



**FALL 2007**

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

**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, which the College is launching in fall 2005, will 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 destined to be unforgettable. For details on the Discovery Courses planned for the upcoming semester, see <http://lsdiscovery.berkeley.edu>.

This document was last updated on September 10, 2007.

## 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.

**American Studies 24, Section I**  
**Political Words: From Lincoln to Jon Stewart (1 unit, LG)**  
**Dr. Kathleen Moran**  
**Monday 1:00-2:00, 179 Stanley Hall, CCN: 02117**

Using Gary Wills's *Lincoln at Gettysburg: the Words that Remade America*, Greil Marcus's *The Shape of Things to Come: Prophecy and the American Voice*, and *The Daily Show with Jon Stewart* presents America, we will discuss the way American identity is created in stories and speeches, songs and popular culture. **This seminar is part of the On the Same Page initiative:**  
**<http://onthesamepage.berkeley.edu>.**

Kathleen Moran is the Associate Director of the American Studies Program. She has written about nineteenth- and twentieth-century American political thought, and her research during the last decade has been focused on consumerism and American popular culture. Her recent course topics include film in the 1980s, advertising, theme parks, and food studies.

**Anthropology 24, Section I**  
**Humor in Cross-Cultural Perspective (1 unit, P/NP)**  
**Professor Stanley H. Brandes**  
**Monday 2:00-3:00, 111 Kroeber Hall, CCN: 02455**

This freshman seminar is designed to explore various approaches to the topic of humor, particularly as humor reflects and reinforces social boundaries—gender boundaries, ethnic boundaries, national boundaries, class boundaries, boundaries of friendship, and the like. We will examine (1) the sources of humor, (2) types of humor (jokes, riddles, teasing and banter, verbal dueling, among others), and (3) the impact of humor on both individuals and groups. Although humor is intrinsically lighthearted, it invariably reflects deep-seated social and psychological concerns. This is the main message of this course.

Stanley Brandes received his Ph.D. in Anthropology from UC Berkeley, where he has taught in the Department of Anthropology since 1974. He has carried out extensive fieldwork in Spain, Mexico, Guatemala, and the United States. His most recent publication concerning humor is his book, *Skulls to the Living, Bread to the Dead: The Day of the Dead in Mexico and Beyond* (2006). In addition to writing on humor in Mexico, he has written extensively on ritual humor in Spain and Jewish humor in the USA.

**Anthropology 24, Section 2**  
**The Road to Freedom: Anthropological Perspectives on African-American Life, 1840-1880 (1 unit, P/NP)**  
**Professor Laurie Wilkie**  
**Monday 12:00-1:00, Room 101 in 2251 College Avenue, CCN: 02458**

This seminar will introduce students to works that consider the ways that African-Americans worked towards creating their own freedom from enslavement—through their family and cultural lives, through their economic and political lives, and through outright resistance to racist policies of the United States (north and south alike). The seminar is intended to provide a complementary set of readings to the "On

the Same Page" program selection, Garry Wills' Lincoln at Gettysburg. Our readings will draw upon works written by archaeologists, historical anthropologists, and first-person narratives (oral histories). **I would like to see students who are not afraid to talk about race relations in a frank and open way, no matter how they self-identify; the peoples of Africa have contributed much to the cultural life and heritage of all those who consider themselves to be part of "American" society, and I want this course to contribute to student's appreciation of that heritage and legacy, and for students to take away a better understanding of how the aftermath of race-based slavery continues to shape our lives today. This seminar is part of the On the Same Page initiative: <http://onthesamepage.berkeley.edu>.**

Laurie Wilkie received her Ph.D. from UCLA, where she began her life-long interest in the history of race relations and the African Diaspora. She has conducted archaeological research in the Caribbean, Louisiana, Alabama and California. When she is not playing in the dirt, her passions include a love of good Louisiana home cooking and anything to do with Mardi Gras.

**Chemistry 24, Section I**  
**Order, Disorder, Chaos and Fractals (1 unit, LG)**  
**Professor Alex Pines**  
**Tuesday 2:00-3:00, 122 Latimer Hall, CCN: 11345**

The seminar will discuss the notions of disorder-order transitions that arise from the competition between cooperative inter-particle or interpersonal interactions and disruptive fluctuations. Examples will be drawn from physics, chemistry, biology, engineering, sociology, voting, etc., and include such phenomena and systems as paramagnet-ferromagnet, gas-liquid, liquid-liquid crystal, random coil-ordered polymer, denatured-folded protein, incoherent-coherent laser light, conductivity-superconductivity, independent-cooperative voting, etc. The dynamics and geometry of such systems will also be outlined, including the possibility of oscillations, chaos and associated fractal structures, and the onset of irreversibility. Demonstrations illustrating these principles and phenomena ranging from chemistry, biology and attempts at random number generation to critical fluctuations and social influence will be presented. Assignments will include statistical assessment of various experiments including coin flipping and cooperative interaction simulations, and the evaluation of the fractal dimensions of various formations of nature ranging from mountains and clouds to cauliflowers and kidneys. The course will be informal, and of a popular semi-quantitative nature, so as to allow non-experts to appreciate the ubiquitous role of chaos and fractals, and the general relationship between dynamics and geometry. **Enrollment is by instructor approval only. If you are interested in taking this seminar, you will need to attend the first class meeting on August 28, 2007. At that meeting, Professor Pines will give a brief quiz and interview to ensure a minimum of mathematical and computer background, as well as diversity of fields of interest, and distribute CECs to selected students. While not essential, high school chemistry, physics and mathematics, especially AP, would be advantageous. Professor Pines is looking forward to hearing about each student's interest in the seminar topic. This seminar is not appropriate for freshmen majoring in mathematics, computer science or engineering—candidates from those majors will not be considered as their majors have similar, more quantitative courses. This class is appropriate for freshmen majoring in the physical sciences, life sciences or non-science/general majors who have interests in an introduction to these topics from a more conceptual approach.**

Professor Pines, PhD MIT, is a world-renowned teacher of physics and chemistry. He has taught courses across the spectrum from advanced quantum mechanics to his UC Distinguished Teaching Award-winning Freshman Chemistry IA and his Innovation Award-winning Digital Chemistry and ChemQuizzes. He is a world leader in the development and application of nuclear magnetic resonance (NMR) spectroscopy and magnetic resonance imaging (MRI). His work and his group, the "Pinenuts," have been recognized by many prizes and he is a member of the National Academy of Sciences and a Foreign Member of the Royal Society of London.

**Chicano Studies 24, Section I**  
**Chicano Civil Rights Movement (1 unit, P/NP)**  
**Professor Carlos Munoz Jr.**  
**Monday 2:00-3:00, 151 Barrows Hall, CCN: 13002**

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.

