



SPRING 2011

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**Freshman and Sophomore Seminars
University of California, Berkeley
301 Campbell 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
- Success, Seminars, and You – a web page full of good ideas and helpful links to support students in registering for a seminar and getting the most out of their seminars before, during and after taking a seminar

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 February 23, 2011.

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

Language and Politics in Southern Africa (1 unit, P/NP)

Professor Sam Mchombo

Wednesday 1:00-2:00, L13 Seminar Room in Christian Hall in Unit I, CCN: 00559

Food for Thought dining arrangements will be discussed in class.

This seminar will focus on political developments in Southern Africa and the use of language in fostering national identity and attaining cultural emancipation. We will look at case studies representative of the dynamics of the region. The topics covered will include a brief history of the peoples of Southern Africa; family structure, kinship systems and traditional political institutions; cultural practices and religious beliefs; the impact of contact with western culture and civilization on language issues and political organization; language and its role in fostering national identity in post-independence Africa; models of national language policy in multi-ethnic societies; language use and democratic practice and human rights; the impact of AIDS on economic development and linguistic ecology; prospects of mother-education, and the use of African languages in science and technology. Since the course is a seminar, students will be expected to participate actively in the class. There will be a course reader. There will be no examinations. Grades will be based on one 500-word paper and class participation. **This seminar is part of the Food for Thought Seminar Series.**

Sam Mchombo is an Associate Professor in the Department of African American Studies and was a member of the Department of Linguistics faculty from 1988 to 2009. He received his B.A. from the University of Malawi and Ph.D. from the University of London. He pioneered and taught courses in Linguistics and African Language Structure in what is now the Department of African Languages and Linguistics in the University of Malawi. From 1985-1988 he was a member of the Linguistics faculty at San Jose State University, teaching courses on general linguistics, syntax, and semantics. His research focuses on grammatical theory and African linguistic structure. Recently, he has also focused on aspects of African politics, delivering talks at the World Affairs Council on emergent democracies, as well as human rights in Africa. His publications include *Theoretical Aspects of Bantu Grammar* (1993), *The syntax of Chichewa* (Cambridge University Press, 2004), and "Democratization in Malawi: Its Roots and Prospects," published in a volume edited by Jean-Germain Gros called *Democratization in Late Twentieth-Century Africa*. Other works include papers on "National Identity, Democracy and the Politics of Language in Malawi and Tanzania," as well as "The Role of the Media in Fostering Democracy in Southern Africa," both published in *The Journal of African Policy Studies*, "Religion and Politics in Malawi" in *Issues in Political Discourse Analysis* (2005), and "Sports and Development in Malawi" in *Soccer and Society* Vol. 7 No. 2-3, 2006. He has delivered invited lectures and conference presentations in Hong Kong, Europe, Mexico, and in Africa. In Spring 2003, he was appointed Distinguished African Scholar by the Institute for African Development at Cornell University.

Anthropology 24, Section I

Exploring the Campus Community through Photography (1 unit, P/NP)

Professor Stanley H. Brandes

Wednesday 3:00-4:00, 204 Wheeler Hall, CCN: 02530

The object of this freshman seminar is to explore our Cal community through the medium of photography. We begin by learning about a time-honored photographic genre: the photographic essay. We explore the composition of the photographic essay as well as alternative ways to produce it. The remainder of the seminar is devoted to student production of two photographic essays of their own. The first essay should deal with a subject, whether people or place, that is familiar to the photographer. In the second essay, students should focus on new or unfamiliar places or people. In a supportive atmosphere, we share these essays with the entire class and solicit comments and reactions from our peers. Grades are assigned on a Pass/Fail basis. To receive a Pass, students are expected to participate in class discussions and complete two original photographic essays, designed in consultation with the instructor and fellow students. Students who miss more than three scheduled classes will receive a failing grade. There are no course examinations. **To take this course, students must have access to any device that takes pictures, plus a way to print those images.**

Stanley Brandes received his Ph.D. in Anthropology at UCB and has been a long-time member of the Cal anthropology faculty. His recent research includes the analysis of food and drink, ritual and religion, pets and their people, and the social dimensions of visual media, especially photography and film.

Faculty web site: http://anthropology.berkeley.edu/people/person_detail.php?person=7

Architecture 24, Section I
Exploring the Architectural Profession (1 unit, P/NP)
Professor Mike Martin
Wednesday 2:00-5:00, 170 Wurster Hall, CCN: 03703

This seminar will meet five weeks: February 9, February 16, February 23, March 2 and March 9, 2011. Food for Thought dining arrangements will be discussed in class.

This seminar will examine the historical foundations of the architectural profession, the role of education in preparing professionals, the structure of contemporary architectural practice and the changing context of the future of the architectural profession. These aspects will be introduced by reading and discussing selected literature and case studies. **This seminar is part of the Food for Thought Seminar Series.**

Mike Martin FAIA, PhD is a Professor Emeritus of Architecture and former Undergraduate Dean of the College of Environmental Design and Chair of the Architecture Department. He studied architecture at the University of Colorado, the University of Washington and the University of California, Berkeley. He is the former Head of the Architecture Department at the California Polytechnic State University in San Luis Obispo. He is an architect specializing in the study of design education and its relationship to design methods and architectural practice with an emphasis on knowledge production in the profession. He is a Fellow of the American Institute of Architects and an active participant in the dialogue between education and professional practice. His book "Design Informed: Driving Innovation with Evidence-Based Design" has just been published by John Wiley & Sons.

Faculty web site: <http://www.ced.berkeley.edu/ced/people/query.php?id=73&dept=all&title=all>

Astronomy 24, Section I
Cosmology and the Early Universe (1 unit, P/NP)
Professor Steven Beckwith
Thursday 2:00-4:00, 240 Sutardja Dai Hall, CCN: 06007

This seminar will meet ten weeks, beginning Thursday, January 13, 2011. The remaining nine Thursday dates and field trip date and details will be announced in class. Food for Thought dining arrangements will be discussed in class.

This course will discuss the modern theory of the origin of the universe, how the early evolution of matter shaped the universe we see today, and why we believe it is all true. This course will use an interplay of observations and theory to explore how science helps us understand our own origins. It will introduce the students to quantitative reasoning on a grand scale without relying on advanced mathematics. We'll explore predictions of the standard Big Bang cosmology and how our most powerful telescopes see the evolution of matter from early times. My aim is to introduce interested students to modern cosmology and give them the tools to reason about the universe. We normally take one field trip to a local observatory or science center. **Students from all backgrounds and interests are welcome in this course, although most of the participants have an interest and aptitude for the physical sciences, and we often discuss wide-ranging topics in astrophysics by popular demand. The course stresses quantitative reasoning and the use of numbers and numerical predictions as a method of understanding nature. All students will learn to apply mathematical reasoning to understanding the fundamentals of cosmology. This seminar is part of the Food for Thought Seminar Series.**

Steven Beckwith is the Vice President for Research and Graduate Studies for the UC system and a Professor of Astronomy at Berkeley. He came to Berkeley most recently from Baltimore, Maryland, where he was the Director of the Space Telescope Science Institute, responsible for the science operations of the Hubble Space Telescope, and a Professor of Astronomy and Physics at Johns Hopkins University for nine years. Previously, he was Director of the Max Planck Institute for Astronomy in Heidelberg, Germany for seven years and a Professor of Astronomy at Cornell University for thirteen years. His research interests include the creation of galaxies in the early universe, the formation of planets around other stars, and the detection of life on extrasolar planets.

Faculty web site: <http://www.ucop.edu/research/beckwith.html>

Chemical Engineering 24, Section I
Foundations of our Empire: Energy and Water (1 unit, P/NP)
Professor Jeffrey Reimer
Monday 4:00-5:00, 121 Latimer Hall, CCN: 10303

Cheap energy and abundant high purity water have been the mainstay of American life for decades. Their availability have made deserts into croplands and cities, and helped build an industrial empire that dominates world markets. An increasing number of scientists and policy analysts, however, are concerned about the future reliability of these resources. Join this seminar and engage in a series of readings and discussions about our energy and water budget, including the triumphalism of science and engineering, and the sobering reality of a world with 9 billion people. What is the problem with carbon? Are we supposed to buy electric cars? Will the hydrogen economy work? Don't we have enough water in the oceans? We seek answers to these and other questions. **Non-technical majors are especially welcome.**

Jeffrey A. Reimer is the Warren and Katharine Schlinger Distinguished Professor and Chair of the Department of Chemical Engineering. In 1998 he won the Donald Sterling Noyce Prize for Excellence in Undergraduate Teaching in the Physical Sciences, and was given the AIChE Northern California Section Award for Chemical Engineering Excellence in Academic Teaching. In 2000 he was awarded the Chemical Engineering Departmental Outstanding Teaching Award. In 2003 Professor Reimer was awarded the Distinguished Teaching Award, the highest award bestowed on faculty for their teaching. For more information regarding Professor Reimer, please visit his faculty web page at <http://india.cchem.berkeley.edu/~reimer/>.

Faculty web site: <http://cheme.berkeley.edu/faculty/reimer/>

Chicano Studies 24, Section I
Chicano Civil Rights Movement (1 unit, P/NP)

Professor Carlos Muñoz Jr.
Tuesday 2:00-3:30, 332 Giannini Hall, CCN: 13103

The seminar will consist of examining the multifaceted dimensions of the 1960s Chicano Civil Rights Movement via documentary films.

Professor Carlos Muñoz, Jr. is a Professor Emeritus in the Department of Ethnic Studies. He is the award-winning author of *Youth, Identity, Power: The Chicano Movement*, and is working on a book on the topic of the seminar. For more information regarding Professor Muñoz, visit his faculty webpage at <http://ethnicstudies.berkeley.edu/faculty/munoz/>.

Faculty web site: <http://ethnicstudies.berkeley.edu/faculty/profile.php?person=21>

Civil and Environmental Engineering 24, Section I
The Design and Construction of Biosand Filters for Developing Countries (1 unit, P/NP)

Professor John Dracup
Wednesday 6:00-7:30, 544 Davis Hall, CCN: 13909

The first class meeting will be held on Wednesday, March 30, 2011, from 6:00 - 7:30 p.m. in 544 Davis Hall. The second and third class meetings will be from 9:00 a.m. - 3:00 p.m. in Professor Dracup's Biosand Filter Laboratory, 125 O'Brien Hall, on Saturdays, April 2nd and April 9, 2011. The fourth and final class meeting will be held on Wednesday, April 13, 2011, from 6:00 - 7:30 p.m. in 544 Davis Hall. Pizza and soft drinks will be served at all four of the class meetings. To obtain a passing grade, attendance at all of the four class meetings is mandatory.

The purpose of this seminar will be to build and test three biosand filters. The class of eighteen freshmen will be divided into three teams of six students per team. Each team will build and test its own biosand filter. The first class meeting will consist of a one-and-one-half-hour lecture on the technology of biosand filters, their design and construction, and their use and effectiveness throughout the developing world. The class will also visit Professor Dracup's Biosand Filter laboratory in 125 O'Brien Hall. During the second class meeting, the three biosand filters will be constructed by the students, using the materials that will be made available. After the biosand filters are constructed, water from Strawberry Creek be poured through the filter to start the growth of the biolayer.

During the April 2-9 time period, Strawberry Creek water will be poured through the biosand filters once per day to assure the continued growth of the biolayer. During the third class, the quality of Strawberry Creek water and the effectiveness of the biosand filters in removing pathogens will be discussed. At the fourth and final class meeting, each group will present its experience with the design, construction and testing of its biosand filter as a brief oral report. **Enrollment is limited to eighteen freshmen interested in environmental issues.**

Dr. John Dracup is a Professor of the Graduate School in the Department of Civil & Environmental Engineering. He has taught and conducted research in the University of California system for over forty years. His expertise is in water resource engineering and hydrology. His recent awards include being elected as a Senior Fulbright Scholar to Australia; inaugurated into the "Order of the Black Blouse" by the Water Rights Court of Valencia, Spain; the designation of a Diplomat of the American Academy of Water Resource Engineering of the American Society of Civil Engineers; an Honorary Professorship at the Universidad Catolica St. Antonio of Murcia, Spain; and the "Agua para Todos" award from the Region of Murcia, Spain; he is a Fellow of the AGU, ASCE, AAAS and the AWRA. He swims competitively with Pacific Masters Swimming.

Faculty web site: <http://www.ce.berkeley.edu/faculty/faculty.php?id=205>

Classics 24, Section 1**Ancient Greek Tragedy in Modern Performance (I unit, P/NP)****Professor Mark Griffith****Monday 3:00-4:00, 204 Wheeler Hall, CCN: 14727**

We will read four or five Classical Greek tragedies in English, and watch video recordings of some modern productions of them. Discussion will focus on differences of acting style, scenic and costume design, and performance space, as well as the use of music and dance, in comparing various approaches that modern directors have taken to adapting these plays to a contemporary context.

Mark Griffith is a Professor of Classics and of Theater, Dance, and Performance Studies. His publications have focused primarily on Greek tragedy.

Faculty web site: http://classics.berkeley.edu/people/faculty/person_detail.php?person=13

Classics 24, Section 2**Papyrus and Greek Literature (I unit, P/NP)****Professor Donald Mastronarde****Tuesday 3:00-4:00, 479 Bancroft Library, CCN: 14730**

The papyrus plant was the major source of writing material for many centuries during the flowering of the classical civilizations of Greece and Rome. The freshman seminar Papyri and Greek Literature will combine hands-on experience with papyrus with reading of some works of Greek literature that owe their survival to the discovery of fragments of ancient books (e.g. poems of Sappho and Archilochus, a tragedy by Euripides, a satyr-play by Sophocles, comedies by Menander). Students will be introduced to the Tebtunis Papyri collection of the Bancroft Library and have access to online images of papyri.

Readings for the course will be supplied on bSpace, except for the general textbook, E. G. Turner, Greek Papyri: An Introduction, which is an ACLS e-book accessible to UCB users at <http://oskicat.berkeley.edu:80/record=b13597369~S1>.

Professor Mastronarde grew up in Connecticut and was educated at Amherst College, Oxford University, and the University of Toronto. He has taught at UC Berkeley since 1973. He has published extensively on the ancient Athenian tragedian Euripides and various aspects of ancient drama, including interpretation, staging and dramatic technique, textual studies, and commentaries. He is the author of a widely-used textbook for elementary ancient Greek and also works on font development and special keyboards for scholars of ancient Greek. He has taught several different variations of freshman seminars about performances (recorded and live) of Greek play and about papyri.

Faculty web site: http://classics.berkeley.edu/people/faculty/person_detail.php?person=5

Classics 24, Section 3**Homer's 'Odyssey'—The Text and the Mythology (I unit, P/NP)****Professor Anthony Bulloch****Tuesday 4:00-5:00, 224 Wheeler Hall, CCN: 14732**

This seminar is a study of the 'Odyssey' in both the cultural and historical context of ancient Greece, and as a mythic language through which to explore issues of identity, gender, sexuality, community, individuality, responsibility, etc.

Anthony Bulloch is a Professor of Classics at UC Berkeley and Assistant Dean in the College of Letters & Science, Office of Undergraduate Advising. Before coming to Berkeley he was a Fellow, Dean and Classics tutor at King's College in Cambridge and has authored books and articles on various authors and texts from the ancient Greek world.

Faculty web site: http://classics.berkeley.edu/people/faculty/person_detail.php?person=17

Comparative Literature 24, Section I
Jazz Tributes (1 unit, P/NP)
Professor Michael Lucey
Monday 3:00-4:00, 202 Wheeler Hall, CCN: 17275

This seminar's purpose will be to help us become informed listeners at the Kurt Elling concert sponsored by Cal Performances on Saturday, April 23, 2011. Elling's latest album, "Dedicated to You: Kurt Elling Sings the Music of Coltrane and Hartman," won the 2010 Grammy Award for Best Jazz Vocal Album. We'll study how jazz works as music, and how jazz works as a culture. The Elling concert will happen toward the end of the semester. Throughout the semester we will watch and listen to some classic recorded jazz performances, as well as to live music (depending on the schedules that are announced for spring) by jazz musicians in events sponsored by the Music Department, or at the Jazzschool in downtown Berkeley, or at the world-famous jazz club in Oakland, Yoshi's. Our particular focus throughout the semester will be on how and why jazz musicians spend so much time listening to other jazz musicians and learning from them, and how they acknowledge what they've learned and who they've learned from during their own performances. Of course our major case study will be Elling's "Dedicated to You," and the two albums on which it is based, "John Coltrane and Johnny Hartman" and "John Coltrane Quartet-Ballads." But Elling has a long practice of recording tributes to jazz musicians who have inspired him, so we'll also listen to and learn from earlier tribute tracks Elling has done, not only to Coltrane, but also to artists such as Dexter Gordon and Keith Jarrett. Along with our musical texts, we will also read a recent book by Ben Ratliff, "Coltrane: The Story of a Sound," in order to understand the unique place Coltrane occupies in jazz history. We'll also be reading sections from Paul F. Berliner's "Thinking in Jazz: The Infinite Art of Improvisation" to help us learn about how jazz music and jazz culture work. Special instructions regarding purchasing CDs for this seminar are available on the Comparative Literature website; see link at the end of this description. **The seminar requires no musical training, and no previous acquaintance with jazz, although we'll happily make use of any jazz expertise seminar participants may have. This is a Berkeley Arts Seminar: http://www.bampfa.berkeley.edu/bca/prog_bas.html. Admission to the on-campus arts events included in this course will be provided at no cost to students.**

Michael Lucey teaches in the Departments of Comparative Literature and French. He is currently the Chair of the French Department. He has also studied jazz and classical piano for many years.

