented in the media. Those who are enrolled will be required to read The New York Times and select online news sources each week and identify current Middle East-related news to present to their peers for discussion. Differing perspectives on the news, especially academic approaches to and understandings of specific events, will be of particular interest. Students should expect vigorous engagement and critical thinking.

Professor Gottreich is Chair of both the undergraduate major in Middle Eastern Studies and the Center for Eastern Studies. She specializes in North African history.

Faculty web site: <http://cmes.berkeley.edu/people/admin-faculty/profile-emily-gottreich>

Molecular and Cell Biology 90B, Section I
Development and Evolution: The Role of History in Biology (1 unit, P/NP)
Professor David Weisblat
Wednesday 11:00-12:00, 104 Genetics & Plant Biology, Class number: 16685

Recent studies have shown that animals as different as fruit fly, octopus and human have remarkably similar complements of genes. How then, do we account for the tremendous diversity in the millions of species of living (and extinct) species? This seminar introduces participants to the field of evolutionary developmental biology (Evo-Devo) which aims to address this and related questions, using techniques that range from classical embryological approaches to DNA sequencing and genome editing. **For students who are interested in "life's mysteries" whether prospective biology majors or not.**

I am a Professor in the MCB Department. Growing up in the Michigan countryside, I was fascinated by natural history. During undergraduate and graduate school, I studied biochemistry and neurophysiology. I came to Berkeley as a postdoc, planning to study the neurobiology of the leech. Here, however, my interests were redirected to developmental biology, and gradually to the question of how changes in developmental mechanisms have given rise to the remarkable diversity of present day animals.

Faculty web site: <http://weisblatlab.weebly.com/>

Molecular and Cell Biology 90D, Section 1
Human Viruses and Disease (1 unit, P/NP)
Professor P. Robert Beatty
Thursday 11:00-12:00, 55 Evans Hall, Class number: 22400

This seminar will focus on human diseases caused by viruses. We will focus on the a specific virus each week including influenza, measles, Ebola, Zika, chikungunya, hepatitis C, and herpes simplex virus. The course will begin with lectures by the instructor to introduce virology and immunology. The remainder of the course will be group work and student-led discussions of specific topics for each virus. **This seminar is part of the Food for Thought Seminar Series.**

Professor Beatty is an infectious disease immunologist who has worked on Chlamydia, Epstein-Barr virus, Leishmania, and dengue virus over the last fifteen years. His research is focused on dengue virus immunology especially testing drugs and vaccines to protect against severe disease. He teaches immunology classes at Cal in the Department of Molecular and Cell Biology.

Molecular and Cell Biology 90D, Section 2
Revolutions in Biology: Past, Present, and Future (1 unit, P/NP)
Professor Russell Vance
Thursday 4:00-5:00, 447 Life Sciences Addition, Class number: 22655

In this seminar, we will discuss revolutions in biology, with a particular focus on two emerging revolutions that have origins at UC Berkeley: the cancer immunotherapy revolution and the genetic engineering revolution. We will begin with a discussion of Thomas Kuhn's classic text, *The Structure of Scientific Revolutions*, and ask: what is a scientific revolution? and, how do they occur? We will then examine specific examples of revolutions in biology from the past and present, and discuss what biological revolutions might be on the horizon. There are no assignments or presentations for this class, but active class participation is expected. Be prepared to read and discuss as much as a (short) book a week for this seminar. **Although this seminar will discuss some science, no particular scientific knowledge is required, and the level of scientific discussion will be accessible to all. Much of the seminar will be dedicated not to science itself, but to the social and philosophical underpinnings of science. Participation from students with a wide range of interests is encouraged.**

Russell Vance has been a professor in the Department of Molecular and Cell Biology since 2006. He holds an MA in Philosophy from Queen's University (Canada), and a PhD in Immunology from UC Berkeley. He runs a research lab studying how our immune system defends against bacterial infections. In the Fall, he also teaches MCB 55 ("Plagues and Pandemics"); and in the Spring, he will teach MCB 103 ("Microbial Pathogenesis"). This is his second time teaching this freshman seminar.