**Civil and Environmental Engineering 24, Section I**  
**Three Field Trips in Environmental Engineering (1 unit, P/NP)**  
**Professor John Dracup**  
**Wednesday 6:00-7:00, 406 Davis Hall, CCN: 1443 I**

**This seminar will meet for four one-hour lectures/discussions, which could possibly run longer, in 406 Davis Hall: on September 5, 2007 for a group orientation and September 26, October 3, and October 24, 2007 for pre-field trip discussions. This seminar will meet for three four-to-six hour field trips, time and location TBA, on the following Saturdays: September 29, October 6, and October 27, 2007. Food for Thought dining arrangements and field trip details will be discussed in class.**

Three Saturday field trips are scheduled to the following: 1. a wetland restoration site, 2. a stream restoration site, and 3. a dam removal site. A one-hour lecture/discussion concerning the science/engineering aspects of the field trip will be held before proceeding to the Saturday field trip. All field trips will be in the San Francisco Bay area and be four to six hours in duration. Transportation will be provided to and from the Berkeley campus. Attendance is mandatory at all three seminar meetings and all three field trips for a passing grade in the class. **Enrollment is limited to twenty-two freshmen interested in environmental issues.**

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 awards in 2006 include being inaugurated into the "Order of the Black Blouse" by the Water Rights Court of Valencia, Spain and the designation of a Diplomat of the American Academy of Water Resource Engineers of the American Society of Civil Engineers. He swims competitively with Pacific Masters Swimming and skis competitively with Far West Masters Ski Racing.

**Classics 24, Section I**  
**Homer's 'Odyssey'—The Text and the Mythology (1 unit, P/NP)**  
**Professor Anthony Bulloch**  
**Wednesday 4:00-5:00, 225 Dwinelle Hall, CCN: 14727**

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.

**Classics 24, Section 2**  
**Ancient Greek Magic (1 unit, P/NP)**  
**Professor Mark Griffith**  
**Monday 3:00-4:00, 279 Dwinelle Hall, CCN: 14730**

This seminar is an introduction to Classical Greek magical rituals, texts and practices. We'll sample written and pictorial examples of healing spells, love charms, necromancy, voodoo-dolls, etc., from a number of different social contexts and periods. We'll discuss the nature, purposes, and efficacy of such "magic" in relation to other religious activities and systems of belief in the ancient world.

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

**Comparative Literature 24, Section 1**  
**Reading and Reciting Great Poems in English (1 unit, P/NP)**  
**Stephen Tollefson**  
**Tuesday 4:00-5:00, 211 Dwinelle Hall, CCN: 17281**

People today do not have enough poetry in their heads, and everyone should be able to recite one or two of their favorite poems. In addition to its purely personal benefits, knowing some poetry by heart has practical applications: in a tough job interview, you can impress the prospective boss by reciting just the right line, say, from Dylan Thomas: "do not go gentle into that good night/rage rage against the dying of the light." Or at a party some time, you'll be able to show off with a bit of T.S. Eliot: "in the room the women come and go, talking of Michelangelo." In this seminar, we will read a number of classic poems as well as a number of other (perhaps lesser, but still memorable) poems, and discuss them. The poems cut across centuries and types. Students will be encouraged to find other poems for the group to read. Participants will be required to memorize and recite 50-75 lines of their choice, and to prepare a short annotated anthology of their favorite poems.

Steve Tollefson, a lecturer in the College Writing Programs, is the author of four books on writing and grammar as well as articles on a variety of subjects and several short stories. He is a recipient of the campus Distinguished Teaching Award.

**Earth and Planetary Science 24, Section 2**  
**Geoscience in the Movies (1 unit, P/NP)**  
**Professor Michael Manga**  
**Tuesday 1:00-3:00, 265 McCone Hall, CCN: 19011**

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://seismo.berkeley.edu/~manga/rsch.html>.

**Electrical Engineering and Computer Sciences 24, Section I  
Gadgets Electrical Engineers Make (1 unit, P/NP)  
Professor Jeffrey Bokor  
Thursday 10:00-11:00, 125 Cory Hall, CCN: 25254**

This seminar is intended to offer a taste of how the hardware that is powering the information age really works. Electrical engineers must invest considerable effort to learn their science and math fundamentals. Eventually, though, the fun comes in building innovative and practical gadgets. We will side-step the science and math and get right into the hardware. We'll take a look at what's inside some of today's most exciting products and technology as well as look ahead at the future products that are just around the corner. Our focus will be on hardware and we will see how much fun engineers can have using their hands other than by typing on a keyboard.

Jeffrey Bokor received the B.S. degree in electrical engineering from the Massachusetts Institute of Technology in 1975, and the M.S. and Ph.D. degrees in electrical engineering from Stanford University in 1976 and 1980, respectively. From 1980 to 1993, he was at AT&T Bell Laboratories where he did research on novel sources of ultraviolet and soft X-ray coherent radiation, advanced lithography, picosecond optoelectronics, semiconductor physics, surface physics, MOS device physics, and integrated circuit process technology. He held management positions as head of the Laser Science Research Department at Bell Labs in Holmdel, NJ, from 1987 to 1990, and head of the ULSI Technology Research Department at Bell Labs in Murray Hill, NJ, from 1990 to 1993. Dr. Bokor was appointed Professor of Electrical Engineering and Computer Sciences at the University of California at Berkeley in 1993, with a joint appointment at the Lawrence Berkeley National Laboratory (LBNL). In 2004, he was appointed as Deputy Director for Science at the Molecular Foundry at LBNL, a major new nanoscale science research center. His current research activities include novel techniques for nanofabrication, new devices for nanoelectronics, quantum information processing, extreme ultraviolet lithography, optical metrology, and Fourier optics. He is a fellow of IEEE, APS, and OSA.

**Engineering 24, Section I  
Time, Money, and Love in the Age of Technology (1 unit, P/NP)  
Lecturer Americ Azevedo  
Monday 1:00-2:00, 41 Evans Hall, CCN: 27651**

Many people in technological societies complain of "time poverty." What are the real relationships between time, money, and love in our lives? Where is love in a world dominated by the technological paradigm? Is there a balance to be found? Does technology make us happy? What is the good life? How can we cultivate peace of mind in a world of rapid change? These and other fundamental questions will be at the heart of a semester-long Socratic dialogue. **This seminar is for engineering, business, and liberal arts students.**

Americ Azevedo has pursued a life-long study of world religions and spirituality, along with a continued commitment to Socratic & Bohmian dialogue. Though his background is in Philosophy, his business and teaching career have brought him extensively into the world of information technology, with an emphasis on collaborative technologies, e-learning, and their cultural implications. He is especially concerned with how we can maintain our humanity in an increasingly technological world. He has been at U.C. Berkeley since Fall 2000, and is currently teaching Time, Money, and Love in the Age of Technology (Engineering 24, section I), Theory and Practice of Meditation (PACS 94) and Introduction to Computers (Engin 110).

**English 24, Section 1**  
**Visual Culture and Autobiography (1 unit, P/NP)**  
**Professor Hertha D. Sweet Wong**  
**Tuesday 5:00-8:00, 300 Wheeler Hall, CCN: 28081**

**This seminar will meet the first five weeks of the semester, beginning August 28, 2007 and ending September 25, 2007.**

Visual culture is not just about pictures, but the (post) "modern tendency to picture or visualize existence"—what W.J.T. Mitchell calls "the pictorial turn." Not surprisingly, as contemporary writers and artists struggle to find forms that convey postmodern individual identities in multicultural, often urban, social landscapes, they experiment with visual/verbal forms of self-representation and self-narration: story quilts, family photo albums, letters, comic books (co-mix), artists' books, photo-biographies, video and film, performance art, homepages, "zines," and more. Course requirements include attendance, participation, completion of in-class activities, and a short course journal.

Hertha D. Sweet Wong is an Associate Professor in the English Department and specializes in American literatures, Native American literatures, autobiography and visual culture. Currently, she is working on a book on visual autobiography.