Faculty web site: <http://french.berkeley.edu/people/detail.php?person=9>

Earth and Planetary Science 24, Section I
Geosciences in the Movies (1 unit, P/NP)
Professor Michael Manga
Thursday 2:00-4:00, 401 McCone Hall, CCN: 19032

This seminar will begin on February 3, 2011. The remaining discussion and film viewing dates and times will be announced in class.

Movies can be an effective way to spread information about science and its relevance to society. Science in movies, however, is often wrong and misleading. In this seminar we will watch and critique a set of modern popular movies that address topics in geoscience, environmental science, and planetary science. Is the science right? Does it matter? Was the movie effective? Movies to be discussed and reviewed cover topics in planetary science that range from the core to the search for life beyond our solar system.

Michael Manga is a Professor of Earth and Planetary Science. His areas of expertise include planetary science, fluid mechanics, hydrology, geodynamics, and physical volcanology. For more information

regarding Professor Manga, please visit his faculty webpage at http://eps.berkeley.edu/development/view_person.php?uid=175059.

Faculty web site: <http://seismo.berkeley.edu/~manga/rsch.html>

Earth and Planetary Science 24, Section 2
Oceans in the News (1 unit, P/NP)
Professors Jim Bishop and Daniel Farber
Wednesday 10:00-11:00, 325 McCone Hall, CCN: 19033

Not one week goes by without major articles about the oceans in print/online media such as The San Francisco Chronicle, New York Times, etc. News items: Pollution?, An ice-free Arctic Ocean?, Law of the Sea?, Fisheries?, Economics and Commerce?, Sea Level Rise?, An ocean fix for the CO₂ problem?, Ecological discoveries? and more. We'll delve into the details of several of these focus areas over the course of the term. Students will be graded on active participation, short written assignments, and in-class team presentations. Participants will have an opportunity to experience the San Francisco Bay from the water. This year, we expect that at least 50% of the seminar will be devoted to exploring the multitude of ocean challenges (engineering to legal) surrounding the 2010 Gulf of Mexico oil leak. **The seminar will close within two weeks of the start of classes.**

Jim Bishop is a Professor in the Department of Earth and Planetary Sciences. His research focuses on understanding how the oceans sequester atmospheric carbon dioxide. He loves to go to sea and has logged about 1.5 years at sea during 32 oceanographic expeditions. For more information regarding Professor Bishop, visit his faculty webpage.

Faculty web site: http://eps.berkeley.edu/development/view_person.php?uid=212268

Dan Farber is Director of the California Center on Environmental Law and Policy (CCELP) and Chair of the Energy Resources Group (ERG). For more information regarding Professor Farber, visit his faculty webpage.

Faculty web site: <http://erg.berkeley.edu/people/faculty/Dan%20Farber/Farber.shtml>

Energy and Resources Group 24, Section 1
The Science, Technology, Policy, and Politics of California Air Pollution (1 unit, P/NP)
Professor Robert Sawyer
Tuesday 2:00-4:00, 323 Barrows Hall, CCN: 27353

This seminar will meet six Tuesdays plus two field trip dates. The first Tuesday seminar meeting will be on January 25, 2011. The remaining five Tuesday meeting dates will be announced in class. The two field trip dates and arrangements will be discussed in class.

California experiences the nation's worst air quality. Its innovative regulatory program is a model for the nation and the world. This seminar examines current California air pollution issues including health-based air quality standards and the problems of their attainment, the next generation of clean cars, California's evolving role in addressing global warming, and more. This seminar is an unusual opportunity to explore air pollution and climate change issues with a professor who also led relevant California regulatory programs.

After forty years on the Berkeley faculty, Professor Sawyer, the Class of 1935 Professor of Energy Emeritus, accepted the appointment of Governor Schwarzenegger to head California's air quality and climate change programs as chair of the California Air Resources Board. While at Berkeley his teaching

and research focused on air pollutant formation and control, motor vehicle emissions, energy and environment, and regulatory policy. His current activities include the Board of Directors of the American Lung Association of California; member of the International Council on Clean Transportation; the National Academy of Engineering's study of Causes of the Deepwater Horizon Explosion, Fire, and Oil Spill; and the International Civil Aviation Organization (UN) Independent Experts assessment of future technology to reduce aircraft fuel burn (CO₂ emissions).

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

English 24, Section 1

The Arts at Berkeley (1 unit, P/NP)

Professor Charles Altieri

Wednesday 11:00-12:00, 205 Wheeler Hall, CCN: 28030

The goal of the course is to help students to feel confident in talking about the arts and to take pleasure in that confidence, as well as to feel at home in the various venues that exhibit art and performance at Berkeley. We will discuss how best to look at and interpret works of visual arts exhibited at the Berkeley Art Museum; we will attend dance and theater events at Cal Performances, and we may include something in the city. Students will be expected to produce one-page reviews of some aspect of performances and they will lead the class in discussing some work of visual art. **I am interested in students from a wide variety of backgrounds who want to experience the arts at Berkeley in the social setting provided by conversation about what we see. There are no prerequisites. This is a Berkeley Arts Seminar: http://www.bampfa.berkeley.edu/bca/prog_bas.html. Admission to the on-campus arts events included in this course will be provided at no cost to students.**

Charles Altieri is a Professor of English who specializes in twentieth-century American literature and literature and the visual arts. He is also former director of the Consortium for the Arts on campus, a unit devoted to developing conversations among the arts.

Faculty web site: http://english.berkeley.edu/contact/person_detail.php?person=9

English 24, Section 2

Reading Walden Carefully (1 unit, P/NP)

Professor Mitchell Breitwieser

Monday 2:00-3:00, 125 Dwinelle Hall, CCN: 28736

We will read Thoreau's Walden in small chunks, probably about thirty pages per week. This will allow us time to dwell upon the complexities of a book that is much more mysterious than those who have read the book casually, or those who have only heard about it, realize. We will also try to work some with online versions of the book, using the wordsearch command to identify words such as "woodchuck" or "dimple" that reappear frequently, in order to speculate on patterns Thoreau is trying to establish. Regular attendance and participation, along with a loose five-page essay at the end, are required.

Mitchell Breitwieser has taught American literature in the Berkeley English department for thirty-one years.

Faculty web site: http://english.berkeley.edu/contact/person_detail.php?person=19

Environmental Science, Policy, and Management 24, Section 1

Issues in Natural Resource Conservation (1 unit, P/NP)

Professor David Wood

Friday 9:00-10:00, 106 Mulford Hall, CCN: 2895 I

There is one optional field trip to a Bay Area location 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; global warming; 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.

Faculty web site: <http://ecnr.berkeley.edu/facPage/dispphp?l=645>

**Environmental Science, Policy, and Management 24, Section 2
Insects, Ticks, and Human Diseases (1 unit, LG)**

Professor Robert Lane

Thursday 2:00-3:00, 306 Wellman Hall, CCN: 28954

This course is intended to examine the impact of insects, ticks, and the disease agents they transmit on human society. A few lectures will be presented on such globally important diseases as Lyme disease and plague. Various laboratory procedures used to study the relationship of ticks to animal disease agents will be demonstrated. Students will be expected to participate in group discussions of selected readings.

Robert Lane is a Professor of the Graduate School in the College of Natural Resources and Professor Emeritus of Medical Entomology in the Department of Environmental Science, Policy & Management. He received his doctoral degree in medical entomology at UC Berkeley. His current research interests include the ecology, epidemiology, and control of tick-borne diseases, especially Lyme disease. He also has extensive experience studying the behavior and biology of bloodsucking flies that annoy humans and other animals.

Faculty web site: <http://ecnr.berkeley.edu/facPage/dispphp?l=611>

Ethnic Studies 24, Section 1

The U.S. 2010 Mid-term Elections and Racial Minorities (1 unit, LG)

Professor Alex Saragoza

Wednesday 3:00-4:00, 111 Kroeber Hall, CCN: 31035

This course examines the role of minority voters in the mid-term elections of November 2010. The 2008 presidential campaign led to an unprecedented level of participation by minority voters, which contributed decisively to President Obama's victory. But what was the role of minority voters in the mid-term elections that followed two years later? Was there a substantial drop-off in their participation, and if so, with what effects? Were certain groups, e.g., African American men, much less involved in the elections? Did the issue of immigration reform energize the participation of Asian and Latino voters? These questions and related ones will be the focus of this seminar.

Professor Alex M. Saragoza offered a seminar in 2009 that examined the role of minority voters in the presidential campaign of 2008. His research has delved recently into the impact of the issue of immigration reform on the participation of Latino and Asian voters in local, state, and federal electoral contests.

Faculty web site: <http://ethnicstudies.berkeley.edu/faculty/profile.php?person=15>

French 24, Section I
Montaigne and the Art of the Essay (1 unit, P/NP)
Professor Timothy Hampton
Friday 12:00-1:00, 222 Wheeler Hall, CCN: 32332

“Montaigne, the inventor of jazz.” - NY Times

Michel de Montaigne is both the most influential prose writer of sixteenth-century Europe and the first great moral philosopher of the modern age. His three books of “Essays” (a word he invented) offer both a reflection on the age in which he lived, and a guide for living in dark times (like ours). They are also among the most endlessly engaging pieces of writing in world literature. In this seminar we will read through as many of the “Essays” as we can at a comfortable pace and discuss the issues they raise. We will be especially attuned to the intersections between Montaigne’s unique writing practice and different technologies for disseminating knowledge—from the printing press to the Internet. And, of course, we will be interested in what Montaigne can teach us about our own essay writing. Among the topics to be considered: writing and the body; the value of idleness; the role of cannibalism in culture; how to understand a monster; the meaning of thumbs; how to prepare for death. The instructor will provide relevant historical and intellectual background. Students are expected to come prepared to think and read. **No knowledge of French is required.**

Timothy Hampton is a Professor of French and Comparative Literature. He teaches and writes widely on early modern European literature and culture.

Faculty web site: <http://french.berkeley.edu/people/detail.php?person=6>

German 24, Section I
Language and Identity (1 unit, P/NP)
Professor Claire Kramtsch
Thursday 2:00-3:00, 78 Barrows Hall, CCN: 37469

This seminar will examine the works of authors for whom the questions of language and cultural identity have played a key role in the development of their distinctive voices. We will read two literary autobiographies of authors who write in a language that is not their native language: Elias Canetti's *The Tongue Set Free* (Bulgarian writing in German) and Eva Hoffman's *Lost in Translation* (Pole writing in English) and one autobiography by American teacher of French Alice Kaplan writing in English: *French Lessons*. We will also read selections from such bilingual authors as J.P. Sartre, N. Sarraute, Jacques Derrida, Shirley Geok-lin Lim, A. Kilito, and Nancy Huston, who view language as an act of identity and writing as giving voice to that identity. Through close textual analysis, we will examine the writer's use of language within the text, placing that analysis within the social, political, and cultural forces that have shaped the author's linguistic choices. Students will write their own autobiographical narratives, using English or languages other than English, or a combination of their native and non-native languages. **All readings will be in English, or English translation.**

Claire Kramtsch is Professor of German and Affiliate Professor of Education. She teaches undergraduate and graduate courses on discourse analysis, second language acquisition, sociolinguistics and discourse stylistics. Professor Kramtsch is currently writing a book on the multilingual subject.

Faculty web site: <http://german.berkeley.edu/people/showprofile.php?id=7>

German 24, Section 2
Nietzsche (1 unit, P/NP)

Professor Chenxi Tang
Tuesday 4:00-5:00, 47 Evans Hall, CCN: 37472

This seminar discusses two main works by Friedrich Nietzsche – "The Gay Science" and "Beyond Good and Evil." We will try to understand Nietzsche's reflections on the human condition, and more importantly to learn what it means to philosophize.

Chenxi Tang studied philosophy, comparative literature, and German literature at Peking University, Ludwig-Maximilians-Universität Munich (MA 1993), and Columbia University (PhD 2000). He taught at the University of Chicago before joining the German Department at Berkeley in 2007. His research and teaching interests include German literature from the eighteenth to the early twentieth century, social and political theory, and modern European intellectual history. His book *The Geographic Imagination of Modernity: Geography, Literature, and Philosophy in German Romanticism* traces the emergence of the geographic paradigm in Western thought around 1800. Recently he has been awarded a Humboldt Research Fellowship to work on a book project entitled *Fictions of Humanity: Poetics of World History in European Modernity*. For more information regarding Professor Tang, visit his faculty webpage on the Department of German website at <http://german.berkeley.edu/people/showprofile.php?id=150>.

Faculty web site: <http://german.berkeley.edu/people/showprofile.php?id=150>

Integrative Biology 24, Section 1
The Darwinian Revolution (1 unit, LG)
Professor Brent Mishler
Thursday 10:00-11:00, 4110 Valley Life Sciences Building, CCN: 43003

The Darwinian Revolution was one of the greatest upheavals in human thought, involving the very basis of our self-awareness: Where did we come from? What is or should be the basis for our ethics and social behavior? Where are we going? Topics to be considered include: historical antecedents of Darwin's theories; the scientific evidence for evolution and natural selection; the impact of Darwinism on religion, social theory, and ethics; later scientific developments and recent challenges by latter-day creationists. The goal is to use these interdisciplinary topics as an exemplar of scientific methods and change, and of the unsteady relationship between science and the public. In addition to attending and participating in each week's lecture/discussion, each student will be required to write a short paper (five pages maximum) due at the end of the semester.

Brent Mishler is Professor in the Department of Integrative Biology and Director of the University and Jepson Herbaria. His research interests are in the systematics and evolution of plants, especially mosses. His lab applies methods ranging from microscopy and computer-assisted morphometrics, through tissue culture and DNA sequencing. He is also interested in the theory of systematic biology, as well as the philosophy and history of science.

Faculty web site: http://ib.berkeley.edu/people/faculty/person_detail.php?person=146

Integrative Biology 24, Section 3
How and Why Do Birds Sing (1 unit, P/NP)
Professor George Bentley
Tuesday 2:00-3:00, 4110 Valley Life Sciences Building, CCN: 43009

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 Assistant 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. For more information regarding Dr. Bentley, visit http://ib.berkeley.edu/research/interests/research_profile.php?person=17.

Faculty web site: http://ib.berkeley.edu/research/interests/research_profile.php?person=17

Integrative Biology 24, Section 4
The Age of Dinosaurs: What Do We Know? (1 unit, LG)
Professor Kevin Padian
Tuesday 1:00-2:00, 5192 Valley Life Sciences Building, CCN: 43012

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. **You 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.**

Kevin Padian has been teaching at Berkeley for thirty 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/faculty/person_detail.php?person=166

Integrative Biology 24, Section 5
Islands as Model Systems (1 unit, P/NP)
Professor Patrick V. Kirch
Thursday 11:00-12:00, 4110 Valley Life Sciences Building, CCN: 43015

Oceanic islands offer outstanding model systems for investigating and understanding many kinds of ecological processes. In a model system, fundamental variables can be readily identified, and the mechanisms of interaction among them tested. While model systems are by definition simple, they

nonetheless contain all of the essential elements found in more complex systems, or in systems that operate on a larger scale, hence their widespread application and utility. Islands offer model systems for ecosystem studies due to the small number of well-defined "state factors" that display especially clear properties, such as biogeochemical gradients, strongly orthogonal variation in climate, and restricted flora and fauna. Islands also offer model systems for investigating and understanding human cultural evolution, including the complex interactions between human populations and the ecosystems they inhabit. This seminar will explore the potential of island model systems to aid in our understanding both of natural evolutionary and ecological processes, and of human-environment interactions. The seminar will draw particularly on recent and on-going research in Hawaii and other Polynesian island groups.