Faculty web site: <https://mcb.berkeley.edu/faculty/IMM/vancer.html>

Natural Resources 24, Section 1
Global Environment Theme House Freshman Seminar (1 unit, P/NP)
Professor Kate O'Neill
Monday 5:00-6:00, 430I Foothill 4 - Classroom A, Class number: 23981

After the formal sessions, the professor and students may continue their discussion informally over dinner in the Dining Commons. Food for Thought dining

arrangements and field trip arrangements will be discussed in class.

The goal of this Freshman Seminar is to bring students and faculty together to explore issues such as global environmental change, policy and management of natural resources, sustainable rural and urban environments, and environmental leadership. The seminar will provide students and faculty a forum to exchange ideas, challenge one another's thinking, and share experiences in a small group setting. Students will have the opportunity to do research and teach their peers about regional to global environmental issues in preparation for Theme Program field trips and guest speakers. **Course enrollment is restricted to Global Environmental Theme House participants. Obtain CEC from the instructor. This seminar is part of the Food for Thought Seminar Series.**

Kate O'Neill joined the Department of Environmental Science, Policy and Management at UC Berkeley in 1999, specializing in the field of global environmental politics and governance. She writes on the ever-changing nature of global environmental challenges and our responses to them, on environmental activism and social movements, and on the global political economy of wastes. She teaches upper division and graduate courses in International Environmental Politics, and is a leading faculty advisor in the Conservation and Resource Studies Major in the College of Natural Resources. She holds a Ph.D. in Political Science from Columbia University, and is a co-editor of the journal *Global Environmental Politics*. She is currently the Resident Faculty member in Unit 2.

**Near Eastern Studies 24, Section I
Animals in Ancient Egypt (1 unit, LG)
Professor Carol Redmount
Friday 1:00-2:00, 271 Barrows Hall, Class number: 17882**

The ancient Egyptians had a rich and multifaceted relationship with the natural world around them, especially with animals. Animals, domestic and wild, played symbolic roles in the Egyptian universe as representatives and manifestations of various deities, and practical roles in the lives of ancient Egyptians where they functioned as pets, food, and offerings to the gods. In this one-hour seminar we will look at some of the many different ways the ancient Egyptians related to the animals populating their universe. **Seminar open to freshman students. No background in field required.**

Carol Redmount is an archaeologist who has been excavating in the Middle East, and especially Egypt, for over thirty years. Her fieldwork research has taken place in Egypt, Jordan, Israel, Cyprus, Tunisia and the United States. Over the years she has adopted cats from Israel and Jordan and sponsored a dog and a cat from Egypt for adoption. She has always been fascinated by the ancient Egyptians' complex relationships with the many animals in their world and looks forward to exploring these further in this seminar. She lives in Berkeley with four rescue animals—one small dog and three cats—as well as two parrots.

Faculty web site: http://nes.berkeley.edu/Web_Redmount/Redmount.html

**Physics 24, Section I
Magnets: Science, Technology, and "Magic Tricks" (1 unit, P/NP)
Professor Frances Hellman
Friday 11:00-12:00, 397 LeConte Hall, Class number: 22752**

The first class will meet

Magnets and magnetic fields are essential to almost every aspect of our lives, from the most fundamental science experiments, to medical applications like the MRI, to computers and cars and navigation, to beautiful effects like the aurora borealis. The earth's magnetic field has made navigation possible for thousands of years, and keeps life on our planet safe from energetic particles coming from the sun and beyond. Magnetism has been known to exist for thousands of years, and yet requires twentieth-century physics (quantum mechanics) to understand the basic principles, such as what makes iron magnetic. Many