**English 24, Section 2**  
**Reading Walden Carefully (1 unit, P/NP)**  
**Professor Mitchell Breitwieser**  
**Monday 4:00-5:00, 175 Dwinelle Hall, CCN: 28083**

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 "root" 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 twenty-five years.

**English 24, Section 3**  
**Shakespeare's Sonnets (1 unit, P/NP)**  
**Professor Alan Nelson**  
**Wednesday 12:00-1:00, 203 Wheeler Hall, CCN: 28825**

Shakespeare's sonnets were first published in 1609. Although little is known about how they were first received by the reading public, they are known to have caused delight and puzzlement since their second edition in 1640. Over the course of the semester, we will read all 154 sonnets, at the rate of approximately ten per week. All students will be expected to participate actively in seminar discussions, and present both informal and formal oral reports.

Professor Nelson is an Emeritus Professor of English with a growing interest in the lives and works of Shakespeare and his contemporaries. His specializations are paleography, bibliography, and the reconstruction of the literary life and times of medieval and Renaissance England from documentary sources.



#### **English 24, Section 4**

**Garry Wills' Lincoln at Gettysburg (the U.S. and the Civil War Era) (1 unit, P/NP)**

**Professor Richard Hutson**

**Friday 12:00-1:00, 203 Wheeler Hall, CCN: 28828**

**Food for Thought dining arrangements will be discussed in class.**

I would like to read Wills' book slowly and carefully with students. I plan to offer students some other materials about the culture of mid 19th-century U.S., perhaps some of the Ken Burns documentary on the Civil War, letters and other speeches by Lincoln. **I would like students who are interested in American history: politics, culture, literature. This seminar is part of the Food for Thought Seminar Series and part of the On the Same Page initiative: <http://onthesamepage.berkeley.edu>.**

I am an Associate Professor of English. I was recently Director of the American Studies Program. I divide my teaching between the English Department and the American Studies Program. I have a PhD in English and History from the University of Illinois, Urbana-Champaign. I have been at UC Berkeley since 1964, interrupted by a year of teaching at the University of Leeds in northern England. My recent publications include a number of essays on filmed Westerns and on writings from the late nineteenth- and early twentieth-century U.S.

#### **English 24, Section 5**

**Contemporary Irish Theater: The Plays of Brian Friel (1 unit, P/NP)**

**Professor Robert Tracy**

**Monday 3:00-5:00, Room L20 in Unit II located at 2650 Haste Street, CCN: 28831**

**This seminar will meet for eight weeks, beginning September 10, 2007 and ending November 5, 2007; it may not meet one of these weeks.**

Brian Friel (b. 1928) is the most prominent playwright of the contemporary Irish theater, best known for *Translations* and *Dancing at Lughnasa*. In a series of innovative plays, he has examined some of the stories the Irish tell themselves about their past and present. He uses the theater to examine issues of role-playing, story-telling, and self-delusion, that is, the nature of theatricality. While he explores Ireland's national and personal myths, Friel is saying something about us all and the parts we cast ourselves in when rehearsing our own dramas. This is a seminar, not a lecture course, so I will expect you all to contribute to discussions. Students will also be paired to lead discussions. **I'm hoping for students who like literature and are interested in thinking about drama not just as texts but also as performance. We will sometimes read scenes to suggest how different voices affect perception of what is happening. Brian Friel is a playwright from the North of Ireland, so that his work often reflects certain tensions from that society, so I'm hoping for students who will discuss social and moral issues facing the dramatic characters.**

Robert Tracy is Emeritus Professor of English and of Celtic Studies. He has served as Visiting Professor of Anglo-Irish literature at Trinity College, Dublin; of American literature at Leeds University; and of Slavic Studies at Wellesley; and has been Associate Director of the University of California Dickens Project. His publications include a study of Trollope's novels, editions of works by Synge, Trollope, Le Fanu, and Flann O'Brien, and Stone, a translation from the Russian of poems by Osip Mandelstam. His *The Unappeasable Host: Studies in Irish Identities* was published in Dublin in July 1998.

**English 24, Section 6**  
**Three Novels by Jane Austen (1 unit, P/NP)**  
**Professor Catherine Gallagher**  
**Thursday 1:00-2:00, 305 Wheeler Hall, CCN: 28834**

We will read three of Jane Austen's novels very slowly to learn why they are among the world's most enduringly popular and the most technically innovative. The novels are *Sense & Sensibility*, *Pride & Prejudice*, and *Emma*. For additional insights, we will turn to recent film adaptations of all three. **I hope to teach students who not only love to read but also feel curiosity about why they love to read. The students should want to learn more about the aspects of writing that attract them to certain authors and kinds of narratives.**

Catherine Gallagher is the Eggers Professor of English Literature at the University of California at Berkeley, where she has taught since 1980. Her books are *The Industrial Reformation of English Fiction* (1985), *Nobody's Story: The Vanishing Acts of Women Writers in the Literary Marketplace* (1994), *Practicing New Historicism* (2001, with Stephen Greenblatt), and *The Body Economic; Life, Death, and Sensation in Political Economy and the Historical Novel* (2005). Her edited volumes are *The Making of the Modern Body* (1988) and the Bedford Cultural Edition of Aphra Behn's *Oroonoko* (2000).

**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: 29160**

**There is one optional field trip to a Bay Area location on a Saturday 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.

**Environmental Science, Policy, and Management 24, Section 2**  
**Discussions on Evolutionary Biology (1 unit, P/NP)**  
**Professor Philip Spieth**  
**Wednesday 3:00-4:00, 410 Wellman Hall, CCN: 29163**

*Discussions on Evolutionary Biology* is a seminar for freshmen that explores the intellectual excitement of evolutionary biology and examines its significance for understanding the world we live in. Weekly readings and roundtable discussions introduce basic facts and principles of evolutionary biology, including both historical perspectives and contemporary issues. Attention is given to popular misconceptions of biological evolution.

Philip T. Spieth is an Emeritus Professor in the Department of Environmental Science, Policy, and Management who worked with computer models of evolution and studied genetic variation in natural populations of fungi. He joined the faculty of the former Department of Genetics in 1971 and taught population genetics for thirty years at UC Berkeley in both introductory genetics courses and in courses for advanced undergraduates and graduate students and has been a co-author of a general genetics

textbook. He created and has taught Discussions on Evolutionary Biology since the inception of the freshman seminar program in the early 1990's. Currently he works with the National Center for Science Education, a nonprofit organization devoted to the teaching of evolutionary biology in public schools.

**Environmental Science, Policy and Management 24, Section 3**  
**Invasive Species: Why, When and Where? (1 unit, P/NP)**  
**Professor George Roderick**  
**Thursday 12:00-1:00, 14 Haviland Hall, CCN: 29165**

Invasive species are biological organisms that should not be where they are, and that are expanding their range. The number of invasive species is climbing rapidly, causing increasing damage to the environment, economy, and human health. Invasive species are now considered to be one of the major forces of global change. Here, we will follow the media, read popular science articles, watch documentaries (and a few B-movies), hear from a couple of experts, go look at some invasive species, and discuss the topic, all with the goal of understanding the problem and solutions. **Eager students interested in this seminar's topic are encouraged to enroll.**

George Roderick studies invasive insects in California and the Pacific. He is Director of UC Berkeley's Gump South Pacific Research Station in Moorea, French Polynesia, and is a Curator in Berkeley's Essig Museum of Entomology. He is married to Rosie Gillespie, a Berkeley professor who studies spiders, and they have two boys. Their family has just returned from a one-year sabbatical in the south of France.