Patrick Kirch is the Class of 1954 Professor of Anthropology and Integrative Biology. He has conducted archaeological and paleoecological research throughout the Pacific Islands, and is particularly interested in the long-term interactions between human populations and island ecosystems. His current multi-disciplinary research project involves collaboration with ecologists, paleobiologists, soil scientists, demographers, and archaeologists to model the complex dynamics of the Hawaiian ecosystem from Polynesian settlement to the present.

Faculty web site: <http://sscl.berkeley.edu/~oal/>

Integrative Biology 24, Section 6
Extinction (1 unit, P/NP)
Professor Anthony Barnosky
Wednesday 11:00-12:00, 4110 Valley Life Sciences Building, CCN: 43017

Food for Thought dining arrangements will be discussed in class.

This seminar will explore the recent controversial idea that a comet explosion some 13,000 years ago killed the mammoths, mastodons, and many other large beasts, and was essentially the kick-off event for a major episode of extinction that is still going on today. We will read and evaluate the current literature written by scientists on opposing sides of this issue. Along the way we will discuss such questions as these: What causes mass extinctions and how do we know? How bad is the current extinction crisis in comparison to the very few other ones that are evident in the history of life? And how do scientists do business and arrive at the most reasonable conclusions? **This seminar is part of the Food for Thought Seminar Series.**

Anthony Barnosky is a Professor of Integrative Biology, Curator in the Museum of Paleontology, and Research Paleoecologist in the Museum of Vertebrate Zoology. His research focuses on using the paleontological record to understand the effects of environmental changes on ecosystems. He is the author of the recent book 'Heatstroke: Nature in an Age of Global Warming' (Island Press, 2009). For more information regarding Professor Barnosky, visit his Department of Integrative Biology faculty web page.

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

Integrative Biology 24, Section 7
Ethnobiology, Nutrition, and Global Food Systems (1 unit, P/NP)
Dr. Thomas Carlson
Wednesday 10:00-11:00, 5053 Valley Life Sciences Building, CCN: 44203

In this seminar we will read Michael Pollan's Omnivore's Dilemma, Gary Nabhan's Where Our Food Comes From and other select literature on related topics. 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 (e.g., corn) and animal (e.g., cows) species. We will also compare the

nutritional qualities, health effects, and carbon footprint of industrial food, organic food, locally grown food, and food that is hunted or gathered.

Dr. Thomas Carlson is an ethnobotanist, botanist, and physician who has conducted food and medicinal plant research with numerous different ethnolinguistic groups in Africa, Asia, Oceania, and the Americas. He has published articles in a spectrum of different disciplines including pharmacology, chemistry, experimental biology, nutrition, botany, ethnobotany, and anthropology. Dr. Carlson teaches courses in medical ethnobotany, botany, California plant life, and human reproduction.

Faculty web site: http://ib.berkeley.edu/research/interests/research_profile.php?person=40

Italian Studies 24, Section I

From Sadism to Satire: How Dictators are Represented in Film (1 unit, P/NP)

Professor Mia Fuller

Thursday 10:00-11:00, 633I Dwinelle Hall, CCN: 46956

Film viewing times and arrangements will be discussed in class.

In this seminar we will focus on how totalitarian rule and its effects have been depicted in film, with a particular emphasis on Mussolini's Italy. We will explore the range of portrayals of the ruler, from the dictator as pure evil to the dictator as buffoon, and also discuss films in which the dictator does not appear but we see the effects of his regime. For comparative reasons, we will include a few films addressing Hitler's dictatorship as well. Our guiding questions: What purposes does it serve to regard the dead dictator as one dimensional? How long after the end of dictatorship do sympathetic or nuanced portrayals begin to appear? And perhaps most importantly, how have filmmakers handled the delicate matter of satire, in which the dictator is lampooned?

Mia Fuller, Ph.D. Berkeley, is Associate Professor of Italian Studies. She is a cultural anthropologist who has combined fieldwork and archival research in her studies of architecture and city planning in the Italian colonies between 1869 and 1943. Her book on the subject, *Moderns Abroad: Architecture, Cities, and Italian Imperialism*, was published by Routledge in 2007. She is also the co-editor (with Ruth Ben-Ghiat) of *Italian Colonialism: A Reader* (Palgrave, 2005). Currently, she is preparing an ethnographic, architectural, and oral-historical study of the Fascist-era 'New Towns' built in 1930s Italy.

Faculty web site: <http://italian.berkeley.edu/people/profile.php?id=19>

Journalism 24, Section I

Revisiting World War II Through the Documentary Lens (1 unit, LG)

Professor William J. Drummond

Wednesday 10:30-12:00, B1 North Gate Hall, CCN: 48003

This seminar will meet for ten weeks, beginning Friday, January 21, 2011 and ending Friday, April 1, 2011.

This seminar will explore the events of 1939-1945 by examining what many experts believe to be the greatest historical TV series ever made: *The World at War*. This monumental work, originally broadcast thirty years ago, has been reissued. In DVD the boxed set contains 22 hours and 37 minutes of original programming, plus another 12 hours of extras, including a detailed account of how the series itself was made. It was seventy years ago in August, 1939, that the Second World War began, and its shadow hangs over relations between nations today from Middle Europe to the Middle East. The generations born since the war's end have slowly lost touch with the staggering human costs and the equally staggering questions of personal and national responsibility. The goal of this class is to make use of the documentarian's art to reopen these questions and examine them in light of new information and new sensibilities. **Enrollment is limited to fifteen freshmen.**

William J. Drummond joined the faculty in 1983 after a career in public radio and newspapers. He continues to produce occasional public radio reports and documentaries. From 1979 to 1983 he worked in Washington for National Public Radio, where he was the first editor of Morning Edition before moving on to become National Security Correspondent. He has produced documentary-length radio programs on a wide range of subjects: Native Americans and welfare reform; jazz diva Betty Carter; Allensworth: the pioneering Negro colony in the California Central Valley; a profile of a psychiatrist whose specialty is interviewing serial killers; the early Jim Crow days in Las Vegas; an examination of why Americans are turned off by the political system; and a look at the tension between Malcolm X and Martin Luther King, as seen through the eyes of youth. His honors include a 1989 citation from the National Association of Black Journalists for "Outstanding Coverage of the Black Condition," the 1991 Jack R. Howard Award for Journalism Excellence, and a 1994 Excellence in Journalism Award from the Society of Professional Journalists' Northern California Chapter for an advanced reporting class experiment in civic journalism. He was a member of the planning committee that created the Public Radio International program The World.

Journalism 24, Section 2

Mission Loc@l and Hyperlocal Reporting (1 unit, LG)

Professor Lydia Chavez

Tuesday 11:00-12:00, 127 North Gate Hall, CCN: 48005

This seminar will explore the world of hyperlocal reporting. Students can contribute to Mission Loc@l in different ways: graphics, short posts, short videos or photographs. **Enrollment is limited to twelve freshmen.**

Lydia Chavez, a former reporter for The New York Times, has written books and articles on affirmative action, Cuba and immigration.

Faculty web site: <http://journalism.berkeley.edu/faculty/chavez/>

Letters and Science 24, Section I

Looking at Berkeley Buildings (1 unit, P/NP)

Professor David Wright

Thursday 11:00-1:00, 425 Doe Library, CCN: 51805

This seminar will meet for twelve weeks, beginning January 20, 2011 and ending April 21, 2011. Participation in the first seminar meeting is essential. Food for Thought dining arrangements will be discussed in class.

This seminar is based on close study of the best buildings on campus and includes comparison with some of the worst. The goal is to learn to analyze buildings objectively, to understand the rationale behind buildings in different styles, and to develop criteria for a balanced judgment of them. We will also study the 1899 ideal plan for the campus, the official 1914 plan, and the present state of the arrangement of buildings, plazas, and planting on campus. There will be weekly study assignments to look closely at specific buildings, to make simplified drawings of them (no experience or talent expected) and to write short descriptive comments. Two-hour classes will normally begin with a discussion of the current assignment, will include a short slide lecture with background for the next assignment, and will end with a collective visit to a building involved in the assignments. No reading; lots of walking, looking, and discussing; some drawing and writing. The final very short paper will be a critical report on a building chosen by the student. **This is a Liberal Arts course, but students of Civil Engineering are specially invited to enroll. This seminar is part of the Food for Thought Seminar Series.**

Professor David H. Wright studied Physics at Harvard for three years just after the war, but for his general education requirement he took a course with the Dean of the School of Design. That course and two other courses in history of art persuaded him to switch and graduate in Fine Arts, and to take the Bauhaus Basic Design course with Joseph Albers. He has taught at Berkeley since 1963. All his scholarly publications concern Late Antiquity and the Dark Ages, but he cares passionately about the architecture and civic design we live with every day.

Linguistics 24, Section 1
Language Myths (1 unit, P/NP)
Professor Larry Hyman
Monday 2:00-3:00, 175 Dwinelle Hall, CCN: 52242

Everyone has preconceptions about language in general and languages in particular. But are these accurate? In this course we will discuss and evaluate a number of common language myths such as these: Are all languages equally complex? Are some more logical? More beautiful? Is there such a thing as a primitive language? Do some people speak more grammatically than others? Is the English language undergoing a process of decay? We will draw on facts from English, other languages that may be familiar to participants, and lesser known languages which bear on the above and other questions. **No linguistic or other prerequisites are required. All interested students are welcome, especially students who have a fascination with language and/or languages.**

Larry M. Hyman is a Professor of Linguistics at Berkeley where he chaired the Department of Linguistics from 1991 to 2002. He obtained his Ph.D. at UCLA in 1972 and subsequently taught at USC until coming to Berkeley in 1988. His research centers around the study of sound systems (phonology) and grammar, particularly within Bantu and other Niger-Congo languages in Africa. His publications include several books and numerous articles in the major journals in general and African linguistics. One of his long-standing interests is the study of tone languages, as found in Africa, Asia, Meso-America and elsewhere.

Faculty web site: http://linguistics.berkeley.edu/people/person_detail.php?person=19

Linguistics 24, Section 2
Language Games (1 unit, P/NP)
Professor Sharon Inkelas
Tuesday 11:00-12:00, 237 Cory Hall, CCN: 52245

Language games appear to be universal, in the sense that they exist in every language, although they exhibit a great deal of variety. The ease with which they are invented makes them an interesting window onto how speakers analyze and manipulate the structures of their own languages. This course will explore language games from around the world, from language play of young children to conventionalized speech disguises found in adult languages to the spontaneous language games of college students. Students will read some literature and do some linguistic investigations of their own. **Anyone who loves playing with language should enjoy this course.**

Sharon Inkelas is Professor and Chair of the Linguistics Department. 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://www.linguistics.berkeley.edu/~inkelas/>

Linguistics 24, Section 3
Language Science in the News (1 unit, P/NP)
Professor Susanne Gahl

Friday 9:00-10:00, 2311 Tolman Hall, CCN: 52247

"Reading Arabic 'hard for brain'" (BBC News, September 3, 2010); "Woman developed Russian accent after head injury" (Washington Post, May 30, 2010); "Dog learns 200 words": From local newspapers to remote corners of the blogosphere, almost every conceivable news outlet carries science news about language and cognition. In this seminar, we will discuss such news items, as well as resources for tracking down information about language and cognition. **The only prerequisite is curiosity about science reporting and/or language. No previous classes in Linguistics or Cognitive Science are required.**

Susanne Gahl is an assistant professor in the Department of Linguistics and the Cognitive Science program. She received her PhD from UC Berkeley in 2000. She has held postdoctoral appointments at Harvard University and the University of Illinois.

**Materials Science and Engineering 24, Section 2
Physics and Materials Science of Skateboarding (1 unit, P/NP)
Professor Daryl Chrzan
Thursday 10:00-11:00, 72 Evans Hall, CCN: 53203**

The popularity of skateboarding and other extreme sports is increasing at a rapid pace. The sports are termed extreme in part because they place the participants and their equipment under extreme conditions. This seminar will explore the extreme conditions associated with skateboarding, and how materials science has been used to evolve the original sidewalk surfers into the modern-day skateboard. Topics to be discussed include the physics of skateboarding (including an analysis of the inevitable slam) and the implications of this physics for the design of wheels, boards, bearings, trucks and safety equipment. The course includes experiments to measure rolling friction and the breaking strength of skateboards. **There are no special prerequisite constraints—just an interest in skateboarding, physics and materials science.**

Professor Daryl C. Chrzan received his Ph. D. in Physics, specializing in condensed matter theory, from UC Berkeley in 1989. From 1990 to 1995, he was a Senior Member of the Technical Staff at Sandia National Laboratories, Livermore. In 1995, Professor Chrzan joined the (now) Department of Materials Science and Engineering at UC Berkeley. His research emphasizes the prediction of the physical properties of metals and semiconductors based on knowledge of the atoms composing the materials. He has published over 70 papers, and presented over 40 invited talks at universities, laboratories, and international meetings. Professor Chrzan spent much of his youth on a skateboard, and can often be found carving the bowls at nearby skateparks.

Faculty web site: <http://cms.mse.berkeley.edu>

**Materials Science and Engineering 24, Section 3
Materials and Weapons of War through History (1 unit, P/NP)
Professor J. W. Morris Jr.
Friday 2:00-3:00, 348 Hearst Mining Building, CCN: 53206**

For most of known history, advances in materials technology have appeared primarily in two areas: objects of art and weapons of war. The former build civilization. The latter have often set its course, as critical military engagements from Kadesh to Kosovo have most often been dominated by the forces with the superior technology. In this seminar, we shall use the development of weapons through history as a vehicle to understand the important properties of different types and classes of materials, and trace their technological development and technical significance across the millennia.

Professor Morris has been a member of the Berkeley faculty since 1971, and was Program Leader for the Advanced Metals Program at the Lawrence Berkeley Laboratory for almost twenty years. He has taught

the introductory course Material Science and Engineering 45 for most of that period, and is a recipient of the University's Distinguished Teaching Award.

Faculty web site: http://www.mse.berkeley.edu/bio_morris.htm

Mathematics 24, Section I
What is Happening in Math and Science? (1 unit, P/NP)
Professor Jenny Harrison
Tuesday 3:00-4:00, 89I Evans Hall, CCN: 53936

In this seminar, we will discuss the latest developments in science and math. Students will present short oral reports from articles of their choice in the Science Times, Scientific American, Science News, or articles in What is Happening in the Mathematical Sciences. Discussion and debate are encouraged especially when controversial or challenging issues arise, e.g., cloning of organs, string theory, stem cell research, and geopolitics of global warming. Students are encouraged to think of applications and possibilities of new research projects. Brainstorming and creative thinking are encouraged! **This seminar is intended for students who love math and science and want to discuss the latest developments in an atmosphere that fosters creative thought. Students considering a major in math or science have found this seminar a useful resource to help clarify their choice.**

Jenny Harrison obtained her Ph.D. in mathematics in Warwick, England. She has taught at Oxford, Princeton, and Yale, as well as UC Berkeley. Her research interests include a new quantum calculus that applies equally to charged particles, fractals, smooth surfaces, and soap films. Applications of this theory to sciences may arise during this seminar.

Faculty web site: http://en.wikipedia.org/wiki/Jenny_Harrison

Mechanical Engineering 24, Section I
Art and Science on Wheels (1 unit, P/NP)
Professor Benson Tongue
Wednesday 1:00-2:00, 108 Wheeler Hall, CCN: 55403

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. **Enrollment is limited to twelve students.**

Benson H. Tongue is a Professor in the Department of Mechanical Engineering and has been a member of the faculty since 1988. His interests lie in the fields of vibrations, dynamics and controls, not to mention Scottish dancing, bicycling and bird watching. He is the author of Principles of Vibrations and Dynamics: Analysis and Design of Systems in Motion.

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

Mechanical Engineering 24, Section 2
Introduction to Aircraft Design (1 unit, P/NP)
Professor Panayiotis Papadopoulos
Friday 12:00-1:00, 121 Latimer Hall, CCN: 55405

This seminar will start with an overview of flight mechanics and proceed to discuss the analysis and design of airplane components, such as wings, fuselages, control surfaces, powerplants, etc. Several examples of poor design that led to catastrophic failures will be presented and analyzed.

Professor Papadopoulos received his Ph.D. in Civil Engineering from UC Berkeley. Since 1992, he has been a Professor in the Department of Mechanical Engineering. Professor Papadopoulos specializes in computational and theoretical solid mechanics.

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

Mechanical Engineering 24, Section 3
Computer Graphics Tools (1 unit, P/NP)
Professor Dennis Lieu
Tuesday 5:00-6:00, 2109 Etcheverry Hall, CCN: 56402

Bitmap or vector? JPG or TIF? AutoCAD or ProE? This seminar will provide an overview of many of the computer graphics formats available today on PC's. Find out about two-dimensional drawing, three-dimensional solids modeling, animation and special effects. Students will be introduced to sophisticated technical drawing and modeling tools such as AutoCAD, Solidworks, Pro/E and 3D Studio.