Nobel Prizes have been given for discoveries related to magnetism and magnets also make some of the best and most fun "magic tricks" or demonstrations. Magnetism is found on the tiniest scale (electrons) and the largest (galaxies). We will learn what makes iron magnetic, and copper not magnetic. I will show why a magnet pushes away a superconductor, which makes levitated trains possible, but how the strongest magnetic fields are produced by superconducting magnets. We will discuss why there are magnets in a car's starter motor, and in computer hard drives, and where current research efforts are. We will also talk about some of the most exciting topics in modern magnetism, such as what happens when you try to make magnets really small (a field known as "nanomagnetism") or when you try to blend together magnets and semiconductors ("spin electronics"). **This seminar is intended for anyone with an interest in understanding some science that is all around us. This seminar is part of the Food for Thought Seminar Series.**

Frances Hellman is Professor of Physics and of Materials Science and Engineering, a Senior Scientist at Lawrence Berkeley National Laboratory, and Dean of Mathematical and Physical Sciences at UC Berkeley, where she oversees the departments of Astronomy, Earth and Planetary Science, Mathematics, Physics, and Statistics. She is an expert in novel magnetic, semiconducting, and superconducting materials, especially in thin-film form. She is also a visiting scientist at the San Francisco Exploratorium, where she goes whenever possible to work with them on exhibits, some of them involving magnets. She received her BA in Physics from Dartmouth College and her PhD in Applied Physics from Stanford University. Before joining the Berkeley faculty in 2005, she held positions at AT&T Bell Labs and UC San Diego. Her faculty office is filled with magnets, and her laboratory is her workshop, where she delights in devising experiments on magnetic materials composed of rare and exotic ingredients.

Psychology 24, Section I
The Shattered Mind (1 unit, P/NP)
Professor Mark D'Esposito
Wednesday 12:00-1:00, 10 Giannini Hall, Class number: 22583

In this seminar, we will read and discuss chapters from a book entitled "The Shattered Mind" by Dr. Howard Gardner. As Dr. Gardner states, "It is my purpose in this book to demonstrate that a host of critical issues in psychology can be illuminated by a thoughtful study of the behavior and testimony of brain-damaged individuals." Such topics will include aphasia, amnesia and the frontal lobe syndrome. The case studies that are presented in the book will be supplemented by patients seen and cared for by Dr. D'Esposito, who is a practicing neurologist.

I am a Professor of Neuroscience and Psychology, Director of the UC Berkeley Brain Imaging Center as well as a practicing neurologist.

Faculty web site: <http://despolab.berkeley.edu>

Theater, Dance, and Performance Studies 24, Section I
Documentary Playmaking: School Integration, Little Rock, 1957-58 (1 unit, P/NP)
Professor Dunbar Ogden
Monday 2:00-4:00, 8 Zellerbach Hall, Class number: 21300

This seminar will meet on Mondays for eight weeks, from September 11 through October 30, 2017.

On the fateful morning of September 4, 1957, a small group of African-American students walked up to the doors of Central High, Little Rock, to enroll in school—and were turned away by the armed National Guard. Arkansas State Governor Faubus had called out the Guard to surround the building. "Blood will run in the streets," said Faubus, "if Negro pupils should attempt to enter Central High School." A racist mob seethed out front. Eventually the courageous group of children did enter. The first of them graduated in the spring of 1958. They came to be known as the Little Rock Nine; Central High was the

first major integrated public high school in the South. Nowadays many people regard their mentor, Daisy Bates, on a level with Martin Luther King, Jr. Each student in our Freshman Seminar will select a person who participated in the integration of Central High, study historical documents linked with that individual, and develop an original monologue in the role of the person, perhaps as one of the Little Rock Nine or as the Governor or as the principal of Central High. We will encourage each student to experiment with a role different from his or her own gender and cultural background. Daisy Bates' *THE LONG SHADOW OF LITTLE ROCK* and Melba Pattillo Beals' *WARRIORS DON'T CRY* will be the required books.