**Environmental Science, Policy and Management 24, Section 4**  
**Tropical Islands - Biology and History (1 unit, P/NP)**  
**Professor Rosemary Gillespie**  
**Thursday 12:00-1:00, 214 Haviland Hall, CCN: 30300**

Remote tropical islands have inspired writers and painters for centuries. These tiny specks in the vast oceans often have a well-known geological history, so we understand how long they have existed for organisms to colonize. Therefore, these islands can tell us a lot about how biodiversity arises and goes extinct. In this course we will examine the properties of islands, how diversity has arisen in history, and how this has changed as people have arrived. The course will look at unique groups of animals and plants on remote islands, as well as people and cultures, and will include case studies of different islands.

Rosemary Gillespie is a Professor in the Department of Environmental Science, Policy and Management and Director of the Essig Museum of Entomology. Her research focuses on spiders and insects, and is largely based on the islands of the Pacific, in particular the remote Polynesian islands of southern Oceania (Marquesas, Societies, and Australs), and the islands of Micronesia and Fiji, as well as Hawaii.

**Environmental Sciences 24, Section 1**  
**Sustainability: The Future is Now (1 unit, P/NP)**  
**Professor William Berry**  
**Wednesday 4:00-5:00, 55A McCone Hall, CCN: 30427**

This seminar includes a review of issues involved in sustainability of our resources and environment. Topics to be discussed include green buildings-sustainable architecture, the energy-transportation-air-quality-health connections, managing our wastes, uses and abuses of our water, and impacts of farming and marketing practices on our food and on enhancing use of organics.

Professor Berry teaches a number of courses in basic environmental science and has both research and teaching programs in impacts of climate change on environmental changes and on biodiversity. He directs an internship program in which students assist Bay Area environmental science teachers.

**Ethnic Studies 24, Section I**  
**Immigration and Immigration Reform (I unit, P/NP)**  
**Dr. Victoria Robinson**  
**Monday 11:00-12:00, 108 Wheeler Hall, CCN: 31096**

Migration might be viewed as a constant theme in America's self-narrative. Whether that migration be forced or voluntary, migration has been and continues to be essential to the nation's ever-changing social and political landscape. However, reaction to these migrations has not been consistent, and indeed at times there have been great periods of xenophobic and nativist sentiment. Today again, the issue of migration is at a zenith of both political and public interest. This seminar will introduce some of the background to this latest round of interest, paying particular attention to the current immigration reform proposals, the assumptions that underpin these reforms, academic perspectives on these proposals, and also personal narratives both from students themselves and invited participants. It is hoped that by the end of the seminar all involved will be well informed as to the mechanics and dynamics of migration, and the causes and consequences of any reform measures proposed.

Victoria Robinson is a Lecturer of Ethnic Studies and Coordinator of the American Cultures Center. She teaches courses addressing race and ethnicity in the United States and global female migrations. In 1998-1999 she was a contributing researcher of the European Migration Observatory, and in 2000 an adjunct fellow at the Public Policy Institute of California (PPIC).

**French 24, Section I**  
**Language and Technology (I unit, P/NP)**  
**Professor Richard Kern**  
**Thursday 1:00-2:00, 33 Dwinelle Hall, CCN: 32326**

This seminar focuses on relationships between technologies of communication and language use. Starting from an historical perspective on technologies of writing and their relationships to cultures of reading and writing, the seminar will consider current questions about computers, literacy, and language use: How do computer environments affect how we use language? What does it mean to be 'literate' in an age of electronically mediated communication? How do notions of 'text', 'reader', and 'writer' change as new media, new discourse communities, and new literacy practices take hold? What kinds of meaning-making abilities do people develop to participate successfully in communities that rely on forms of electronic communication? How do people acquire these abilities?

Professor Richard Kern teaches courses in French language and linguistics, applied linguistics, and foreign language pedagogy. His interests include second-language acquisition, psycholinguistics, reading, writing, and relationships between technology and language use. He is also Director of the Berkeley Language Center.

**History 24, Section I**  
**The Creation, Operation, and Dismantling of Apartheid in South Africa (I unit, P/NP)**  
**Professor Tabitha Kanogo**  
**Thursday 12:00-2:00, 2303 Dwinelle Hall, CCN: 39207**

Apartheid, the social, political and economic policy of racial segregation and discrimination in South Africa, formally ended in 1994. This course will examine the origins, development, effects, and the dismantling of the Apartheid regime. Class discussions will be based on a variety of historical documents, films and documentaries including the powerful Soweto to Berkeley documentary, which captures UC Berkeley students' contribution to the anti-Apartheid movement in the mid-1980s.

Tabitha Kanogo teaches courses on precolonial, colonial and special topics in African history. She wrote *Squatters and the Roots of Mau Mau, 1905-1963* and *African Womanhood in Colonial Kenya, 1900-1950*. Her current research project is broadly entitled "Endangered Childhood in Kenya: A Historical Perspective."

### **History 24, Section 2**

#### **Historical China in Films (1 unit, P/NP)**

**Professor Wen-hsin Yeh**

**Wednesday 2:00-3:00, 123 Dwinelle Hall, CCN: 39210**

**Films will be viewed on four Wednesdays from 4:00 - 7:00 p.m. in a location to be arranged. *Crouching Tiger, Hidden Dragon* will be viewed on a date to be announced. *The Last Emperor* will be viewed on September 26th. *Empire of the Rising Sun* will be viewed on October 24th. *Farewell My Concubine* will be viewed on November 14th. Students enrolling in this seminar should keep their Wednesday evenings free until the complete viewing schedule is announced on this website or in class.**

In this course students will view a selection of films concerning historical China, study relevant fictional and historical materials, and consider the connections among them. The films selected for this course will include "Crouching Tiger, Hidden Dragon," "Empire of the Rising Sun," "The Last Emperor," and "Farewell My Concubine." The objective of the course is to consider fictional and visual representations of history in contemporary popular culture.

Wen-hsin Yeh is Morrison Professor of History and the Director of the Institute of East Asian Studies. She is also author of three books on modern Chinese history.

### **History 24, Section 3**

#### **Abraham Lincoln and the Crises of the Civil War (1 unit, P/NP)**

**Professor Jon Gjerde**

**Wednesday 10:00-11:00, 123 Dwinelle Hall, CCN: 39213**

The American Civil War was a conflict of horrific proportions. Some 600,000 soldiers died in the war; few families were not scarred by four years of carnage. The war also created many political, legal, social and moral crises for the United States, and the ways in which Americans grappled with questions of the legality of secession, the end to slavery, the morality of war, and the integration of black people into the American nation were central in offering a path forward for the nation. Throughout it all, President Abraham Lincoln was a critical actor in struggling with these crises. This course will focus on the words and deeds of President Lincoln in relation to these crises related to the Civil War. It will be taught in conjunction with the Letters and Science On the Same Page program centered on the campus visit of Garry Wills, author of the Pulitzer-Prize-winning *Lincoln at Gettysburg: The Words that Remade America*. **This seminar is part of the On the Same Page initiative: <http://onthesamepage.berkeley.edu>.**

Jon Gjerde is Professor of History and Dean of Social Sciences at Cal. His main interests are nineteenth-century American history with particular focus on the questions of immigration and ethnicity in the United States. He has published five books and many articles.