Dennis K. Lieu is a Professor in the Department of Mechanical Engineering. He teaches beginning and advanced engineering design graphics classes in the College of Engineering.

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

Molecular and Cell Biology 90A, Section I
"Be Afraid. Be very Afraid" The Fly (1986) (1 unit, P/NP)
Professor Jack Kirsch
Tuesday 5:00-7:00, 177 Stanley Hall, CCN: 57856

This seminar will meet for seven weeks; the first meeting will be on January 18, 2011. The remaining six meeting dates, and film viewing dates and arrangements will be discussed in class.

The biblical Four horsemen of the Apocalypse—Pestilence, Famine, War and Death—are now joined by an equally frightening modern quartet of partially overlapping political, economic and social issues that have nearly simultaneously emerged as potential disasters for our planet. They are

- 1) Climate Change
- 2) Exhaustion of Natural Resources
- 3) Global Pollution
- 4) Nuclear Terrorism

All threaten our society individually, but together they present a scenario that challenges our civilization to an unprecedented degree. Our objective will be to present the scientific basis for each of these concerns, with proper respect to divergent points of view. Possible courses of action will be presented. As we only will have about three one-hour sessions for each topic, we can not possibly give a comprehensive coverage of any one, let alone all four. The active goal of the seminar is thus to raise awareness, and to consider possible remedies.

Jack F. Kirsch is a Professor of the Graduate School and is on faculty of both the Chemistry and Molecular and Cell Biology Departments. He has most recently carried out research in enzymology and in molecular evolution. He has taught undergraduate courses in organic and in biochemistry as well as graduate courses on enzyme mechanisms. Professor Kirsch has been active in service to government panels and in professional society administration.

Faculty web site: <http://chem.berkeley.edu/faculty/kirsch/index.php>

Molecular and Cell Biology 90B, Section I
Insulin as a Window on Discovery in Biology (1 unit, P/NP)
Professor Randy W. Schekman
Tuesday 3:00-4:00, 2070 Valley Life Sciences Building, CCN: 57859

The discovery and therapeutic application of insulin was one of the most dramatic developments in twentieth-century biomedical science. We will consider the impact of insulin in protein biochemistry, and molecular and cell biology. We will also explore the role of the individual scientist in the process of discovery and the importance of animal research in biomedical science. The Discovery of Insulin by Michael Bliss will be available in the student bookstore and Invisible Frontiers: The Race to Synthesize a Human Gene by Stephen S. Hall will be provided in class because it is out of print. Glory Enough For All, a Canadian film and dramatic portrayal of the insulin story, will be available for viewing. **Students considering a major in Molecular and Cell Biology as well as all other interested students are welcome to enroll. This seminar is open to all students interested in the discovery process in the life sciences. A background in high school biology will be useful; AP biology is particularly appropriate preparation for the material we cover.**

For additional information about insulin and its status as the first "miracle drug", use the related web site link below to access an article that appeared recently in the New York Times:

Randy Schekman is a Professor of Cell and Developmental Biology in the Department of Molecular and Cell Biology and an Investigator in the Howard Hughes Medical Institute. Schekman is past Chair of the Department and currently is Chair of the Chancellor's Advisory Committee on Biology, a council that covers the span of life science research conducted on the Berkeley campus. Schekman also directs the campus program in stem cell biology. The research in Schekman's laboratory focuses on the mechanism of transport of membrane proteins within the eukaryotic cell.

Faculty web site: <http://www.hhmi.org/research/investigators/schekman.html>

Molecular and Cell Biology 90B, Section 2
Blood, Guts and Plumbing: The Human Body (1 unit, P/NP)
Professor John Forte
Wednesday 3:00-4:00, 89 Dwinelle Hall, CCN: 57862

The human body is a wonderful machine. It has pumps, combustion cells, fuel storage and exhaust systems. It even comes with air conditioning and circulating coolant. This seminar will explore the operation of these systems. Some students will be asked to be the mechanic who must explain the workings of one of the component parts, why it works so well, and what may sometimes go wrong. Others will be asked to debate opinions and misconceptions pertaining to optimization of the machine. **Freshmen students wishing to go on into biology are encouraged to enroll.**

Professor Forte has taught and done research at Berkeley since 1965. He received an undergraduate degree from Johns Hopkins University, where he also played football and was captain of the fencing team. He received his Ph.D. in Physiology from the University of Pennsylvania. Here at Cal he currently teaches Biology 1A, a freshman seminar class (MCB 90B) and an advanced course in physiology (MCB 136). His research interests concern the mechanisms of biological membrane transport and the regulation of these processes. He has frequently used the gastrointestinal tract as a model to explore the biophysics and biochemistry of cellular secretory and absorptive systems. He is the principal discoverer of the mechanism of gastric acid secretion: the definition of the gastric proton pump; cooperativity of the pump

with ion channels to effect HCl secretion; and the mechanism of membrane recycling as the basis for acid secretory regulation.

Faculty web site: http://mcb.berkeley.edu/index.php?option=com_mcbfaculty&name=fortej

Molecular and Cell Biology 90D, Section I
Viruses (1 unit, P/NP)
Professor P. Robert Beatty
Thursday 11:00-12:00, 61 Evans Hall, CCN: 57868

Food for Thought dining arrangements will be discussed in class.

This seminar will focus on human diseases caused by both RNA and DNA viruses. The course will begin with lectures by the instructor to introduce virology and immunology. The remainder of the course will be student-led discussions of specific viruses. **This seminar is part of the Food for Thought Seminar Seminars.**

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 focussed 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 90E, Section I
Brain Science in Fact, Fiction, and Film (1 unit, P/NP)
Professor Walter Freeman
Friday 12:00-1:00, 2032 Valley Life Sciences Building, CCN: 57871

This seminar will offer you the opportunity to learn how brain science plays a role in society. The exchange is in both directions. Scientific discoveries of how brains work are learned by writers and used in novels and scripts for movies. Imaginative scenarios invented by visionary writers provide insights into human behavior that inspire scientists to investigate the neurobiological mechanisms. The topic this spring is 'brainwashing': how it is done, what the brain mechanisms are, and what it means in terms of your experience and understanding of reality, of your self-identity, and your expectations of responsibility for actions by yourself and others. The format of this seminar requires active participation in speaking, reading and writing. I will assign references to books and films on reserve in Moffitt Library. On alternate weeks you will read a book or watch a movie. In the week in which you read the assigned book, you will write a brief book review [1 or 2 paragraphs] and post it on the class web site.

Walter J Freeman studied physics and mathematics at MIT, electronics in the US Navy in WWII, philosophy at the University of Chicago, medicine at Yale University, internal medicine at Johns Hopkins, and neuropsychiatry at UCLA. He has taught brain science in the University of California, Berkeley since 1959 and is now Professor of the Graduate School. He received his M.D. cum laude (1954), the Bennett Award in Biological Psychiatry (1964), Guggenheim (1965), NIMH MERIT Award from (1990), and Pioneer Award from IEEE Neural Networks Council (1992). Professor Freeman was President of the International Neural Network Society (1994) and is Life Fellow IEEE (2001). He has authored over five hundred articles and five books.

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

Molecular and Cell Biology 90E, Section 3
Matter, Mind, Consciousness (1 unit, P/NP)
Senior Lecturer David E. Presti
Wednesday 3:00-4:00, 2038 Valley Life Sciences Building, CCN: 57876

All that we know as humans comes to us by way of our mental experiences: our thoughts, feelings, perceptions, and conscious awareness. The prevailing assumption in contemporary science is that these mental processes will ultimately be completely understood in terms of physical processes in the brain and body. However, it is a deep mystery as to how the objective physical movements of ions and molecules in our brains might give rise to subjective experiences like thoughts and feelings. Some argue that the investigation of this mind-body problem is the most interesting question in all of science. We will consider this question from the perspectives of neuroscience, physics, and philosophy of mind. **Non-science majors are encouraged to enroll.**

David Presti has taught neuroscience at UC Berkeley for twenty years. For the past several years, he has also been teaching neuroscience to Tibetan monks in India.

Faculty web site: http://mcb.berkeley.edu/index.php?option=com_mcbfaculty&name=prestid

Natural Resources 24, Section 2

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

Professors Peter Berck and Matthew Potts

Thursday 5:00-6:00, 4301 Foothill 4 - Classroom A, CCN: 61353

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.**

Peter Berck is a Professor of Agricultural and Resource Economics and Policy. He was an undergraduate at Cal, received a Ph.D. in Economics from MIT in 1976, and has been teaching at Cal ever since. His research has been on the economics of forestry, fisheries and water, on food security in developing nations, and on the costs of environmental regulation.

Faculty web site: <http://afs.berkeley.edu/~pberck/>

Matthew D. Potts is an Assistant Professor of Forest Ecosystem Management in the Department of Environmental Science, Policy and Management. He has an interdisciplinary background with training in mathematics, ecology and economics with a BS from the University of Michigan and a PhD from Harvard University. In addition, he has extensive international experience conducting field research in tropical forest throughout the world. His varied research interests include spatial aspects of resource management and epidemiology as well as how human actions, values, and ethics affect biodiversity conservation.

Faculty web site: <http://http://nature.berkeley.edu/pottslab/>

Near Eastern Studies 24, Section 1

Islam and Imaginative Literature: The Making of a Problematic Relation (1 unit, LG)

Professor Muhammad Siddiq

Tuesday 10:00-11:00, 180 Barrows Hall, CCN: 61474

This course explores the status of imaginative literature in Islamic contexts. Beginning with the attitude of the Qur'an towards poetry and poets (which we will compare to the views of Plato and Aristotle on the subject), the course will examine the perimeters of literary expression and the theological constraints placed on it in various phases of Islamic history up to the present. Students are expected to write several short, informal, but analytical essays. In addition, regular attendance and participation in class discussion will figure in determining the overall grade in the course.

Professor Muhammad Siddiq is trained in Comparative Literature with special expertise in Arabic, Hebrew, and English. He is currently working on a project that examines the poetics of Palestine in the works of the major Palestinian poet Mahmoud Darwish.

Faculty web site: http://nes.berkeley.edu/Web_Siddiq/Siddiq.html

Near Eastern Studies 24, Section 2

Ancient Egypt at Berkeley: Egyptian Archaeology in the Hearst Museum (1 unit, LG)

Professor Carol Redmount

Monday 1:00-2:00, 252 Barrows Hall (first meeting) and Exhibit Gallery in Hearst Museum, CCN: 61477

The first seminar meeting will be in 252 Barrows Hall. Future seminar meeting locations will be announced in the first class.

The Hearst Museum has one of the most important collections of ancient Egyptian artifacts in the United States and the best west of Chicago. Most of the almost 19,000 ancient Egyptian objects in the museum came from excavations undertaken in the early 1900s by George Reisner, with funding provided by Phoebe Apperson Hearst. Only a very tiny fraction of this collection is ever on display, due to exhibit space constraints. This year we are fortunate because the museum's newest exhibit will highlight Egyptian objects. In this one-credit seminar, we will examine the background and history of the collection, its housing and treatment in the museum, and various objects from the collection. Students will learn to use various museum resources and have the opportunity to go behind the scenes in the museum as well as work with the ancient objects on display. **First-year students with no background in the field are encourage to enroll.**

Carol Redmount is an Associate Professor in the Near Eastern Studies Department. She specializes in the archaeology of Egypt and directs the UC Berkeley excavations at El-Hibeh, a three-thousand-year-old provincial town and cemetery site in Middle Egypt. She began her archaeological fieldwork the summer of her freshman year in college and hasn't stopped digging since. She has worked in the Middle East for over thirty years and lived for extended periods of time in Egypt, Israel and Jordan. Her archaeological experience also includes fieldwork in Cyprus, Tunisia and the United States.

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

Near Eastern Studies 24, Section 3

What If You Were a Babylonian Student? (1 unit, P/NP)

Professor Niek Veldhuis

Tuesday 4:00-5:00, 12 Barrows Hall, CCN: 61479

This is an introduction to Babylonian (Mesopotamian) culture by following the day-to-day activities of a pupil at an ancient scribal school - 4000 years ago! Learn how to write your name in cuneiform and how to do mathematics the Babylonian way, and read the myths, stories and hymns that those ancient pupils had to study. **This is a general course for all freshman students who are interested in broadening their horizon and learning something about the ancient world. Enrollment is limited to ten freshmen.**

Niek Veldhuis is an Associate Professor of Assyriology in the Department of Near Eastern Studies at UC Berkeley. In 2005 he received the Guggenheim Award for his work on the history of ancient Babylonian (Mesopotamian) education. He has published on Mesopotamian religion, literature, and intellectual culture and is involved with various online projects, including the Sumerian Dictionary.

Faculty web site: http://nes.berkeley.edu/Web_Veldhuis/

Near Eastern Studies 24, Section 4
Reading Modern Jewish Cultures (1 unit, P/NP)
Professor Chana Kronfeld
Monday 11:00-12:00, 8B Barrows Hall, CCN: 61921

Arrangements for museum visits will be discussed in class.

We will discuss textual and artistic developments in modern Jewish cultures in their diverse European and Middle Eastern contexts. The seminar will emphasize collaboration in introducing students to methods of close reading and to the multilingualism of Jewish cultural production. Two important concerns of the seminar will be 1) the ways secular Jewish literature engages critically with tradition, and 2) the emergence of modern Jewish art as a byproduct of secularization. We will draw on the collection at the Magnes Jewish Museum (now affiliated with the Bancroft Library), as well as the collection at the Contemporary Jewish Museum in San Francisco, in order to compare traditional and modern formations of Jewish art. **This is a Berkeley Arts Seminar: http://www.bampfa.berkeley.edu/bca/prog_bas.html. Admission to the on-campus arts events and the excursion to the Contemporary Jewish Museum in San Francisco included in this course will be provided at no cost to students.**

Chana Kronfeld is Professor of Hebrew, Yiddish and Comparative Literature at UC Berkeley. She is an Israeli co-translator of modern Hebrew poetry into English (Yehuda Amichai, Dahlia Ravikovitch) and is interested in issues of gender as well as the poetics and politics of multilingualism and modernism in literature and art. She is the recipient, most recently, of the Akavyahu Lifetime Achievement Award for Scholarship on Hebrew and Yiddish poetry.

Nutritional Sciences and Toxicology 24, Section 1
Classic Asian Martial Arts Movies (1 unit, P/NP)
Professor George Chang
Wednesday 11:00-1:00, Unit Two All Purpose Room, CCN: 64617

Food for Thought dining arrangements will be discussed in class.

Do you like classic Asian martial arts films? Or wonder how Jet Li and Jackie Chan became stars? Or want to see the early work of today's greatest martial arts director? Do you want to see the obscure Japanese movie that inspired the Star Wars films? Then this is the seminar for you. In some weeks we will screen films in class. In others, teams of students will lead discussions about certain aspects of these films. We'll start with 'Crouching Tiger, Hidden Dragon,' and then move on to classics such as the 'Seven Samurai,' Jet Li's 'Shaolin Temple,' Bruce Lee's 'Chinese Connection,' Jackie Chan's 'Snake in the Eagle's Shadow,' and Toshiro Mifune's 'Hidden Fortress' (the inspiration for Star Wars). "Classic Asian Martial Arts Movies" will be held in the Unit 2 All-Purpose Room to enhance the living-learning connection in the residence halls. **This seminar is part of the Food for Thought Seminar Series. After seminars, students and faculty can continue their discussions over lunch at the Crossroads Dining Commons.**

Professor Chang received an A.B. in chemistry from Princeton and a Ph.D. in biochemistry from Cal. He has been heavily involved in undergraduate affairs, serving on the Undergraduate Affairs Committee, the

Committee on Courses, and the Committee for Undergraduate Scholarships and Honors of the Academic Senate. He has also served on ad hoc committees dealing with disabled students and the need to develop a sense of community on each of the UC campuses. His most exciting assignment in the 20th Century was to serve on The Chancellor's Commission to Study the University's Responses to a Diversified Student Body. In 2005 Professor Chang became the inaugural professor in Cal's new Residential Faculty Program.

Faculty web site: http://nature.berkeley.edu/site/personnel_profile.php?id=95&id_url=true

Physics 24, Section I

Siege Engines: High Tech for an Agrarian World (1 unit, P/NP)

Professor Bob Jacobsen

Thursday 12:00-1:00, 175 Le Conte Hall, CCN: 69416

Food for Thought dining arrangements will be discussed in class.