Professor Dunbar H. Ogden has just published a book entitled *MY FATHER SAID YES*, about the integration crisis at Central High School, Little Rock. He has developed this civil rights book in conjunction with students in his Freshman Seminars since 2000. Professor Ogden is also the author of books on actors, set design, and theatrical space.

Faculty web site: <http://tdps.berkeley.edu/people/emeritus-faculty/>

Vision Science 24, Section 1
The Human Eye (1 unit, P/NP)
Professor Richard C. Van Sluyters
Friday 2:00-4:00, 491 Minor Hall, Class number: 40703

This seminar will meet approximately every other week throughout the semester, beginning the first week of the semester.

This seminar will include a series of instructor-led discussions on the structure and function of the human eye and its appendages. The use of a standard clinical instrument to view the eye will be demonstrated. Students will then employ this instrument to observe one another's eyes. Digital images of the iris will be captured and provided to each student. Examples of the types of topics to be discussed include the following: Why is the cornea so clear and the sclera so white? Why is the iris so beautifully colored? What is the fluid in the eye, where does it come from, and where does it go? How do the skull and bony orbit protect the eye without hindering its performance? How do the appendages of the eye—the eyelids and eyebrows—work, and what are their functions? How does the eye adjust its focus from far to near, and why do we lose this ability with age? How do contact lenses work, and what happens to the cornea when laser refractive surgery is performed? What structural and functional changes in the eye are found in various ocular diseases?

Professor Richard C. Van Sluyters joined the faculty of the School of Optometry in 1975, and currently serves as the School's Associate Dean for Student Affairs. He received his undergraduate training at Michigan State University, studied optometry at the Illinois College of Optometry and was a graduate student at Indiana University. He holds doctorates in optometry and vision science and was a postdoctoral fellow at Cambridge University in England. He teaches courses on the anatomy and physiology of the eye and visual system.

Faculty web site: <http://vision.berkeley.edu/VSP/content/faculty/facprofiles/vansluyters.html>

Vision Science 24, Section 3
Myths, Mysteries and Discoveries in Medicine (1 unit, P/NP)
Dr. Patsy Harvey
Monday 12:00-1:30, 491 Minor Hall, Class number: 42246

This 90-minute seminar will meet for the first nine weeks of the semester, from August 28 through October 23, 2017 (we will not meet on Labor Day, September 4).

4th).

Throughout the centuries, people sought to understand the reasons for diseases, disabilities and death. Intriguing explanations, myths and superstitions were developed in an attempt to describe and prevent their medical maladies. In this course, we will discuss early and current explanations of health problems, with special considerations given to nutrition and various cultures in the US and around the world. We will also discuss recent changes in health care and imagine future roles and discoveries of medicine.

Students enrolled in this seminar should be curious about people's beliefs and misconceptions about health and diseases, including our own myths about vision.

Dr. Patsy Harvey received her Doctor of Optometry and Masters in Public Health from UC Berkeley. She currently teaches at the UC Berkeley School of Optometry, including courses on Systemic Diseases, Geriatrics, and the History of Medicine and Optometry. During her international travels and clinical work, she developed a fascination with health beliefs in other countries and times, and enjoys discussing their beliefs and myths with others.

FRESHMAN AND SOPHOMORE SEMINARS

Most of the following courses are limited to 20-25 students. First- and second-year students are given priority for enrollment. Some of these courses fulfill Letters and Science breadth requirements; for details consult *A Guide for Students in the College of Letters and Science: Earning Your Degree*. If a course is designated as requiring the consent of the instructor, or if you would like additional information, please contact the undergraduate assistant in the department offering the seminars.

Computer Science 39, Section I
Symmetry and Topology (2 units, P/NP)
Professor Carlo Sequin
Monday 4:00-6:00, 606 Soda Hall, Class number: 46527

We will not meet on official University holidays.