#### **History 24, Section 4**

#### **War and Religion in America (1 unit, P/NP)**

**Professor Mark Peterson**

**Wednesday 11:00-12:00, 123 Dwinelle Hall, CCN: 39216**

This seminar explores the relationship between practices of religion and practices of warfare in North America from the time of European colonization to the American Civil War of the 1860s. It is being taught in conjunction with the "On the Same Page" program, and therefore one of the texts we will examine closely is Garry Wills' Lincoln at Gettysburg. We will focus on how evolving forms of religion, and conflicts among religious groups, are connected to evolving forms of warfare and conflicts over scarce resources such as land, labor, and commodities. **This seminar is part of the On the Same Page initiative: <http://onthesamepage.berkeley.edu>.**

Mark Peterson is a new member of the U.C. Berkeley History Department, having just arrived from the University of Iowa, where he taught for eight years. He received his Ph.D. in history from Harvard University, where he specialized in early America, particularly the New England region. His first book, *The Price of Redemption: The Spiritual Economy of Puritan New England*, was published by Stanford University Press in 1997. He is now at work on a history of Boston in the Atlantic world from 1630 to 1865.

#### **History of Art 24, Section I**

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

**Professor David Wright**

**Wednesday 2:00-4:00, 425 Doe Library, CCN: 05430**

**Attendance at the first seminar meeting is necessary. This seminar will meet the first twelve weeks of the semester.**

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 very simple 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 for 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.**

Professor David H. Wright completed the requirements in Physics at Harvard in three years, just after the war; however, 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.

## **History of Art 24, Section 2**

### **An Ex-slave's Use of Photography: Sojourner Truth's Cartes-de-visite (1 unit, P/NP)**

**Professor Darcy Grimaldo Grigsby**

**Friday 9:00-11:00, 425 Doe Library, CCN: 05431**

**This seminar will meet the first eight weeks of the semester.**

This seminar will investigate the life and photography of former slave, abolitionist and orator Sojourner Truth in conjunction with the On the Same Page program's focus on Garry Wills' book *Lincoln at Gettysburg*. Sojourner Truth was active during the Civil War and had met Abraham Lincoln who called her Aunty Sojourner. During the 1860s, when Sojourner Truth made and circulated her photographs, the United States was undergoing the crisis of the civil war and confronting the fundamental questions of abolition and the rights of "freedmen." At the same time the country was witnessing rapid technological transformation and national consolidation. Relevant to Sojourner Truth's use of photography are the modernization of the postal system, the invention of a national form of paper money, and the expansion of copyright law to include photography. **This seminar is part of the On the Same Page initiative: <http://onthesamepage.berkeley.edu>.**

Darcy Grimaldo Grigsby is an Associate Professor in the Department of History of Art and author of the book *Extremities: Painting Empire in Post-Revolutionary France* (2002), which examines six famous paintings in relation to debates in France about slavery, abolition and empire. *Extremities* reconstructs the intersecting histories of French relations to Haiti, Egypt, Senegal, and the Ottoman Empire after the Revolution of 1789. Grimaldo Grigsby is currently writing on Sojourner Truth's use of photography and completing a book entitled *Colossal Engineering*, on reconnecting the Suez Canal, Statue of Liberty, Eiffel Tower and Panama Canal. Her essay on David's Sabines, "Nudity à la grecque," was reprinted in Norma Broude and Mary D. Garrard, eds., *Reclaiming Female Agency: Feminist Art History in the Postmodern Era* (2005).

## **Industrial Engineering and Operations Research 24, Section I**

### **Overview of IEOR (1 unit, P/NP)**

**Professor Ilan Adler**

**Wednesday 5:00-6:00, 3102 Etcheverry Hall, CCN: 41003**

This seminar offers a bird's eye view of IEOR. Each week a faculty member or visitor from the IEOR Department will discuss some aspect of his or her research interests.

Professor Adler holds a B.A. in Economics and Statistics from the Hebrew University in Israel, M.Sc. in Operations Research from the Technion in Israel and Ph.D. in Operations Research from Stanford. His research interests are in optimization theory, financial engineering and combinatorial probability models. For more information regarding Professor Adler, please visit his faculty web page at <http://www.ieor.berkeley.edu/People/Faculty/adler.htm>.

## **Integrative Biology 24, Section I**

### **Animal and Human Navigation: Which Way Is Home? (1 unit, LG)**

**Professor Roy Caldwell**

**Monday 3:00-4:00, 5192 Valley Life Sciences Building, CCN: 43003**

A homing pigeon can return to its loft after being shipped one thousand km to a place it has never been. A whale spends its summers in the Bering Sea and its winters near Maui. A female sea turtle returns for the first time to a beach where she hatched thirty years earlier to lay her own eggs. A Monarch butterfly flies south two thousand km to spend the winter in a secluded grove in central Mexico. A limpet returns forty cm to a favorite depression in a rock. The abilities of animals to navigate have intrigued biologists for decades. We will read a series of papers describing how animals navigate and how they use such methods

as landmarks, celestial cues, and geomagnetic fields to determine where to go and what route to follow. We will also attempt to replicate experiments that suggest that humans are able to navigate using geomagnetic fields. At the end of the semester, each student will be required to write a short review paper discussing navigation and orientation by an animal of his or her choice. **This seminar is designed for students with a general interest in animal biology and more specifically animal behavior. Registration for this seminar is by instructor approval only. Interested students should put their names on the waitlist and then attend the first class meeting.**

Roy Caldwell is a Professor of Integrative Biology with a background in insect migration and marine invertebrate animal behavior.

**Integrative Biology 24, Section 2  
Biology, the Study of Life (1 unit, P/NP)  
Professor Tyrone Hayes**

**Wednesday 5:00-6:00, 5192 Valley Life Sciences Building, CCN: 43006**

**Food for Thought dining arrangements will be discussed in class.**

Biology, the Study of Life is a course primarily designed for non-science majors. The course will examine scientific issues that we are confronted with in our everyday life: health and nutrition, reproduction, etc. The seminar will focus on current events and political issues that we are confronted with today: what is stem cell research? intelligent design? pesticide reform? bio-fuels? genetically modified organisms? **Non-science majors are encouraged to enroll. This seminar is part of the Food for Thought Seminar series.**

Tyrone Hayes is a Professor of Integrative Biology. He received his Bachelor's degree from Harvard and his PhD from the Department of Integrative Biology, UC Berkeley. Professor Hayes is a developmental endocrinologist whose research focuses on the role of hormones in development and the impact of pesticides on amphibian development and in human cancer.

**Integrative Biology 24, Section 3  
The Stone Age (1 unit, P/NP)  
Professor Tim White**

**Wednesday 3:00-5:00, 18 Hearst Gym, CCN: 43009**

**This seminar will meet the first eight weeks of the semester.**

This seminar is an overview of human evolution and prehistoric archaeology. The seminar considers the methods and findings of human evolutionary studies, and introduces laboratory and field investigations into this topic. It will cover the biological and technological evidence of human evolution across the last six million years, and will focus on current debates about human origins. Hands-on experience with fossils and artifacts from around the world will be an integral part of the seminar. Students will be introduced to primary research papers and will be encouraged to critically evaluate published claims about human evolution and related subjects. **Enrollment is limited to first-semester freshmen.**

Professor Tim White has taught at all levels on the Berkeley campus for twenty-seven years, first in the Anthropology Department, and now in Integrative Biology. He conducts fieldwork in Africa and Eurasia and has made many discoveries relating to the topic of the seminar. He co-directs Cal's Human Evolution Research Center and is the Curator of Biological Anthropology in the Hearst Museum of Anthropology.