The ballista, trebuchet and catapult were the high-tech wonder gadgets of the medieval age: If you had one, you could start a conversation just about anywhere. In this seminar, we'll study the physics, history, physics, technology, and physics of these devices. We'll examine how they were built, how they worked, and how they were used. We intend to build one or more model engines and measure their performance, but it is not yet clear how far that will go. There will be some reading required; involvement in building is optional. **No physics, engineering, technical, or mathematical background is required. Curiosity and willingness to get involved are required: this is not a seminar for leaning back and listening to what's happening in the front of the room. This seminar is part of the Food for Thought Seminar Series.**

Bob Jacobsen is an experimental high-energy physicist and ex-computer engineer. His previous project involved hundreds of physicists and thousands of Linux computers at sites around the world; his next one definitely won't.

Faculty web site:

http://physics.berkeley.edu/index.php?option=com_dept_management&act=people&Itemid=299&task=view&id=363

Plant and Microbial Biology 24, Section I

Would You Like to Learn More about the Food You Are Eating? (1 unit, P/NP)

Professor Zinmay Renee Sung

Monday 1:00-2:00, 106 Mulford Hall, CCN: 70336

Field trip dates and details to the botanical garden will be announced in class.

Plants have an amazing capacity to change their body parts and we have certainly encouraged the various modifications to our benefits. We will discuss the parts of the plants we eat, vegetable, grain, or fruit. We will visit the botanical garden and study the herbs used in diverse cultural backgrounds for cooking as well as for traditional medicinal purposes. Students are encouraged to discuss their favorite food and research the history and development of the food and the recipe.

Zinmay Renee Sung is a Professor of Plant Biology. She has taught courses on genetics, plant molecular biology, and plant developmental biology, and is currently teaching Plant and Microbial Biology 150: Plant Cell Biology. Her current research area is focused on "how does a fertilized egg grow into an organism?" Professor Sung's main research project is "epigenetic mechanism of floral repression."

Faculty web site: <http://pmb.berkeley.edu/~sung/>

Portuguese 24, Section I
Introduction to Brazil: Brazil's "Greatest Hits" in Literature and Film (1 unit, P/NP)
Professor Candace Slater
Tuesday 1:00-2:00, 233 Dwinelle Hall, CCN: 86605

Film viewing dates and times will be discussed in class.

The course will introduce student to Latin America's largest country and to a particularly vibrant culture with strong African and Brazilian Indian, as well as European and Asian, influences. We will take advantage of a film series featuring the radical 1960s filmmaker Glauber Rocha that will be playing this Spring at the Pacific Film Archive. We will also have short readings from some of Brazil's greatest writers. We will take advantage of a film series featuring the radical 1960s filmmaker Glauber Rocha that will be playing this Spring at the Pacific Film Archive, as well as a performance by the Balé Folclórico da Bahia at Cal Performances. **The course is designed for students with an interest in Latin America. Some basic knowledge of Spanish or Portuguese is useful, though not required. This is a Berkeley Arts Seminar: http://www.bampfa.berkeley.edu/bca/prog_bas.html. Admission to the on-campus arts events included in this course will be provided at no cost to students.**

Professor Candace Slater is a specialist in Brazilian literature and in the folk and popular culture of Brazil. She is the author of seven books and various articles. Much of her research has been in the Amazon and the Brazilian Northeast—a region a bit like Appalachia mixed together with the U.S. Wild West. She has held numerous fellowships and is an adviser to the Brazilian government's Pontos de Cultura or Culture Points initiative—a pan-Brazil program that uses the arts for social transformation.

Faculty web site: <http://ies.berkeley.edu/psp/people.html>

Psychology 24, Section I
Human Neuropsychology (1 unit, P/NP)
Professor Robert Knight
Wednesday 2:00-3:00, 210 Barker Hall, CCN: 73878

This seminar will discuss the major behavioral syndromes observed in neurological patients. Neuropsychological syndromes including deficits in attention, language, memory, executive control, visual perception, and motor control will be reviewed. Neurobiological techniques used to study these disorders will also be considered. Students will be asked to deliver an oral presentation on the topic of their choice. Final grade will be determined by the presentation and a review paper on a topic relevant to human neuropsychology. **Enrollment is limited to twelve students.**

Robert Knight is a Professor in the Department of Psychology. His research focuses on human neuropsychology with a particular emphasis on disorders of the prefrontal cortex. He received his Ph.D. in 1974 and practiced as a neurologist in the UC Davis School of Medicine from 1980-1998. He maintains a research lab applying neurobiological techniques to study cognitive disorders in neurological patients.

Faculty web site: <http://psychology.berkeley.edu/faculty/profiles/rknight.html>

Psychology 24, Section 2
Myths about Mental Illness (1 unit, P/NP)
Professor Ann Kring
Tuesday 1:00-2:00, 2129 Tolman Hall, CCN: 73880

As many as one in four people may experience symptoms of a mental illness at some point in life. In this seminar, we will explore mental illness from many different perspectives in order to try to parse myth

from fact. To do so, we will take a look at readings in psychology, sociology, literature, philosophy, journalism and anthropology. We will also consider views of mental illness portrayed in films and television. **This seminar is intended for students interested in mental illness and will be particularly useful for students considering a major in psychology.**

Ann Kring is Professor of Psychology and a member of the Helen Wills Neuroscience Institute and the Institute for Personality and Social Research. She has taught graduate and undergraduate courses in severe mental illness since 1991. Her research focuses on emotion and mental illness, with a specific interest in the emotional features of schizophrenia, assessing negative symptoms in schizophrenia and bipolar disorder, the linkage between cognition and emotion in schizophrenia, and emotion/cognitive processes that impact multiple disorders, including schizophrenia, depression, and bipolar disorder. She has received the Distinguished Teaching Award from the UC Berkeley Division of Social Sciences in the College of Letters & Science and has published over eighty articles and book chapters, co-edited a book on emotion and mental illness, co-authored a best-selling textbook in Abnormal Psychology.

Faculty web site: <http://psychology.berkeley.edu/faculty/profiles/akring.html>

Psychology 24, Section 3
Social and Personality Psychology in Everyday Life (1 unit, P/NP)
Professor Serena Chen
Monday 2:00-3:00, 3105 Tolman Hall, CCN: 75288

In this seminar, we will read articles from *Current Directions in Psychological Science*, a journal that publishes short review articles (typically 4-5 pages) on various psychology-related topics. These articles are written by experts in a language that is intended to be accessible to non-experts. Each week, students will read one such article and submit a few discussion questions or issues on the article. Classroom time will focus on discussing these questions and issues as a group. Possible topics include loneliness, interracial interactions, status-seeking, gender differences, and self-control.

Professor Serena Chen is an Associate Professor in the Psychology Department. She is a social and personality psychologist who studies the self, identity, and close relationships.

Faculty web site: <http://socrates.berkeley.edu/~serchen1/>

Psychology 24, Section 4
Scientific Creativity and Public Policy: the Manhattan Project (1 unit, P/NP)
Professor Charlan Nemeth
Wednesday 2:00-3:00, 3105 Tolman Hall, CCN: 75291

We will discuss the Manhattan project and the role of scientists, especially those from UC Berkeley, from the perspective of both scientific creativity and public policy.

Charlan Jeanne Nemeth is a professor in the Department of Psychology, University of California, Berkeley. Her background includes a B.A. in Mathematics from Washington University in St. Louis and a PhD in Psychology from Cornell University. Her faculty appointments include the University of Chicago, University of Virginia and University of British Columbia, with visiting appointments in Bristol (England), Paris (France), Trento (Italy) and Mannheim (Germany). Recently, she was the Leverhulme Trust Fellow at Aston Business School in Birmingham, UK. Her specialty is influence processes, creativity and small group decision making and her particular emphasis has been on the role of the “outsider” and of the value of dissenting viewpoints.

Faculty web site: <http://psychology.berkeley.edu/faculty/profiles/cnemeth.html>

Psychology 24, Section 5
Psychology of Cross-cultural Communication (1 unit, P/NP)
Professor Kaiping Peng
Wednesday 1:00-2:00, 3105 Tolman Hall, CCN: 75294

The purpose of this seminar is to help you gain a better appreciation of the importance of cross-cultural communication, and to enhance your ability to deal with and understand how communication processes vary across cultures. In order to achieve these goals, we will review key concepts in cross-cultural communication, discuss some common problems in cross-cultural communication, and learn some strategies and skills that are necessary to deal with it. The goal is to help you to become effective communicators in an increasing globalized world. There is no exam for this course. However, you will be responsible for leading the discussion and writing an essay on the topic for which you are responsible. This essay could be either your summary of the classroom discussion for that week or your own review of the literature on the topic. Please take a look at the approximate schedule and topics to decide which topic you want to lead the discussion and write about. We need to have at least one student volunteer for each week. Grades will be based on the following: good attendance, overall interest and engagement in the class, and the essay.

Professor Kaiping Peng is a tenured faculty member in the Department of Psychology at the University of California, Berkeley. He received his Ph.D. in Social Psychology from the University of Michigan in Ann Arbor in 1997. Before coming to the US in 1989, he was a faculty member in the Psychology Department of the Peking University of China for five years. He has served as the assistant chair of the psychology department of Beijing University, head of the social/personality psychology area in Berkeley, a member of the APA leadership council and the co-president of the Fifth International Congress of Chinese Psychologists Worldwide. He was the founding chair of the Department of Psychology at Tsinghua University. He currently directs the Culture and Cognition Lab and the Berkeley Program of Psychological Studies in China at UC Berkeley. He has published eight books and ninety some articles on cultural and social psychology, as well as methodological issues of psychology. According to a recent study by Nia Phillipas of the University of Kansas, he was the world's most cited social psychologist at the associate professor level up until 2007.

Faculty web site: <http://psychology.berkeley.edu/faculty/profiles/kpeng.html>

Psychology 24, Section 6
Squirrels at Berkeley: A Field Course in Animal Cognition (1 unit, P/NP)
Professor Lucia Jacobs
Wednesday 2:00-3:00 pm, 4131 Tolman Hall, CCN: 75297

The Berkeley campus is home to some of the smartest animals in the world—and not just people! Here you will find not only the famous Raven and Western Scrub Jay but also the Eastern Fox Squirrel. Tree squirrels are really 'mini-primates': they're long-lived (up to 20 years), big-brained animals with interesting and complex lives. The goal of this seminar is to learn about our neighbors, the fox squirrels, how they live and how they think, using classic observational methods and simple experiments that we'll design ourselves. We'll begin by getting to know them— watching individuals who are marked with unique fur dye patterns so we can track individuals and measure dominance hierarchies and competition. We'll then start observing their complex caching decisions - and we'll study ourselves making the same decisions, in the field (Easter Egg hunt, anyone?)! So about half of the classes will be in the field, studying squirrels and the other half in the classroom, watching films and talking about squirrels and our data. Using our campus as our laboratory, you'll learn how to design and conduct your own experiments in animal cognition—and you'll be able to appreciate a new aspect of the Berkeley experience, our amazing squirrels! **Because this is a small class and we'll be working closely together in the field, I need to hear from everyone who is interested to make sure you're a good fit. You'll love this class if you like animals, are interested in squirrels and don't mind getting muddy and rained on occasionally! So send Professor Jacobs an email, with a short paragraph**

about yourself and why you think you'd like this course! The address? squirrel@berkeley.edu, naturally.

Lucia Jacobs started studying tree squirrel cognition as a graduate student—her Ph.D. thesis finally answered the question, do squirrels remember where they bury their nuts? Yes! Professor Jacobs and her students have been studying the campus fox squirrels for over a decade, publishing classic studies on their ability to solve ten-foot-tall vertical mazes (they work for peanuts!), how they shake their head to weigh nuts before deciding whether to cache them and how their strategy of encoding a location in space changes through the year. Professor Jacobs and her students also study spatial orientation in voles, kangaroo rats, mice and humans, and causal reasoning in pet dogs and humans.

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

**Public Policy 24, Section I
Art and Despair (1 unit, LG)
Professor Michael O'Hare
Thursday 3:00-4:00, 105 Goldman School of Public Policy, CCN: 77102**

Artists have engaged with despair in many ways, including but not limited to

- expressing their own personal agony
- voicing the despair of their society
- recording triumphs over despair
- inspiring citizens to keep working in time of despair.

In this seminar we will encounter work along these lines in a variety of media, including live Cal Performances events and visits to the Berkeley Art Museum and the Center for New Music & Audio Technologies, and, where possible, there will be hands-on and not merely passive engagement. **No art experience required; open to students who are curious, like to argue and don't take it personally, and are willing to consider that a life without art may not be worth living. This is a Berkeley Arts Seminar:**

http://www.bampfa.berkeley.edu/bca/prog_bas.html. Admission to the on-campus arts events included in this course will be provided at no cost to students.

Michael O'Hare is an architect and structural engineer by training, with research experience in arts and cultural policy, public management, and environmental policy. Currently he teaches courses in quantitative methods for policy analysis, an introduction to policy analysis, and arts and cultural policy. He has had teaching positions at Harvard and MIT and was an Assistant Secretary in the Executive Office of Environmental Affairs in Massachusetts.

Faculty web site: <http://gspp.berkeley.edu/academics/faculty/ohare.html>

**Rhetoric 24, Section I
Prosecuting Genocide and Crimes Against Humanity in Cambodia (1 unit, LG)
Professor David Cohen
Monday 10:00-12:00, 7415 Dwinelle Hall, CCN: 77866**

This seminar will meet the whole semester but have various weeks off to prepare for assignments.

Our seminar will examine the development of the new war crimes tribunal established by the UN and the Cambodian government to provide justice for victims of the Khmer Rouge Genocide (1975-79). We will examine the genocide itself, the years of negotiation that led to the creation of the court, and the challenges facing this "hybrid" national/international institution. The first trial of the Director of the Tuol

Sleng Interrogation Center will be one of the focal points of the course. We will also read materials about other international tribunals for comparative analysis.

David Cohen is the Director of the War Crimes Studies Center at Berkeley. He is engaged in long term legal and human rights reform in Asia and Africa. He is currently working on international justice projects with the UN-Cambodian Khmer Rouge Tribunal, the Supreme Court of Indonesia, the Human Rights Resource Center for ASEAN, and the UN Special Court for Sierra Leone. He teaches course on human rights, transitional justice, international criminal law, and legal theory.

Faculty web site: http://rhetoric.berkeley.edu/faculty_bios/david_cohen.html

Scandinavian 24, Section 1

Murder on Ice: The Girl with the Dragon Tattoo and Other Scandinavian Mysteries (1 unit, P/NP)

Professor Linda Rugg

Friday 12:00-1:00, 6415 Dwinelle Hall, CCN: 78741

Food for Thought dining arrangements will be discussed in class.

The explosive popularity of the Swedish Millenium Trilogy ("Girl with the Dragon Tattoo," etc.) has sent publishers and bookstores and readers scrambling for the next great murder mystery out of Scandinavia. How is it that a region of Europe renown for peacefulness and prosperity has produced the world's best-selling crime fiction? That's one question we will consider as we read through a selection of crime fiction from the North. And the representation of crime, detection, courtroom processes, and punishment (or "rehabilitation") in any given culture says a great deal about the values of the society portrayed. What is a "criminal" action? How does any given group (family, society, state) deal with crime? What is the proper function of police? Of the courts? Where do perceptions of immorality and crime intersect? Are certain individuals inherently "criminal," or can people be "reformed"? What role does race or ethnicity play in representations of crime? What role is played by politics? Gender? Economy or class? Psychology? In this course we will learn about the Scandinavian culture mirrored in these fictions; we will also learn about various genres within cultural representations of crime, including the detective novel, police procedural, and the thriller. Presence and active participation required for a passing grade. **You may not register for this course if you have taken Scandinavian 120: Murder on Ice during Fall of 2010. This seminar is part of the Food for Thought Seminar Series.**

Linda Haverty Rugg is an Associate Professor in the Scandinavian Department at UC Berkeley and is also affiliated with the Film Department. Her training was in Comparative Literature, so her research combines analysis of literature, films, and other visual media from European and American cultures. She teaches courses on crime fiction, ecology and culture, Whiteness, children in culture, and modern Scandinavian drama and film.

Faculty web site: <http://scandinavian.berkeley.edu/people/rugg.html>

Spanish 24, Section 3

Talking Funny: Language Variation in Spanish and English Literary Texts (1 unit, LG)

Professor Milton Azevedo

Thursday 11:00-12:00, 89 Dwinelle Hall, CCN: 86178

This seminar analyzes language through the literary representation of regional and social varieties of Spanish and English (as in Mark Twain's *Adventures of Huckleberry Finn* or Guillermo Cabrera Infante's *Tres Tristes Tigres*) and discusses social and cultural implications of language variation. It is taught in English with readings in both English and Spanish. Regular class attendance is a strict requirement, and grades will be based on required participation in class discussions and a final oral presentation on an individual project. The reader will be available at the Copy Central on 2560 Bancroft Avenue. **The**

ability to read and understand spoken Spanish is essential to follow this course successfully. PLEASE NOTE: THIS IS NOT A CONVERSATION COURSE. Students interested in taking a course focusing on conversation or otherwise improving their ability to speak Spanish should see the Undergraduate Assistant in the Department of Spanish and Portuguese.