Symmetry plays an important role in art, fashion, architecture, engineering, computer modeling, biology, and in all the sciences in general; as well as in music, poetry, and psychology. We will explore its use in several of these domains. We will enumerate all possible types of symmetry and establish a rigorous understanding of them. We will start with simple mirror images, proceed through wallpaper patterns and hyperbolic tilings, finishing up with the symmetry of 4-dimensional "Platonic" solids.

Topology focuses on the connectivity of objects or of abstract constructions; it is important in the design and analysis of complicated shapes. It also allows us to extend the notion of symmetry to the interconnectivity of networks and to "regular maps" on surfaces of arbitrary genus (smooth donuts with one or more holes). We will get familiar with all surfaces of low genus, including Moebius bands, cross-caps, and Klein bottles.

The goal of this course is to give the participants a good enough understanding of the basic principles of symmetry and topology, so they can put this knowledge to good use in their future studies. This course, even though offered by the CS Division, will involve no computer programming, but will occasionally ask participants to construct models from paper, clay, or pipe-cleaners. **Students are welcome from many departments. In the past I have had students from EECS, ME, CE, IEOR, BioE, Math, Physics, Architecture, Art Practice, ...**

Students should have some love for geometry and abstract mathematical thinking.

Carlo H. Sequin has been a Professor in the EECS Computer Science Division since 1977. He has taught courses concerning the design of integrated circuits, micro processors, and campus buildings. He has also taught courses on geometric modeling with hands-on assignments in the design and fabrication of mechanical puzzles, artistic maquettes, and mathematical visualization models. Outside of the classroom he has made use of symmetry and topology in the layout of solid-state image sensors at Bell Labs, in the design of the first RISC (reduced instruction set computer) chips with Professor Dave Patterson (CS), in the conception and construction of Soda Hall (the current home of the CS Division), and in the generation of various large-scale geometrical sculptures with artist Brent Collins from Gower, MO.

Faculty web site: <http://www.cs.berkeley.edu/~sequin/>

Native American Studies 90, Section I
Myth, Memory, and History: Understanding Native America (4 units, LG)
Lecturer Diane Pearson
Monday, Wednesday and Friday 11:00-12:00, 209 Dwinelle Hall, Class number: 18017

This course provides an overview of the history of the indigenous peoples of the Western Hemisphere, and proceeds from the premise that knowledge of Native America is essential to the study of the Western Hemisphere. It will survey a number of societies, cultures, lifestyles, and contemporary and historical issues. This seminar may be used to satisfy the Social and Behavioral Sciences or Historical Studies breadth requirement in Letters and Science.

Dr. Pearson holds a Ph.D. in American Indian Studies and specializes in American Indian law and policy, societies and culture, and education.

Faculty web site: <http://ethnicstudies.berkeley.edu/faculty/profile.php?person=70>

**Theater, Dance, and Performance Studies 39, Section I
Movement, Awareness, and Learning (2 units, LG)
Professor Marianne Constable
Tuesday 12:00-2:00, 240I Bancroft, large studio, Class number: 46139**

How do we learn? How do we learn to learn? What do feeling, sensing, thinking, and doing have to do with learning? What does movement have to do with all of these? (How) can one become more aware of oneself in movement? This weekly seminar will have two parts: during the first 50 minutes or so, you will do a Feldenkrais Method (R) Awareness-through-Movement lesson (ATM); then, after a short break, we will discuss the lesson and/or short readings and videos tailored to your interests. Students will be asked to reflect on their own experiences with the lessons and to relate such experiences to the concerns and interests in education and/or performance that they bring to the class. Attention will be paid to oneself in place/space; breath; ease, timing, and range of movement; use of the self and self-image; voice; repetition and rest. Additional themes may include habit, intention, and strain; the “mind-body problem”; perception and observation; and so forth.

The seminar is open to open-minded students interested in exploring awareness, movement, and learning. No prior experience in movement classes or performance studies is needed.