**Integrative Biology 24, Section 4**  
**How and Why Do Birds Sing? (1 unit, P/NP)**  
**Professor George Bentley**  
**Tuesday 2:00-3:00, 4110 Valley Life Sciences Building, CCN: 43011**

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://http://ib.berkeley.edu/research.orig/interests/research\\_profile.php?person=112](http://http://ib.berkeley.edu/research.orig/interests/research_profile.php?person=112).

**Integrative Biology 24, Section 5**  
**Field Geology and Marine Biology of the San Francisco Bay Region (1 unit, LG)**  
**Professor Jere Lipps**  
**Friday 2:00-4:00, 5053 Valley Life Sciences Building, CCN: 44332**

**This seminar will meet on the following four Fridays from 2:00 - 4:00 p.m. in a location to be arranged: August 31, September 7, October 19 and October 26, 2007. The field trip and overnight stay at UC Bodega Marine Lab will be on October 20 and 21, 2007. The date of the field trip along the Hayward Fault and the date of the field trip to the Stege Marsh at UC's Richmond Field Station are TBA. Field trip arrangements will be discussed in class.**

This seminar looks at the geologic history and marine biology of the San Francisco Bay region. It will include three field trips and four one-hour meetings to discuss the plans and results of the field trips. Field trips include an afternoon along the Hayward Fault in Berkeley and Oakland, an afternoon visit to the Stege Marsh at UC's Richmond Field Station and a one- or two-day field trip across the coast ranges to Tomales Bay and the UC Bodega Marine Laboratory. Field guides will be provided for discussion and use on the trips. A paper describing and interpreting some aspect of the field work will be required before December 5, 2007. For additional information on the Bodega Marine Laboratory, see <http://www-bml.ucdavis.edu/>, and for the Hayward Fault, see <http://www.seismo.berkeley.edu/seismo/hayward/hayward.overview.html>. **There are no prerequisites, although an intense interest in marine biology and geology will be beneficial. Enrollment is limited to twelve students.**

Jere Lipps is a geologist and marine biologist and Professor of Integrative Biology and Curator of the Museum of Paleontology at UC Berkeley. For more information about Professor Lipps, please visit his website at <http://www.ucmp.berkeley.edu/people/jlipps/jlipps.html>.

**Journalism 24, Section 1**  
**Reporters Gone Wild (1 unit, P/NP)**  
**Professor Neil Henry**  
**Wednesday 11:00-12:00, B1 North Gate Hall, CCN: 48003**

This discussion seminar explores examples of poor and unethical works of journalism, and their effect on society. Regular monitoring of the news media will be required, along with selections from the book *American Carnival: Journalism Under Siege in an Age of New Media*. **Enrollment is limited to twelve students.**

Neil Henry worked for sixteen years as a metro, national and foreign correspondent based in Nairobi, Kenya for The Washington Post, and as a staff writer for Newsweek magazine, prior to joining the faculty in 1993. A former John S. Knight Journalism Fellow at Stanford University, he is the author of a 2002 racial history, *Pearl's Secret*. His second book, *American Carnival: Journalism under Siege in an Age of New Media*, was published in May, 2007. A graduate in political science from Princeton University, Professor Henry earned his master's degree from Columbia University's Graduate School of Journalism.

**Journalism 24, Section 2**  
**Reporting and Producing for Television News (1 unit, P/NP)**  
**Senior Lecturer Joan Bieder**  
**Wednesday 9:00-11:00, 101 North Gate Hall, CCN: 48005**

**This seminar will meet for eight weeks, beginning September 12, 2007 and ending October 31, 2007.**

The first four weeks of the course comprise a survey of the history of television news with an emphasis on different production styles and techniques. During the last four weeks, students will produce a short news story. **Students should be avid consumers of television news and current affairs. Enrollment is limited to twelve students.**

Joan Bieder is a Senior Lecturer at the Graduate School of Journalism where she teaches courses in television news reporting, writing and producing. She was an ABC-TV network news producer for a decade in the evening news and documentary units. Before coming to UC Berkeley, she taught print and broadcast journalism at Columbia University's Graduate School of Journalism. Ms. Bieder has produced a series of videotapes on broadcast journalism and a film on female journalists in Asia and written several articles. She frequently spends the summer in Singapore, where she has done research on freedom of the press, consulted with television news reporters there and lectured in communications at the Nanyang Technological University. She has studied the history of the Jewish Community in Singapore and is currently completing a book on the subject.

**Journalism 24, Section 3**  
**Great Non-fiction (1 unit, LG)**  
**Professor Lydia Chavez**  
**Wednesday 11:00-12:00, 104 North Gate Hall, CCN: 48204**

This seminar will take a look at some of the best non-fiction, reading pieces from George Orwell to Joan Didion. **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.

**Landscape Architecture 24, Section I**  
**The River on Film (I unit, P/NP)**  
**Professor G. Mathias Kondolf**  
**Tuesday 5:00-7:00, 315D Wurster Hall, CCN: 48502**

**This seminar will meet for ten weeks, beginning September 4, 2007 and ending December 6, 2007.**

Filmmaking and large dam construction both developed in the twentieth century. By virtue of their scale and symbolic importance, large dams have long been popular subjects of films, from government propaganda pieces to adventure epics. Recently, a film depicting the drying up of a major California river sparked a political controversy. This course involves viewing ten classic (and not-so-classic) films dealing with rivers, floods, and dams, starting with the Farm Security Administration's *The River*, Eliza Kazan's *Wild River*, and others. Based on viewing the films and selected readings about the films and/or their subject matter and historical context, each student will prepare and present a brief paper about the depiction of rivers in one or more films. The format of this course is lecture, film viewing and seminar discussion.

Dr. G. Mathias (Matt) Kondolf is an Associate Professor of Landscape Architecture & Environmental Planning at UC Berkeley and a fluvial geomorphologist specializing in environmental river management and restoration of rivers and streams, conducting research in California and other Mediterranean-climate regions. He is a principal investigator in the National River Restoration Science Synthesis project, a 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.

**Linguistics 24, Section I**  
**Language and Politics in Southern Africa (I unit, P/NP)**  
**Professor Sam Mchombo**  
**Wednesday 11:00-12:00, 233 Dwinelle Hall, CCN: 52263**

**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 Linguistics, which he joined in 1988. 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.

**Mass Communications 24, Section I**  
**Keeping Informed in the Digital Age (I unit, P/NP)**  
**Professor Thomas Goldstein**  
**Monday 12:00-1:00, 344 Campbell Hall, CCN: 53236**

**Food for Thought dining arrangements will be discussed in class.**

This seminar will explore what keeping informed means in the digital age. It will also offer strategies on how to be well informed. **I look for eager, enthusiastic students who want to know how to figure out what is going on in the world. This seminar is part of the Food for Thought Seminar Series.**

Tom Goldstein, Director of the Mass Communications Program, is the former Dean of the journalism schools at Berkeley and Columbia. He was a reporter at the New York Times, the Wall Street Journal and other newspapers.