Professor Milton Azevedo specializes in Hispanic Linguistics and his research focuses on applications of linguistics to literature. He has taught Freshman Seminars since spring 1999.

Faculty web site: <http://spanish-portuguese.berkeley.edu/>

Spanish 24, Section 6
Imagining Havana (1 unit, P/NP)
Dr. Teresa Stojkov
Wednesday 4:00-5:00, 220 Stephens Hall, CCN: 86186

"If I get lost, look for me in Cuba." – Federico García Lorca

Throughout the first half of the twentieth century, numerous writers, musicians and artists, from Langston Hughes, García Lorca and George Gershwin to Walker Evans, Graham Greene and Paul Bowles, were fascinated with the cultural milieu of Havana, Cuba. In this seminar we will survey briefly the cultural landscape of pre-revolutionary Havana—between the early 1930s and the late 1950s—and examine its diverse representations in literature and the arts. Of particular interest will be the influence and poetic uses of Afro-Cuban rhythms (son cubano) in key writers and musicians of the era. In addition to Hughes and Lorca, we will read selections from Cuban writers Nicolas Guillen, Alejo Carpentier, Lydia Cabrera and Nancy Morejon.

Teresa Stojkov holds a PhD in Romance Languages and Literature with a specialization in Latin American Literature. She is Associate Director at the Townsend Center for the Humanities at UC Berkeley. Previously she taught at Oberlin College and the University of Chicago.

Faculty web site: <http://spanish-portuguese.berkeley.edu/>

Vision Science 24, Section I
The Human Eye (1 unit, P/NP)
Professor Richard C. Van Sluyters
Friday 2:00-4:00, 394 Minor Hall, CCN: 66403

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 standard clinical instruments to view the exterior and interior of the eye will be demonstrated. Students will then employ these instruments to observe one another's eyes. Digital images of the iris will be captured and provided to each student. Examples of the 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?

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>

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. Most of these courses fulfill Letters and Science breadth requirements; 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.

African American Studies 39G, Section I
Expressive Cultures of the African Diaspora (2 units, LG)
Professor Leigh Raiford
Tuesday 10:00-12:00, 650 Barrows Hall, CCN: 00565

This seminar will meet ten weeks, beginning February 15, 2011 and ending April 26, 2011, plus performance nights to be announced in class.

Tentatively, the seminar would require students to attend Bale Folklorico de Bahia, Marsalis/Blanchard, Alvin Ailey and Afro-Cuban All-Stars, as well as the Black Theater Workshop performance in the Department of Theater, Dance, and Performance Studies, and possibly the African Film Festival at the Pacific Film Archive, accompanied by readings on the concepts of African Diaspora, performance, and cultural politics as well as background information on the origins of the various performers and regions.

This is a Berkeley Arts Seminar:

http://www.bampfa.berkeley.edu/bca/prog_bas.html. Admission to the on-campus arts events included in this course will be provided at no cost to students. This seminar may be used to satisfy the Arts and Literature or Social and Behavioral Sciences breadth requirement in Letters and Science.

Leigh Raiford, Ph.D, is Associate Professor of African American Studies at the University of California, Berkeley. She earned a BA in African American Studies and Women's Studies from Wesleyan University and received her doctorate in African American Studies and American Studies from Yale University in 2003. Before coming to UC Berkeley in 2004, she was the Woodrow Wilson Postdoctoral Fellow at the John Hope Franklin Humanities Institute at Duke University. Her teaching and research interests include race, gender and visual culture with an emphasis on film and photography; race and racial formations of the United States; black feminism; memory studies; and black popular culture. Raiford is co-editor with Renee Romano of *The Civil Rights Movement in American Memory* (University of Georgia Press, 2006). Her work has also appeared in *American Quarterly*; *History and Theory*; *NKA: Journal of Contemporary African Art*; *English Language Notes*; and in the Coco Fusco/Brian Wallis edited collection *Only Skin Deep: Changing Visions of the American Self* (Harry N. Abrams Press, 2003). Raiford's monograph, *Imprisoned in a Luminous Glare: Photography and the African American Freedom Struggle*, is due out from University of North Carolina Press in January 2011.

Faculty web site: <http://africam.berkeley.edu/faculty/raiford.html>

Astronomy 39, Section I
How Much of the Earth's Past Climate Variations Were Due to Astronomical Variations? (1.5 units, P/NP)
Professor Marc Davis
Wednesday 3:30-5:00, 544 Campbell Hall, CCN: 06009

There are remarkable geological records of fluctuations in the Earth's past climate, showing evidence for cold periods, "ice ages," alternating with warm periods for the past 400,000 or more years. The average temperature appears to jump ~10 degrees C. What causes these dramatic changes? We shall explore possible explanations of these events, none of which are wholly convincing. Are the ice ages caused by

astronomical variations? Or is the explanation something based on oscillations of ocean circulation, i.e. the Gulf Stream? The course will explore these ideas by reading research papers to try to understand what it is that has driven the dramatic oscillations in our climate.

Marc Davis has been a faculty member at Cal for the past thirty years and has enjoyed the teaching of these seminars. His research is on cosmology, something obviously unrelated to the seminar. You can find information on his past awards and degrees in his CV, which is available on his faculty web page.

Faculty web site: <http://astro.berkeley.edu/~marc>

Comparative Literature 39H, Section I
Remapping the Carribean (4 units, LG)
Dr. Luis Ramos
TuTh 11:00-12:30, 206 Wheeler Hall, CCN: 17281

In this course we will make use of recent efforts to remap the Caribbean beyond linguistic and insular categories by exploring critical concepts and concerns Hispanic, Anglophone and Francophone authors share in common. Drawing from a wide range of disciplines (literature, history, and anthropology) and genres (fiction, drama and travel writing), we will examine how explorers, writers and scholars have continuously sought to redefine the Caribbean at critical moments in its recorded history. Beginning with the literature of discovery and exploration, we will examine how efforts to represent the region were historically linked to the desire for territorial control and imperial expansion. We will then turn to literary responses to the cultures of violence and subjection that the advent of European colonial rule brought about. Along similar lines, we will consider efforts by both critics and novelists to recover or rethink the histories of anti-slavery resistance in the Caribbean from the Haitian Revolution to the present. Finally, we will read works that seek to re-imagine the region's parameters through their exploration of alternate location-based identities. Among the leading questions of the course: How has the geography of the Caribbean shifted over time? What do these shifts suggest about broader cultural and political transformations in the region? This seminar may be used to satisfy the Arts and Literature breadth requirement in Letters and Science.

Luis Ramos obtained his PhD in the Department of Comparative Literature in August of 2009. His research interests include nineteenth- and twentieth-century Latin American literature; Anglophone, Francophone and Hispanic Caribbean literatures; transnational approaches to American studies; postcolonial studies; and transatlantic political thought. While some associate reading with a vicarious form of travel, Luis finds the opposite to be equally true: It is by traveling in unfamiliar regions of the world that he has by chance discovered some of his favorite works of fiction.

Comparative Literature 41C, Section I
Human Rights and the Novel (4 units, LG)
Mr. Toby Warner
TuTh 9:30-11:00, 20 Wheeler Hall, CCN: 17284

In this class we will consider whether the spread of the novel as a global literary form and of human rights as a political framework might be intertwined. In addition to reading a selection of novels that pertain, in a variety of ways, to the subject of human rights, we will closely study the Declarations of 1789 and 1948. As a class, we will also read essays of critical and political theory that engage with the promises and paradoxes of human rights. Finally, this course will aim to familiarize students with foundational studies of the novel as a genre, in order to develop a vocabulary for discussing and writing about them. We will devote special attention to two sub-genres of the novel, the epistolary novel and the Bildungsroman, which recent scholarly works have attempted to link to the rise and spread of human rights. In the course of our readings, we will explore such questions as these: Do novels teach their readers to recognize themselves and others as human? If so, what are the possibilities and limitations of this type of recognition? How do literary models of representation inform legal ones, and vice versa? How have

particular novels negotiated the difference between the human, the citizen and other figures? How might certain narrative conventions drawn from novels contribute to the legibility of agency, pain and dignity? What are the stakes of witnessing and what are the limits of empathy? How have works from different moments in time and space laid claim to (and contested) human rights? This seminar may be used to satisfy the Arts and Literature breadth requirement in Letters and Science.

Toby Warner is a graduate student in his 5th year in the Department of Comparative Literature. His work focuses on Senegalese literature and film from the 19th and 20th centuries. He is writing his dissertation on the terms of legibility and universality for authors working in French and Wolof.

Computer Science 39K, Section I
Information Technology Goes to War! (2 units, P/NP)
Professor Randy H. Katz
Wednesday 4:00-6:00, 310 Soda Hall, CCN: 26260

Necessity drives invention. In this seminar, we will examine the intertwined historical development of information technology, broadly defined as computing, communications, and signal processing, in the twentieth century within the context of modern warfare and national defense. Topics include cryptography/cryptanalysis and the development of the computer; command and control systems and the development of the Internet; the war of attrition and the development of the mathematics of operations research; military communications and the development of the cellular telephone system; precision munitions and the development of the Global Positioning System. While we will endeavor to explain these developments in technical terms at a tutorial level, our main focus is to engage the students in the historical sweep of technical development and innovation as driven by national needs, and discuss whether this represents a continuing framework for the twenty-first century. **This course requires NO background in information technology or computer science—ANY freshman or sophomore student at Berkeley has the necessary technical background. An interest in military affairs, economics, politics, history, and/or technology is essential. This is not a lecture class—class meetings are organized around live play where students form teams and interact with each other to illustrate the concepts to be discussed. A desire to participate and "play along" is important—no "wall flowers" please!** This seminar may be used to satisfy the Historical Studies breadth requirement in Letters and Science.

Randy Howard Katz received his undergraduate degree from Cornell University, and his M.S. and Ph.D. degrees from the University of California, Berkeley. He joined the Berkeley faculty in 1983, where since 1996 he has been the United Microelectronics Corporation Distinguished Professor in Electrical Engineering and Computer Science. He is a Fellow of the ACM and the IEEE, and a member of the National Academy of Engineering and the American Academy of Arts and Sciences. In 2007, he received an honorary doctorate from the University of Helsinki. He has published over 250 refereed technical papers, book chapters, and books. His textbook, *Contemporary Logic Design*, has sold over 100,000 copies in two editions, and has been used at over 200 colleges and universities. He has supervised 45 M.S. theses and 39 Ph.D. dissertations (including one ACM Dissertation Award winner and ten women). His recognitions include thirteen best paper awards (including one "test of time" paper award and one selected for a 50 year retrospective on IEEE Communications publications), three best presentation awards, the Outstanding Alumni Award of the Computer Science Division, the CRA Outstanding Service Award, the Berkeley Distinguished Teaching Award, the CS Division's Diane S. McEntyre Award for Excellence in Teaching, the Air Force Exceptional Civilian Service Decoration, the IEEE Reynolds Johnson Information Storage Award, the ASEE Frederic E. Terman Award, the ACM Karl V. Karlstrom Outstanding Educator Award, and the ACM Sigmobility Outstanding Contributor Award. In the late 1980s, with colleagues at Berkeley, he developed Redundant Arrays of Inexpensive Disks (RAID), a \$15 billion per year industry sector. While on leave for government service in 1993-1994, he established whitehouse.gov and connected the White House to the Internet. His BARWAN Project of the mid-1990s introduced vertical handoffs and efficient transport protocols for mobile wireless networks. His current research interest is the architecture of Internet Datacenters, particularly frameworks for datacenter-scale instrumentation and resource management. Prior research interests have included: database management,

VLSI CAD, high performance multiprocessor (Snoop cache coherency protocols) and storage (RAID) architectures, transport (Snoop TCP) and mobility protocols spanning heterogeneous wireless networks, and converged data and telephony network and service architectures.

Faculty web site: <http://www.cs.Berkeley.edu/~randy>

Computer Science 39P, Section I
Photographing History in the Making (2 units, P/NP)
Professor Brian Barsky
Tuesday 12:00-2:00, 380 Soda Hall, CCN: 26262

On the first day of instruction, please go to 380 Soda Hall at 12:10 p.m. Additional Food for Thought dining arrangements will be discussed in class.

Responding to this transformational period in the history of the university, this experimental seminar will explore photographic technique and be conducted in the context of the current climate of change and conflict sweeping the university. The seminar aims to hone photographic skills for both film and digital photography. Special emphasis is on the roles of documentary photography, photojournalism, and activist photography as both documenters of and vehicles for change. This seminar is intended for students who are experienced in photography. To complete the course assignments, students must have a camera that has manual control of exposure and focus and either interchangeable lenses of different focal lengths or a zoom lens. Although access to both a film camera and a digital camera is preferred, this is by no means necessary. We will discuss aesthetic, semantic, and technical aspects of photography. Sample topics include quality of light, exposure control, depth of field, composition and patterns, perspective, color science, the human visual system, spatial and color perception, and digital versus chemical processing. This seminar is not about the subject of computer science even though it is offered through the Computer Science Division. Print film assignments are encouraged, but not required; however, darkroom facilities are outside the control of the class. Students are expected to take photographs on a weekly basis. Student photographs will be critiqued in class. Students should be interested in learning about changes that are occurring at the university and in discussing these topics (for example, fiscal issues, priorities, privatization, students rights), as well about how documentary photographs convey and affect political change. Political discussion will be an integral part of the seminar. **The seminar is open to freshmen only. Class participation is essential. 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 part of the Food for Thought Seminar Series.**

A relevant photograph by Professor Barsky can be viewed at the link below:

Brian Barsky received his Ph.D. from the University of Utah in Computer Science and joined the UC Berkeley faculty in 1981. 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, and virtual environments for surgical simulation.

Faculty web site: <http://www.eecs.berkeley.edu/Faculty/Hompages/barsky.html>

Earth and Planetary Science 39A, Section I

Geological Influences in California Society Today (2 units, LG)
Professor Hans-Rudolf Wenk
Wednesday 4:00-5:00, 325 McCone Hall, CCN: 19036

Students must attend the first class where field trip dates and arrangements will be discussed and the additional meeting dates will be announced. The first class will be on January 19, 2011.

The focus of this course is a four-day field trip to explore California. As a freshman seminar, the class involves close personal interaction between students and faculty. For the interaction to work, it is essential that all enrolled students be prepared for the learning experience and to become engaged as active participants. Toward this end, the field trip is preceded by two or three one-hour lectures and video presentations. Students are expected to attend one logistical meeting prior to the trip. The continuous four-day trip will visit geological and historical localities in various parts of California. Topics emphasized on the trips vary: societal impacts of dams, the Gold Rush, resource conservation, the geology of Yosemite as a national park, water resource issues, volcanic and seismic hazards, and glacial geology. Three nights will be spent camping out. Accordingly, each student will need to bring appropriate gear including a sleeping bag and a tent or make arrangements to share space in a tent. More details on equipment to bring and preparations to make will be supplied at the logistical meetings. Be prepared for some strenuous hiking. Attendance at initial six class meetings (two organizational, two lectures and two video sessions) and 4-day field trip is mandatory. **Enrollment is limited to ~30 freshmen. This course is restricted to freshmen only unless the instructor's consent is obtained. If you have any questions regarding this seminar, please contact Catherine Pauling at 642-4068 or cpauling@berkeley.edu or contact the instructor: wenk@berkeley.edu.**

Hans-Rudolf Wenk is a Professor of Geology. He joined the Department of Earth and Planetary Science in 1967. His research is in crystallography, mineralogy, structural geology and rock deformation. For more information regarding Professor Wenk, please visit his faculty web page at http://eps.berkeley.edu/people/faculty_page.php?name=wenk.

History 39K, Section I
European Witchcraft in Historical Perspective (4 units, LG)
Dr. Tyler Lange
Monday 2:00-4:00, 108 Wheeler Hall, CCN: 3923 I

Why did the most intense prosecutions of witches in Europe occur on the cusp of the modern era? Was Europe really full of pagan peasants? These questions and others will be addressed in this introduction to historical thinking. The course will introduce sources for the study of witchcraft and historians' discussion of those sources. As you read about and discuss sacramentals, magic, torture, inquisitorial procedure, and the wretched lives of European peasants, you will learn some great and terrible stories at the same time as you acquire the tools for thinking critically about the past (and, one hopes, the present) in a structured manner. **Enrollment is limited to fifteen students.** This seminar may be used to satisfy the Historical Studies or Social and Behavioral Sciences breadth requirement in Letters and Science.

Tyler Lange is a Visiting Lecturer in the Department of History. For information regarding Dr. Lange, visit his departmental faculty web page.