In addition to being a professor of Rhetoric at UCB, Marianne Constable is a certified practitioner of the Feldenkrais Method (R).

**Theater, Dance, and Performance Studies 39, Section 2
Best Films of 2016 and the Great Films That Influenced Them (2 units, LG)
Professor Abigail De Kosnik
Friday 2:00-4:00, 340 Moffitt Library, Class number: 46140**

In this seminar, we will watch the top 10+ movies of 2016 (according to my personal, subjective ranking) in conjunction with great films of the past that influenced them. Every week, a 2016 film will be paired with an earlier film that bears some relation to it. For instance, we will watch *Moonlight* in conjunction with *Daughters of the Dust*, *The Handmaiden* together with *Bound*, *Arrival* alongside *Gravity*, and so on. Watching recent films with older films will allow us to identify the cinematic vocabularies, and the techniques in audiovisual storytelling, that characterize excellence in filmmaking and persist over time.

Abigail De Kosnik is an Associate Professor at the University of California, Berkeley with a joint appointment in the Berkeley Center for New Media (BCNM, bcnm.berkeley.edu) and in the Department of Theater, Dance & Performance Studies (TDPS, tdps.berkeley.edu). Her book on digital archives is forthcoming from MIT Press in 2016. She has published articles on media fandom, popular digital culture, and performance studies in *Cinema Journal*, *The International Journal of Communication*, *Modern Drama*, *Transformative Works and Cultures* and elsewhere. She is the co-editor, with Sam Ford and C. Lee Harrington, of the edited essay collection *The Survival of Soap Opera: Transformations for a New Media Era* (University Press of Mississippi, 2011). She and Sam Ford also wrote the annotated bibliography on

“Soap Operas” for Oxford Bibliographies Online (OBO).

Faculty web site: <http://tdps.berkeley.edu/people/abigail-de-kosnik/>

SOPHOMORE SEMINARS

The following courses are limited to 15 students. Each is offered for one or two units of credit. Second-year students will be given priority for enrollment. Courses designated P/NP may be taken pass/no pass only; courses designated LG may be taken for a letter grade or on a pass/no pass basis. If a course is designated as requiring the consent of the instructor, or if you would like additional course information, contact the undergraduate assistant in the department offering the seminar.

English 84, Section 1

High Culture, Low Culture: Modernism and the Films of the Coen Brothers (2 units, P/NP)

Professor Julia Bader

Wednesday 1:00-4:00, 300 Wheeler Hall, Class number: 14040

We will concentrate on the high and low cultural elements in the noir comedies of the Coen brothers, discussing their use of Hollywood genres, parodies of classic conventions, and representation of arbitrariness. We will also read some fiction, including stories from Jhumpa Lahiri's *Interpreter of Maladies*, and attend events at the Pacific Film Archive and Cal Performances.

Julia Bader is a Professor Emerita in the English Department and specializes in the modern period, both British and American, with an emphasis on fiction, film, and feminism.

Faculty web site: <http://english.berkeley.edu/profiles/11>

English 84, Section 2

Utopian and Dystopian Films (2 units, P/NP)

Professor George Starr

Tuesday 5:00-6:30 and 7:00-8:30, 300 Wheeler Hall, Class number: 44462

Among the Utopian and (mostly) Dystopian films likely to be included in the syllabus and discussed in class are the following: Fritz Lang, *Metropolis* (1927); Leni Riefenstahl, *The Triumph of the Will* (1934); Charlie Chaplin, *Modern Times* (1936); George Lucas, *THX -1138* (1970); Stanley Kubrick, *A Clockwork Orange* (1971); Michael Radford, *Nineteen Eighty Four* (1984); Terry Gilliam, *Brazil* (1985); Volker Schlöndorff, *The Handmaid's Tale* (1990); Andrew Niccol, *Gattaca* (1997); Alfonso Cuarón, *Children of Men* (2006); Mark Romanek, *Never Let Me Go* (2010); and Alex Garland, *Ex Machina* (2015).