**Materials Science and Engineering 24, Section I**  
**Materials in Music (I unit, P/NP)**  
**Professor Ronald Gronsky**  
**Monday 2:00-4:00, 128 Hearst Memorial Mining Building, CCN: 53403**

**The lab will also be available from 4:00-5:00 in case students wish to stay after class to use the equipment, play music, etc.**

Is a rosewood fretboard any better than a maple one? Why does the same brass cymbal go from "crash" to "clunk" when aged? Can the tonal range of magnetic pick-ups be enhanced in single-coil, humbucking, or triple-wound configurations? Does it really matter if those strings are nickel wrapped? Is platinum better? The answer to these questions lies in the microstructure of materials, as illustrated in this hands-on seminar for musicians, poets, or engineers. We will establish the relationship between the acoustical signatures of various materials used in music and their microstructures, to show how performance (tone) can be optimized through microstructural manipulation. **Enrollment is limited to twelve freshmen.**

Professor Gronsky holds the Arthur C. and Phyllis G. Oppenheimer Chair in Advanced Materials Analysis in the College of Engineering and is a recipient (2001) of the Distinguished Teaching Award. He currently conducts research on the fundamental relationship between the atomic structure and properties of materials used in nanotechnology and biomedical applications.

**Mathematics 24, Section 1**  
**The Mathematics of Gambling (1 unit, P/NP)**  
**Professor Alberto Grunbaum**  
**Tuesday 11:00-12:30, 939 Evans Hall, CCN: 54448**

**This seminar will meet the first ten weeks of the semester.**

People have gambled using dice or tossing coins for several centuries. In fact, several important areas of mathematics were developed to answer questions posed by gamblers. These pieces of mathematics eventually found unexpected applications in physics, chemistry, and several parts of engineering. We will discuss a number of questions that a gambler may consider of interest. The three guiding principles in the selection of material will be 1) it will be very elementary; 2) it will show that common sense cannot always be trusted; and 3) it will illustrate the interconnection between mathematics and several physical sciences.

Alberto Grunbaum is a Professor in the Mathematics Department at UC Berkeley. His fields of expertise include analysis, probability, integrable systems and medical imaging.

**Mathematics 24, Section 2**  
**What is Happening in Math and Science? (1 unit, P/NP)**  
**Professor Jenny Harrison**  
**Friday 3:00-4:00, 891 Evans Hall, CCN: 54450**

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 when ethical issues arise from breakthroughs such as human cloning and genetic engineering of food and animals. Students are encouraged to think of applications and possibilities of new research projects. Creative thinking is encouraged! **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 extensions of calculus to fractals, point-like discrete domains and soap films. Applications of this theory to sciences may arise during this seminar.

**Mechanical Engineering 24, Section 1**  
**Computer Graphics Tools (1 unit, P/NP)**  
**Professor Dennis Lieu**  
**Monday 5:00-6:00, 2105 Etcheverry Hall, CCN: 56003**

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.

**Molecular and Cell Biology 90A, Section I**  
**Biology Research Informs Society: Society Decides What's Next (1 unit, P/NP)**  
**Professor Caroline Kane**  
**Tuesday 1:00-2:00, 2032 Valley Life Sciences Building, CCN: 57823**

Research in the biological sciences provides new information daily about how the natural world works. Society and the political leadership influence what to do with the information and what additional research will be funded. This seminar will explore examples of this science-society interaction historically and in our current events. The necessity for a scientifically literate society will be emphasized. **Students with all interests are welcome.**

Caroline M. Kane is a Professor in Residence of Molecular and Cell Biology at UC Berkeley. She has combined social activism and biological science all throughout her career. Her work to uncover the intricacies of how genes are selected to reveal their information in a regulated way has been funded by the National Institutes of Health, the National Science Foundation, the American Cancer Society, and the University of California Cancer Research Coordinating Committee. Professor Kane has received several awards for her teaching and mentoring including the 2002 College of Letters and Science Award for Distinguished Research Mentoring of Undergraduates, the Faculty Appreciation Award from the undergraduate societies of Molecular and Cell Biology in May 1998 and May 2001, the Phi Beta Kappa Northern California Association Teaching Award in 2003, and the Judith Pool Award from the Northern California Chapter of American Women In Science, and she was elected to the Gahanna Lincoln High School Alumni Hall of Fame in 2003. She has a strong interest in increasing diversity among professionals in biological science-related careers, and for this work she has won the Leon A. Henkin Citation for Distinguished Service from the Academic Senate, and along with her campus colleagues in the Coalition for Excellence and Diversity in Math, Science and Engineering (that she Chairs), the Presidential Award for Excellence in Science, Math and Engineering Mentoring from the White House. Professor Kane also works at the local, national and international level to create positive change in education and increase representation in biology careers.

**Molecular and Cell Biology 90B, Section I**  
**Workings of the Human Body (1 unit, P/NP)**  
**Professor John Forte**  
**Thursday 11:00-12:00, 2319 Tolman Hall, CCN: 57826**

**This seminar will meet the first fourteen weeks of the semester.**

In the first seven weeks Professor Forte will lecture and discuss functions of the human body, e.g., cardiovascular, respiratory, renal, gastrointestinal, and immune systems. In the last seven weeks students will prepare an oral presentation of their library research on a specific physiological function or pathology resulting from dysfunction.

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 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.

**Molecular and Cell Biology 90B, Section 2**  
**Insulin as a Window on Discovery in Biology (1 unit, P/NP)**  
**Professor Randy W. Schekman**  
**Tuesday 3:00-4:00, 2032 Valley Life Sciences Building, CCN: 57829**

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. A book entitled *The Discovery of Insulin* by Michael Bliss will be available in the student bookstore. *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.**

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.

**Molecular and Cell Biology 90E, Section 1**  
**Brain, Mind, Music, Culture (1 unit, P/NP)**  
**Senior Lecturer David E. Presti**  
**Wednesday 3:00-4:00, 2062 Valley Life Sciences Building, CCN: 57838**

Music has a deep and mysterious impact on human behavior. This seminar will explore music, the brain, the human mind, and how they are related. Content will range from the biophysics of sound sensation and the neurophysiology of auditory perception to an exploration of the evolution of music, from its roots to modern genres.

David Presti has taught neuroscience in the Department of Molecular and Cell Biology for sixteen years. He has also taught neuroscience to Tibetan monks in India and is interested in how science can address the connection between what we know as the brain and what we call the mind.

**Molecular and Cell Biology 90E, Section 2**  
**Evolution Writ Large—From the Big Bang to the Rise of Civilization (1 unit, P/NP)**  
**Professor Harold Lecar**  
**Wednesday 1:00-2:00, 2070 Valley Life Sciences Building, CCN: 57841**

Seminar Description TBA

Harold Lecar is a Professor of Neurobiology in the Department of Molecular and Cell Biology. He studies the membrane processes underlying excitation in the nervous system, particularly the gated ionic channels involved in electrical and chemical excitation. For more information about his current projects and selected publications, please visit his faculty web page at <http://mcb.berkeley.edu/faculty/NEU/lecarh.html>.

**Natural Resources 24, Section 1**  
**Dean's Night Out - People and the Environment (1 unit, P/NP)**  
**Professor J. Keith Gillless**  
**Thursday 4:30-7:00, 260 Mulford Hall, CCN: 61303**

**This seminar will meet six dates: August 30, September 13, September 27, October 11, October 25 and November 1, 2007.**

You will be introduced to the different approaches for examining the environment and finding solutions to major environmental and natural resource problems. Some sessions will feature guest speakers who will speak informally about their work, their preparation for it, and the problems it addresses. Following presentations, participants will have an opportunity to participate in informal Q & A interactions with speakers. **Attendance at all six sessions is mandatory.**

J. Keith Gillless is a Professor in the Department of Environmental Science, Policy & Management and interim Dean of the College of Natural Resources. His research uses economic analysis and operations research modeling techniques to address forest resource management issues such as forest products market forecasting, analysis of resource-dependent local economies, the role of forestry in international development, forest harvest scheduling, protected area management, non-market valuation, the impact of climate change on fire control, structure survival in large urban-wildland fires, and wildland fire protection planning.