Faculty web site: <http://history.berkeley.edu/faculty/Lange/>

History 39L, Section I
Gender and Korean History (4 units, LG)
Professor Kenneth Wells

Wednesday 12:00-2:00, 205 Wheeler Hall, CCN: 39234

This course is a cultural history course in which the organization and activities of the people on the Korean peninsula are approached from the point of view of various beliefs and practices concerning gender. The Korean experience is ideal for a study of this kind, since from traditional times its society had been organized according to a cosmic, explicit doctrine of gender. Following some consideration of the chief issues that have been raised in writings on gender history, the course examines the patterns of traditional gender relations in Korea, with particular focus on the alleged transformation of gender relations between the Koryŏ and Chosŏn dynasties. The main focus of the course, however, will be placed on the twentieth century, where we will deal specifically with the question of gender in relation to colonial rule, nationalist and socialist movements, social change, class and occupation, sexuality, and "modernization." Materials for consideration of these issues throughout the course will include a number of interesting works of literature. **Enrollment is limited to fifteen students.** This seminar may be used to satisfy the Historical Studies or Social and Behavioral Sciences breadth requirement in Letters and Science.

Kenneth Maurice Wells, the Il Han New Visiting Professor of Korean in the Department of History, comes to Berkeley from the Australian National University where he held the Korea Foundation Professorial Chair in History. His research interests include the relationship between religion, nationalism, social change and gender movements in modern Korea in an age of imperialism, on which he has written extensively.

Faculty web site: <http://history.berkeley.edu/faculty/Wells/>

History 39M, Section I

Modern Diasporas: Transnational Identity and Politics (4 units, LG)

Professor Stephan Austourian

Wednesday 12:00-2:00, 2519 Tolman Hall, CCN: 39237

Although this seminar will touch upon the historical background of some of the oldest diasporas, it will focus mainly on diasporas in the modern era, with a particular emphasis on the second half of the twentieth century. The readings will deal with the chosen theme, "transnational identity and politics," but they will also provide a broad historical perspective on the role of diasporas in such matters as cross-cultural trade or entrepreneurship, for instance. The first part of the seminar will dwell on the concepts of "diaspora" and "identity," often used loosely in the current literature. These readings will be followed by historical surveys of "typical" diasporas: the classic model of the Jewish diaspore, victim diasporas (African and Armenian), labor and imperial diasporas (Indian and British), and trade diasporas (Chinese and Lebanese). The second part of this seminar will focus on the interactions between diasporas and politics. The readings will touch upon topics such as the impact of homelands upon diasporas, the political analysis of the Jewish people as the classic diaspora, the Palestinians in the diaspora, political exiles and diasporas, and the Chinese diaspora in southeast Asia. The third part of this course will deal with case studies of specific contemporary diasporan communities: the Armenians in Australia and Iran, and the Russians in various areas of the former Soviet Union. The fourth part of this seminar will touch upon contemporary migration crises resulting from mass exodus and their connections with the making and unmaking of transnational communities. The fifth part will then focus on the economic aspects of diasporas, in particular on international labor migration as one of the origins of incipient diasporas. The readings will deal with the Turkish diaspora in Germany, the political fallout of international labor migration, and the role of overseas Chinese in China's economic development. The sixth part of the seminar will treat the impact of transnational migration upon the Western European and American conceptions of citizenship and state. We will conclude this course with a reflection on transnationalism, globalization, postmodernism, and the typology and future of diasporas. **Enrollment is limited to fifteen students.** This seminar may be used to satisfy the Historical Studies or Social and Behavioral Sciences breadth requirement in Letters and Science.

Stephan Astourian is an Assistant Adjunct Professor in the Department of History. His area of interest is Armenian and Caucasian Studies.

Faculty web site: <http://history.berkeley.edu/faculty/facultyhours.html>

Legal Studies 39D, Section I

Current Political and Moral Conflicts and the U.S. Constitution (2 units, LG)

Mr. Alan Pomerantz

Monday 10:00-12:00, 80 Barrows Hall, CCN: 51503

The debate about morals has moved steadily into the realm of the Supreme Court, but people differ on what exactly the role of the Court should be. Some have strongly argued that the Court's interpretation and application of the Constitution have adversely affected our fundamental rights and usurped powers from other branches of government. This position claims the Court has created an "Imperial Judiciary." Others argue as strongly that the Court has acted properly to protect fundamental freedoms and individual rights in the face of unprecedented political and governmental efforts to limit them. This position claims the Court has, in fact, fulfilled the role envisioned for the Court by the Constitution. This seminar will follow the Socratic method in examining moral and political issues that have a constitutional basis and the Court's participation in the debate on topics such as gay rights (including gay marriage), abortion, privacy, capital punishment, college speech codes, "hate" speech, and racial and ethnic profiling. We will read Supreme Court cases, as well as political and legal commentary from across the political spectrum, and consider not only the opinions of the Justices, but also why they hold those opinions. Students will be asked to develop and apply critical thinking skills and are expected to develop and support their own views and opinions regarding the relevant topics. This seminar may be used to satisfy the Philosophy and Values or Social and Behavioral Sciences breadth requirement in Letters and Science.

Alan J. Pomerantz, Esq., is a practicing lawyer and Senior Counsel of Orrick, Herrington & Sutcliffe, a major international law firm. A graduate of the NYU School of Law, he also studied in Chile and received an advanced legal degree from the University of Amsterdam (Netherlands). He has lectured and taught widely, including at the NYU School of Law, NYU College of Arts and Science, the University of Amsterdam, Columbia Graduate School, and the University of Concepcion (Chile). He has published numerous articles and contributed to several treatises on legal topics. Mr. Pomerantz is recognized by several peer publications as one of the world's leading lawyers. Mr. Pomerantz has participated in important and controversial matters affecting individual rights, including death penalty appeals, right of public artistic expression, right of privacy for acts of consenting adults, and numerous free speech cases.

Letters and Science 39A, Section I

Photography as a Fine Art: History and Practice (with Darkroom Work) (4 units, LG)

Professor David H. Wright

Friday 1:30-4:30, 308B Doe Library, CCN: 51850

This seminar combines studying the work of Old Master photographers with assignments to make photographs on film and print them in the darkroom. It is based on a critical analysis and discussion of the work of selected photographers from about 1860 to 1940, from Carleton Watkins to Walker Evans, with nine assignments to try making photographs in their styles, to improve your understanding of different styles of photography. After these assignments there will be an oral report and term paper on a topic developed by each student individually, with the instructor's help. No examination. **Enrollment is limited to eight students; Freshmen have priority, other applicants considered carefully. Interview required: further information and signup sheet will be posted by the instructor's office, 432 Doe Library, for interviews early in November and January 18-19. Please bring to the interview samples of black-and-white prints you made in the darkroom.** This seminar may be used to satisfy the Arts and Literature breadth requirement in Letters and Science.

Professor David H. Wright invented this course some twenty-five years ago when he realized what he should have taken when he was a freshman just after the war; he continues to delight in offering it. Although he completed the requirements in Physics before switching to History of Art, he feels his real college education came as a photographer for the Harvard Crimson.

Music 39N, Section I

Music for the Shadows: Noir Film Scores (3 units, LG)

Dr. Holley Replogle

Tuesday and Thursday 2:00-3:30, 124 Morrison Hall, CCN: 6045 I

Film noir is a complex and difficult-to-define genre of Hollywood melodrama that expresses some of the darker undercurrents of human experience—alienation, despair, disillusionment, guilt, paranoia, desperation, and melancholia. These films resonate with contemporary cultural and political tensions stirred up by wartime anxieties and rapidly changing modern life. This course is an introduction to film music through the noir tradition, with an emphasis on understanding the ways that music is used to create meaning. We will address ways to analyze and interpret use of music in film and deal with a range of issues—political, moral, cultural, historical, aesthetic—that are relevant to our study. We will focus our study on classical Hollywood scoring practices, but extend our view to encompass silent film, post-classical, pop-compilation, and modern soundtracks. Students will gain critical and analytical tools for studying music and sound in film, become familiar with the noir genre and style, study selected directors and composers and aspects of film history. By the end of the course, students should be able to address formal aspects of film music itself, as well as its role in the overall meaning of particular films. **This course is open to Freshmen and Sophomores who are willing to engage with the ways in which music enriches and enhances visual media. Prior experience in music or media is not required; relevant terminology and skills will be introduced in class.** This seminar may be used to satisfy the Arts and Literature breadth requirement in Letters and Science.

Holley Replogle is a teacher, scholar, and performer. She earned her PhD in musicology at University of California, Los Angeles in 2009. Her dissertation deals with American cultural hierarchies in operetta and the megamusical. Holley is very passionate about teaching, and in 2007, she was awarded the UCLA Distinguished Teaching Assistant Award, which came with a UCLA Dissertation Year Fellowship. In 2009-2010, Holley was a lecturer in the Department of Musicology at UCLA, where she taught courses on film music, the American musical, music and gender, and Mozart. Her publications include "Coming of Age in Wartime: American Propaganda and Patriotic Nationalism in Yankee Doodle Dandy," published in *Echo: A Music Centered Journal*, and an article on musical theater stars and fans for the forthcoming book *Keywords for the American Musical on Stage and Screen* from Oxford University Press. She is a recipient of the UCLA Research Mentorship Fellowship and the Phi Beta Kappa Pauline Venable Turrill Award. Holley's research interests include topics in musical theater, nineteenth- and twentieth-century American cultural hierarchies, spectacle, voice, classical crossover, and film and video game music. She is also an avid performer; she has acted as music director and accompanist for several youth theater productions, sung in various ensembles and for the occasional film soundtrack, and has recently appeared in a number of community musical theater productions in Los Angeles.

Faculty web site: <http://music.berkeley.edu/people/profile.php?person=290>

Natural Resources 39E, Section I

Biology's Ideologies (2 units, P/NP)

Professor Ignacio Chapela

Wednesday 4:00-6:00, 2305 Tolman Hall, CCN: 61355

Human understanding of living things has changed dramatically over the centuries, and certainly over the course of the last century. Simultaneously, resilient ideas about what and who we are, and about how we

fit in the larger tableau of life run deeply in the way we view, study, utilize and intervene in the world. Launching from Lewontin's invitation to view Biology as ideology, in this seminar we will explore the many and diverse ideologies that have populated the discipline and practice of this field over the years. From the long pre-agricultural history of humanity, through the origins of agriculture and forth into the years of the Bio-Economy, we will look for traces of ourselves—our ideologies—in the way we relate to non-human living others. This seminar, as an intellectual trip, promises many surprises involving views on religion, politics, and economics as well as foundational concepts of biology. We will read, watch movies and walk in the richly biological—and richly ideological—Berkeley campus. **This seminar will require critical capacity and fearless commitment to intellectual inquiry. The intention is to provide a space for cross-pollination of ideas from the humanities, the social sciences and the natural sciences: students from all fields will be welcome.**

Professor Chapela self-describes as a Biologist in the making, since he believes that understanding living things is itself an evolving project. He has formal training in microbial ecology (the world and interactions of the living invisible), and has practiced his craft in various contexts over the years: in industry, in governmental, non-governmental and multilateral organizations, working for indigenous communities and in various appointments as an academic researcher. His current lab and field work is on the geographical visualization and mapping of microscopic, airborne biological materials.

Faculty web site: <http://www.cnr.berkeley.edu/chapelalab/>

Psychology 39M, Section I
The Psychology of Movies: Seeing, Knowing, and Feeling (2 units, P/NP)
Professor Art Shimamura
Thursday 2:00-4:00, 3105 Tolman Hall, CCN: 73883

Movies offer a unique yet accessible way to understand human psychology. We often envelope ourselves within a movie, generating the same sensations, thoughts, and feelings as characters in a movie. Filmmakers have developed techniques that play on our perceptions, imagination, and emotions, and this course will discuss ways in which psychological science can help us understand how these techniques work. In particular, we will consider editing styles, storytelling, cross-cultural factors, suspense, and empathy with respect to how the mind (and brain) interprets these influences. We will also consider how movie genres, such as road movies, melodramas, Westerns, and horror movies, focus on certain aspects of human psychology. Of course, we will also watch movies and clips as discussion points and as a way to exemplify principles concerning the psychology of movies. This seminar may be used to satisfy the Social and Behavioral Sciences breadth requirement in Letters and Science.

Arthur P. Shimamura is Professor of Psychology and faculty member of the Helen Wills Neuroscience Institute. He uses brain imaging techniques and analyses of brain-injured patients to explore the biological underpinnings of human memory and cognition. He is also interested in explorations of how we experience art. He is recipient of the Distinguished Teaching Award from the UC Berkeley Division of Social Sciences, has been Scientific Advisor for the San Francisco Exploratorium Science Museum, and was awarded a Guggenheim fellowship to examine art, mind, and brain.

Public Health 39I, Section I
Health, Fitness, Stress and YOU (2 units, P/NP)
Professor Darlene Francis and Ms. Wlni Linguvic
Thursday 12:00-2:00, 2505 Tolman Hall, CCN: 75502

The health and fitness industry is a multibillion dollar industry with contradictory and confusing messages. The weight loss industry alone is a 58 billion dollar market. How does one discriminate between valuable information and gimmicks? Can we apply critical thinking skills? In this seminar students will navigate through these messages. After we define stress and the toll it can take on health we will explore, through readings and discussion, how critical thinking can inform our health and fitness choices. Students will

sharpen their research skills as they compare the claims and the facts, the exaggerations and the pearls of truths, and carve out a personal understanding of health, stress and fitness. Our goal is to encourage critical thinking in the realm of personal health for the young adult. **Intended Audience: The audience is the college freshman and sophomore who is dealing with the stress of university life while trying to sort out the overload of confusing and contradictory health and fitness messages.**

Professor Darlene Francis is trained as a stress neurobiologist. Her research interests focus on exploring how life, living and circumstance influence health & well-being via the stress axis.

Faculty web site: <http://psychology.berkeley.edu/faculty/profiles/dfrancis.html>

Wini Linguvic is completing her MPH degree with a concentration in Public Health Nutrition. She is a personal trainer and best-selling author. Her interest in health and nutrition focuses on the interactions between biology and behavior.

South and Southeast Asian Studies 39G, Section I
“Think Gender” in Indian Short Stories (2 units, LG)
Lecturer Kausalya Hart
Friday 8:00-10:00, Unit 3 - 2400 Durant Avenue - Room L45, CCN: 83212

In this seminar, students will read approximately twenty-five short stories from various languages of India translated into English. The stories will describe the relationships between men and women and how the society looks at the roles of men and women in Indian culture. The students will be expected to read the stories and to discuss and critique them in class. They will also be expected to write a three-page criticism of the stories assigned for each class. **Enrollment is limited to fifteen students.** This seminar may be used to satisfy the Arts and Literature or Social and Behavioral Sciences breadth requirement in Letters and Science.

Kausalya Hart (M.A., Annamalai University, 1962) is the author of Tamil for Beginners, Tamil Madu, and Tamil Tiraippadam (advanced Tamil textbooks). She has prepared numerous Tamil language teaching aids (including a collection of Tamil movie videos), and a dictionary for modern Tamil. Her current research involves the preparation of a dictionary of Tamil inscriptions. Her interests include Tamil literature, grammar, and inscriptions.

Faculty web site: <http://sseas.berkeley.edu/people/faculty.html>

South and Southeast Asian Studies 39H, Section I
Southeast Asian Literature and Performing Arts (2 units, LG)
Dr. Maria Josephine Barrios-Leblanc, Ms. Ninik Lunde and Mr. Bac Tran
Tuesday 9:00-11:00, Room L15B in Unit 3 Residence Hall on Durant Avenue, CCN: 83214

The course focuses on Southeast Asian narratives—the short stories of Vietnam, Indonesian narrative dances, and Philippine epics as performed/re-envisioned in contemporary times. Discussions shall be guided by the following questions: What are the sources and influences of these Southeast Asian narratives? How have experiences of colonialism and social movements contributed to the works of writers and artists? How can we read/view these works today? This seminar may be used to satisfy the Arts and Literature breadth requirement in Letters and Science.

Joi Barrios has a Ph.D. in Filipino and Philippine Literature. She is the author of five books, among them the poetry collection *To Be a Woman is to Live at a Time of War* and her research, *From the Theater Wings: Grounding and Flight of Filipino Women Playwrights*.

Ninik Lunde has a Master's degree in Linguistics from the University of Wisconsin. She taught Indonesian language at UW Madison for five years and has been teaching beginning and intermediate Indonesian since 1993 at UC Berkeley. She has created audio-visual materials for her classes. Her academic interests include linguistics and comparative literature. In addition to language teaching, she also has been performing Javanese, Balinese and Sumatranese dances on campus, in the Bay Area and at dance festivals.