No texts will be assigned, but certain background materials will be posted on bCourses.

Most of G. A. Starr's research and teaching has been on eighteenth-century English literature, but in recent years he has also offered courses on nineteenth- and twentieth-century California writers, and on Utopian texts and social movements.

Natural Resources 84, Section 1

Global Environment Theme House Sophomore Seminar (1 unit, P/NP)

Professor Kate O'Neill

Monday 5:00-6:00, 4301 Foothill 4 - Classroom A, Class number: 23982

After the formal sessions, the professor and students may continue their discussion informally over dinner in the Dining Commons. Food for Thought dining arrangements and field trip arrangements will be discussed in class.

The goal of this Sophomore Seminar is to bring students and faculty together to explore issues such as global environmental change, policy and management of natural resources, sustainable rural and urban

environments, and environmental leadership. The seminar will provide students and faculty a forum to exchange ideas, challenge one another's thinking, and share experiences in a small group setting. Students will have the opportunity to do research and teach their peers about regional to global environmental issues in preparation for Theme Program field trips and guest speakers. **Course enrollment is restricted to Global Environmental Theme House participants. Obtain CEC from the instructor. This seminar is part of the Food for Thought Seminar Series.**

Kate O'Neill joined the Department of Environmental Science, Policy and Management at UC Berkeley in 1999, specializing in the field of global environmental politics and governance. She writes on the ever-changing nature of global environmental challenges and our responses to them, on environmental activism and social movements, and on the global political economy of wastes. She teaches upper division and graduate courses in International Environmental Politics, and is a leading faculty advisor in the Conservation and Resource Studies Major in the College of Natural Resources. She holds a Ph.D. in Political Science from Columbia University, and is a co-editor of the journal *Global Environmental Politics*. She is currently the Resident Faculty member in Unit 2.

**South and Southeast Asian Studies 84, Section I
Contemporary Southeast Asian Society and Culture through Film (2 units, LG)
Dr. Maria Josephine Barrios-Leblanc and Lecturer Hanh Tran
Friday 2:00-4:00, 233 Dwinelle Hall, Class number: 21457**

In this seminar, we will examine contemporary Southeast Asian society and culture through the lens of contemporary Southeast Asian films from two countries -- Vietnam and the Philippines. In discussions about the films in class we will seek to understand how these films mirror modern and traditional aspects of the societies in which they were produced. We will also consider the films as examples of current world cinema and vehicles of storytelling. In their four page papers for each section of the course, students will address the above broad issues (referencing class discussions when appropriate) in relation to their own experiences and opinions, focusing either on one film or comparing two or three from the same country. **Students should plan to participate actively and consistently in class discussions, remembering that class participation makes up 25% of the grade in the course. Previous knowledge of or personal experience with Southeast Asian societies and cultures, and if possible Southeast Asian film, is desired but not required. Students with no previous knowledge of Southeast Asia who have experience watching and discussing a wide range of films from other countries with a critical eye are also welcome.**

Maria Barrios-Leblanc has a Ph.D. in Filipino (Philippine Literature) from the University of the Philippines (UP). Before coming to UC Berkeley, she served as Associate Professor and Associate Dean of the UP College of Arts and Letters. She has written/edited more than a dozen books including language textbooks, poetry collections and research on Philippine drama and literature.

Faculty web site: <http://sseas.berkeley.edu/people/faculty/joi-barrios-leblanc>

Hanh Tran holds an M.A. degree in South and Southeast Asian Studies with a concentration in Political Studies and Literature. He has been a lecturer of Vietnamese language and literature at UC Berkeley since 2006. He has also guest-lectured and co-taught several seminars on Southeast Asian Literature and Movies. His current research interest is in Southeast Asian Material Culture and History of Art.