Bac Hoai Tran has a Master's degree in English with a concentration in Linguistics from San Francisco State University. He is the author of the textbook *Conversational Vietnamese* (2008), and is a coauthor of the *Vietnamese Practical Dictionary* (2010) and *Living with English* (2001). He is a co-translator of the collection of short stories titled *The Stars, The Earth, The River* (1997), as well as several other short stories in the anthologies *The Other Side of Heaven* (1995), *Vietnam: A Traveler's Literary Companion* (1996), *Night, Again* (1996), *Virtual Lotus: Modern Fiction of Southeast Asia* (2002), and *Crossing the River* (2003).

Faculty web site: <http://ls.berkeley.edu/dept/sseas/people/faculty.html>

Theater, Dance, and Performance Studies 39B, Section I
The Best New Books You've Never Read: Masterpieces of Global Contemporary Literature (2 units, LG)
Professor Abigail De Kosnik
Wednesday 10:00-11:00, BCNM Commons - 340 Moffitt Library, CCN: 88336

Field trip arrangements to art exhibits, performances or artist talks that have themes in common with seminar readings will be discussed in class.

Sure, Shakespeare and Tolstoy and Austen are all fantastic, and you came to college to read the "classics," but what great literary works have been published in the last five years? In this seminar, we will read short(-ish) recent texts of fiction, non-fiction, and poetry from authors around the world. All of the books chosen are works of magnificent art and towering genius (in the instructor's opinion). Find out where literature is going! Know what constitutes the cutting edge of the creative writing scene! When anyone asks you "What are you reading these days?" you will astound and impress them with your knowledge of little-known, but brilliant, contemporary writers. Our reading list will likely include *The Sacred Book of the Werewolf* by Victor Pelevin (Russian), *The Coming Insurrection* by the Invisible Committee (French), *The Literary Conference* by César Aira (Argentinian), *Transcript* by Heimrad Bäcker (Austrian), and *Methland* by Nick Reding (American). We will also attend live author readings and other arts events on campus. **This is a Berkeley Arts Seminar:**
http://www.bampfa.berkeley.edu/bca/prog_bas.html. Admission to the on-campus arts events included in this course will be provided at no cost to students. This seminar may be used to satisfy the Arts and Literature breadth requirement in Letters and Science.

Abigail De Kosnik is an Assistant Professor in the Berkeley Center for New Media (BCNM) and the Department of Theater, Dance & Performance. She teaches the History and Theory of New Media graduate seminar every year, as well as undergraduate courses in Sound Design & Media Theater, Performance & Technology, Performance & Television, and Asian/American Performance Across Media.

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

Theater, Dance, and Performance Studies 39C, Section I
Underworlds: Interwar Images of Organized Crime in American and European Theatre and Cinema (2 units, P/NP)
Professor Mel Gordon
Tuesday 2:00-4:00, 224 Wheeler Hall, CCN: 88342

Much of what American and European audiences understood about each other's cultures in the 1920s and 1930s was through a mutual and sustained interest in criminality and gangland activities. Popular entertainment, during the Prohibition and Depression eras, featured lawlessness and organized violence among the urbanized underclasses as a mirror-like reflection of the social and political struggle in their respective nations. This course will analyze the performed presentations of outlaw behavior during the interwar period and how they portrayed unique national aspirations and communal identities. It will focus on crime dramas that played out in the immigrant communities of New York, Chicago, Berlin, Paris, and London. Topics will include underworld codes of honor, the role of the New Woman, legalized injustice, assimilation and success, and the proper ethics of Capitalist competition. Students will be graded on attendance, classroom participation, and one paper. This seminar may be used to satisfy the Arts and Literature breadth requirement in Letters and Science.

Mel Gordon is Professor of Theater in the TDPS Department and author of fourteen books on Acting, Theatre History, and Popular Culture.

**Undergraduate and Interdisciplinary Studies 39B, Section I
Archival Research: Working with Primary Sources in the Humanities, Sciences, and
Engineering (1.5 units, LG)**

Professor James Casey, Mr. David Farrell and Mr. Peter Hanff

Friday 1:30-3:00, Stone Room - 373 Bancroft Library, CCN: 89003

This seminar offers undergraduates from any major the opportunity to perform original research using primary sources from the archives of the Bancroft Library, or from other specialized libraries at the University or in the San Francisco Bay Area. Students will have direct access to the unique collections of original manuscripts, papers, early printed editions, maps, photographs, paintings, and other items in the Berkeley archives. These cover literary, historical, philosophical, social, cultural, scientific, engineering, and artistic areas, spanning many centuries and different cultures. Bancroft has an especially rich collection of primary sources on California during the nineteenth and twentieth centuries (e.g., manuscripts, drawings, and paintings from the Gold Rush era; reports, engineering drawings, and photographs for the Golden Gate and Bay Bridge projects; an extensive archive on the poetry and fiction of the Beat Generation; and the papers of the Sierra Club and the Free Speech Movement). After some introductory sessions on the use of primary documents and artifacts in research, we will explore the Bancroft archives in areas of interest to the group. By mid-semester, students will begin working individually or in pairs on a topic of their own choosing, but based on archival materials. Creativity and ingenuity in research are encouraged and everyone is expected to participate vigorously in the discussions. Library specialists will provide technical assistance. A presentation and research report will be due at the end of the semester. **In the past, we have found that the seminar works best when our students come from diverse cultural and academic backgrounds and are eager to engage in academic dialogue. We are particularly interested in attracting students from the sciences and engineering in addition to the humanities and arts, so that problems can be discussed from different angles, and interdisciplinary collaborations can take place. Enrollment is limited to fifteen students and attendance is mandatory.**

James Casey is a Professor in the Mechanical Engineering and Bioengineering Departments. He works on theoretical mechanics, but also has an interest in the history of the mathematical sciences. He is a passionate proponent of discourse that crisscrosses disciplinary boundaries.

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

David Farrell is both Curator of the History of Science and Technology Program at Bancroft and University Archivist.

Faculty web site: <http://sunsite.berkeley.edu/~ucalhist/about/bios.html>

Peter Hanff, Deputy Director of the Bancroft Library, has an intimate knowledge of the archives at Bancroft and other Bay Area libraries, and a great commitment to the value of primary sources in undergraduate education.

Faculty web site: <http://blogs.berkeley.edu/author/phanff/>

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 I
High Culture, Low Culture (2 units, P/NP)
Professor Julia Bader
Thursday 2:00-5:00, 300 Wheeler Hall, CCN: 28118

We will examine the films and writings of Woody Allen in terms of themes, narration, comic and visual inventiveness and ideology. The course will also include a consideration of cultural contexts and events at Cal Performances and the Pacific Film Archive. The required book is Woody Allen's *The Insanity Defense: The Complete Prose*. This seminar may be used to satisfy the Arts and Literature breadth requirement in Letters and Science.

Professor Julia Bader teaches 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/contact/person_detail.php?person=11

Integrative Biology 84, Section I
Elements of Mammalian Societies (1 unit, P/NP)
Professor Eileen Lacey
Monday 3:00-5:00, 5053 Valley Life Sciences Building, CCN: 43020

This seminar will meet for seven weeks, beginning January 24, 2011 and ending March 14, 2011. It will not meet on February 21st, which is a holiday.

What do meerkats, killer whales, and humans have in common? Among other things, all are mammals and all live in complex societies, members of which are capable of extreme cooperation as well as violent conflict. The goal of this seminar is to introduce students to the fundamental building blocks of mammalian societies—namely kin structure, breeding structure, and the dynamic interaction between cooperation and conflict among group members. To achieve this objective, we will review the social structures of a variety of mammal species; over the course of the semester, our comparative survey of these species will reveal how the basic elements of social structure listed above contribute to the complex patterns of behavior observed among mammals. By the end of the semester, participants will have acquired (1) a detailed familiarity with the societies of thirteen prominent mammal species and (2) a thorough understanding of the basic principles thought to determine mammalian social structure. The seminar will enable students to critically evaluate social structure in non-mammalian species and will prepare them to enroll in upper-division courses in animal behavior, psychology, and anthropology.

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.

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

Landscape Architecture 84, Section I

The River in Film (2 units, P/NP)

Professor G. Mathias Kondolf

Tuesday 3:30-5:00 and 7:00-10:00, 220 Stephens Hall - Geballe Room in the Townsend Center, CCN: 48502

The format of this seminar includes lecture, film viewing, and seminar discussion. Because of the time required to screen films, the course meets for a longer time period than most sophomore seminars, but only ten Tuesdays during the term. The seminar will begin on January 18, 2011. The remaining nine Tuesday meeting dates will be announced in class. The lecture and discussion will be in the afternoon from 3:30- 5:00 p.m. The film viewing will be in the evening from 7:00 - 10:00 p.m.; the ending time will vary based on film length. There may also be additional screenings at the Pacific Film Archive.

Rivers have always appealed to artists, inspired by the river's form, movement, and intimate relation with human settlement. The river was a frequent subject of the landscape painters touring the American hinterland of the nineteenth century, whose art served as precursor to the art of film. With the emergence of film in the early twentieth century, filmmakers were quick to capture the river in its beauty and scale, as a scenic backdrop but often with additional symbolic importance. This class will explore the great symbolic value of rivers by viewing classic (and not-so-classic) films dealing with rivers, floods, and dams. Themes and topics involving rivers range from its transformative and cleansing properties, to possible roles as timekeeper, lifegiver, indicator of the authentic and "natural," to the spiritual, or its important role in often defying (or conforming to?) modernity. Course requirements are viewing films, reading, participating in discussion, and a short (two-page) research paper requiring use of the PFA library. **Sophomores enrolled in the class are admitted free to the required PFA screenings.**

Dr. G. Mathias (Matt) Kondolf is Professor of Environmental Planning at UC Berkeley and a fluvial geomorphologist specializing in environmental river management and restoration of rivers and streams. He was a principal investigator in a recent national-level study of river restoration, a member of the Environmental Advisory Board to the Chief of the US Army Corps of Engineers, and a member of the National Research Council Committee on Hydrology, Ecology, and Fishes of the Klamath River Basin. Dr. Kondolf was an author of the CALFED Ecosystem Restoration Program Strategic Plan. He developed the restoration flow regime adopted in the 2006 settlement to restore salmon in the San Joaquin River below Friant Dam.

Faculty web site: <http://landscape.ced.berkeley.edu/~kondolf/>

Natural Resources 84, Section I

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

Professors Matthew Potts and Peter Berck

Thursday 5:00-6:00, 4301 Foothill 4 - Classroom A, CCN: 61356

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.

Matthew D. Potts is an Assistant Professor of Forest Ecosystem Management in the Department of Environmental Science, Policy and Management. He has an interdisciplinary background with training in mathematics, ecology and economics with a BS from the University of Michigan and a PhD from Harvard University. In addition, he has extensive international experience conducting field research in tropical forest throughout the world. His varied research interests include spatial aspects of resource management and epidemiology as well as how human actions, values, and ethics affect biodiversity conservation.

Faculty web site: <http://http://nature.berkeley.edu/pottslab/>

Peter Berck is a Professor of Agricultural and Resource Economics and Policy. He was an undergraduate at Cal, received a Ph.D. in Economics from MIT in 1976, and has been teaching at Cal ever since. His research has been on the economics of forestry, fisheries and water, on food security in developing nations, and on the costs of environmental regulation.

Faculty web site: <http://afs.berkeley.edu/~pberck/>

Plant and Microbial Biology 84, Section I
Plant Microbe Interactions: Life and Death at the Cutting Edge (I unit, P/NP)
Professor Barbara Baker
Tuesday 4:00-5:00, 104 Dwinelle Hall, CCN: 70355

It has been estimated that up to a third of global crop yield is lost yearly to pests and pathogen diseases and yet the plant innate immune system protects wild species progenitors of crops against most pathogens. What is the plant innate immune system and how does it work? Why isn't plant innate immunity protecting our crops? Can understanding molecular mechanisms of plant innate immunity lead to new strategies for crop protection and decrease our dependence on chemical pesticides? This seminar will introduce students to the principles underlying plant innate immunity. We will discuss the potential of new discoveries to enhance plant immunity in crops. **This seminar is for students intending to major or majoring in the biological sciences. Enrollment is limited to fifteen sophomores.**

Dr. Baker joined the faculty at the University of California, Berkeley, Department of Plant and Microbial Biology, and is a Senior Molecular-Geneticist at the Plant Gene Expression Center at the USDA ARS in Albany, CA where she isolated one of the first plant disease resistance genes, N, specifying virus resistance. Her research group works on molecular mechanisms of host pathogen interactions. The goal of the work in the Baker lab is to understand plant defense mechanisms for development of new environmentally benign strategies for durable, broad-spectrum disease-resistant crops.

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

Vision Science 84, Section I
An Introduction to Vision Research Through Myopia (I unit, P/NP)
Professor Christine Wildsoet
Thursday 4:00-6:00, 394 Minor Hall, CCN: 66405

This seminar will meet every other week.

This seminar will combine reading of recent review papers with hands-on research through mini-projects. Using myopia (near-sightedness) as a topical research example, we will explore together the field through recent review papers—what is known about the condition and the research approaches used to discover

that information. Based on this literature, we will formulate research questions around which self and small-group studies will be designed and executed. Research tools encountered will include questionnaires and instruments used to obtain objective measures of eye dimensions, refractive errors, vision, and visual experience. We will also consider the applications and relative merits of animal models and in vitro cell and tissue studies in myopia research. **Students interested in research or who find themselves asking "why" a lot should enjoy this seminar. Consider this seminar if graduate research studies are among your career path possibilities. It hopefully will open your eyes to the broad range of possibilities that fall under the umbrella of vision research. If you are also myopic (nearsighted), you may learn a lot about your own eyes.**

Professor Wildsoet is on the faculty in the School of Optometry, where she is involved in both clinical and pharmacology teaching. She is also a member of the Vision Science group. Her research is multidisciplinary as is her research group, which includes basic scientists, clinicians and bioengineers. The focus of research in the her lab is myopia (nearsightedness), specifically the mechanisms underlying the development of myopia and its clinical management. The overriding goal of this research is the development of treatments for myopia. Under optimal conditions, young eyes adjust their eye growth to correct neonatal focusing errors. Understanding how this growth regulatory process is derailed in myopia can provide the keys to new treatments. Over the course of her research career, Professor Wildsoet has had the opportunity to work with a range of animals and birds to address other questions related to eye design.

Faculty web site: <http://vision.berkeley.edu/wildsoet/>

**Vision Science 84, Section 3
Visual Impairment (1 unit, P/NP)
Professor Susana Chung
Monday 4:00-6:00, 394 Minor Hall, CCN: 66408**

This seminar will meet for seven weeks, beginning March 7, 2011 and ending April 25, 2011.

This is an introductory course on visual impairment. When a person's vision cannot be corrected to the standard 20/20 with glasses or contact lenses due to disorders of the eye, he or she may be functionally limited by the reduced vision. This is referred to as "visual impairment." In this course, we will discuss various causes that can lead to a visual impairment, what are the difficulties facing people with visual impairment and what can be done to help these people lead a successful life.

Professor Susana Chung is an Associate Professor of Optometry and Vision Science at the University of California, Berkeley. She is an optometrist as well as a researcher specializing in the field of low-vision rehabilitation.

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

**Vision Science 84, Section 4
Stewardship of the Earth [and UC Berkeley] and its Peoples—A seminar on Civic Education (1 unit, P/NP)
Professor Stanley Klein
Monday 2:00-4:00, 394 Minor Hall, CCN: 66580**

This seminar will meet eight weeks concentrated at the beginning of the semester. The first seminar meeting is on January 24, 2011. The seven remaining meeting dates will be announced in class.

This seminar examines current and future problems facing our planet [and our university] and its inhabitants and seeks to learn how society can find solutions. We will ask questions like Why is it difficult for society to implement a carbon tax? Our goal is to have open discussions on both long-range issues facing the world and issues facing the campus. By bringing it to the campus level we can deal with issues on which we can have a direct effect, asking questions like How can Civic Education be improved at UC Berkeley? Both practical considerations and utopian long-range visions will be included in our seminar discussions. A general theme of the course is how we can acquire tools for becoming responsible citizens. There will be readings from Berkeley authors, from the printed media and from the Internet community. The seminar grade will be based on class participation. **In past years, because of the OPT84 course number and my being in Optometry, I have gotten students interested in Optometry. This seminar is rather for students interested in sustainability and civic education and politics/economics.**

Stanley Klein is a Professor in Optometry, Neuroscience and Bioengineering. He has a commitment to finding approaches for our society to function better in meeting the challenges of the future. He believes that there is much to learn from individuals in the Berkeley community on the topic of sustainability and the political process in general.

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