**Natural Resources 24, Section 2**  
**Global Environment Theme House Freshman Seminar (1 unit, P/NP)**  
**Professors Kate O'Neill and Whendee Silver**  
**Thursday 5:00-6:00, Classroom A in Foothill I, CCN: 61306**

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

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

Kate O'Neill is an Associate Professor in the Society and Environment Division of ESPM. She has a BA in Philosophy, Politics and Economics from Oxford University, and a Ph.D. in political science from Columbia University. She is particularly interested in questions of global and comparative environmental politics and governance, ranging from the politics of the international trade in toxics, to the World Trade Organization, to the creation and implementation of international environmental agreements, to the emergence of transnational protest movements. She has also published several articles on Mad Cow Disease.

Whendee Silver is a Professor in the Ecosystem Science Division of the Department of Environmental Science, Policy and Management. She received a B.I.S. in International Environment Studies from The School for International Training, and a Ph.D. in Ecosystem Ecology from Yale University. Her research addresses ecosystem ecology, terrestrial biogeochemistry, and tropical ecology, and integrates the basic science of C and nutrient dynamics with applied research into the effects of climate change and human impacts on the environment.



### **Near Eastern Studies 24, Section 1**

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

**Professor Carol Redmount**

**Tuesday 1:00-2:00, Exhibit Gallery in Hearst Museum, CCN: 61442**

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 displayed in the museum, due to space constraints. In this 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 resources of the museum and have the opportunity to work with ancient objects. **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 the southern Levant, and directs the new 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 excavating since. She first worked in Egypt in 1978 and lived in Cairo for three years in the mid-1980s. She also has taken part in archaeological research in Cyprus, Israel, Jordan, Tunisia, and the United States.

### **Near Eastern Studies 24, Section 3**

#### **What If You Were an Ancient Babylonian Student? (1 unit, P/NP)**

**Professor Niek Veldhuis**

**Thursday 4:00-5:00, 12 Barrows Hall, CCN: 61447**

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.

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.

### **Nutritional Sciences and Toxicology 24, Section 1**

#### **The Freshman Experience: A Comparative Study (1 unit, P/NP)**

**Professor George Chang**

**Tuesday 11:00-12:00, Unit 2 Towle Residence Hall L3 Seminar Room, CCN: 64596**

**Food for Thought lunch meeting dates and times will be discussed in class. Students in this seminar are encouraged to keep the Tuesday 12:00-1:00 p.m. time slot open for lunch. Unit 2 is located at 2650 Haste Avenue between College and Bowditch. Unit 2's front desk staff can direct you to the room if needed.**

The freshman experience offers problems and challenges to the first-year student. For example: How can I cope with The Roommate from Hell? What about the "freshman fifteen" pounds of weight gain? Why do I have more reading in one week than I had in all of high school? Is Chemistry 1A really more frightening than death itself? Why can't my GSI speak Californian English? Are assignments and exams really necessary? Each week a team of students will select a question like these, research it for a week, and then present their findings to the class. A lively discussion will follow, with each student speaking every week. In fall 2007, "The Freshman Experience" will be held in Unit 2 Towle Residence Hall L3 Seminar 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.

**Physics 24, Section 1**  
**The Stuff that Stuff is Made Of (1 unit, P/NP)**  
**Professor Robert Jacobsen**  
**Monday 11:00-12:00, 233 Dwinelle Hall, CCN: 69503**

**This seminar begins the second week of the semester. Food for Thought dining arrangements and optional field trip times will be announced in class.**

The "elementary particle" branch of physics attempts to understand the basic stuff of which the universe is made. In this seminar, we will examine how physicists actually do this. About half of the sessions will discuss experimental and theoretical elementary-particle physics, including these topics: How are these experiments done? How do we examine theoretical questions? What parts of our understanding are well established, and what parts are still in doubt? The other half of the sessions will examine what it's like to be a physicist, including these topics: What is it like to study physics as an undergraduate? What do people with physics degrees do? What's it like to be a graduate student? What do research physicists do all day? There will be weekly reading and writing assignments. One or more optional field trips to local experiments will be scheduled outside the regular seminar time. **No prior physics courses are required. You should be curious about the topic. This is a discussion seminar course; bringing questions to class is a good thing. 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.

**Physics 24, Section 2**  
**Physics For The Twenty-first Century (1 unit, P/NP)**  
**Professor Kam-Biu Luk**  
**Tuesday 12:00-1:00, 395 LeConte Hall, CCN: 70335**

Physics is commonly considered the foundation of the pyramid of science. Besides revealing how Nature works, advances in physics offer us new tools that are beneficial to the other fields and can have profound impacts on our lives. This course will provide a broad overview of the status and prospects of physics at the beginning of the twenty-first century. **The intended audience would be students who are interested in science and are willing to read articles, and present and discuss current developments in physics.**

Kam-Biu Luk is a professor in the Physics Department. He is an experimentalist in particle physics. His current research interest is in neutrino physics, in particular investigating how neutrinos can transform from one type to the other as they travel.

**Physics 24, Section 3**  
**Physics of Bicycling (1 unit, P/NP)**  
**Professor Joel Fajans**  
**Tuesday 11:00-12:00, 397 LeConte Hall, CCN: 70344**

**This seminar will meet for eleven weeks to be arranged. Food for Thought dining arrangements will be discussed in class.**

We will explore many topics in bicycling physics, including balancing and steering, no-hand riding, unicycles, energy and power, drafting, and bicycle construction. We will go out for a few rides to try some of the principles taught in the course. **A high school physics (no calculus) background is strongly suggested. This seminar is part of the Food for Thought Seminar Series.**

Professor Fajan's current research is focused on making antihydrogen to study the differences between matter and antimatter. (Dan Brown's book, Angels and Demons, is very loosely based on the research of his collaboration.) Previously, he has been interested in plasma physics, nonlinear dynamics and fluid dynamics. He has published two papers on bicycling.

**Plant and Microbial Biology 24, Section I**  
**Microbes Rule! The Exploration of a Small World (1 unit, P/NP)**  
**Professor N. Louise Glass**  
**Wednesday 4:00-5:00, 104 Genetics and Plant Biology Building, CCN: 70406**

In the past decade, a microbial renaissance has occurred with the realization that ~99% of the microbial flora on earth remains undiscovered. In this seminar, we will examine the diversity of microorganisms (bacteria, archaea, fungi and protists) and how these organisms contribute to the biology of the planet, including their role in geochemical cycles, pathogenesis, symbiosis and ecology. Microbes rule!

Professor N. Louise Glass received her Ph.D. at the University of California, Davis on bacterial-plant interactions in 1986. Her post-doctoral work was performed at the University of Wisconsin, Madison, where she worked on mating type regulation in the filamentous fungus *Neurospora crassa*. From Madison, Dr. Glass moved to an Assistant Professor position in the Biotechnology Laboratory/Botany Department at the University of British Columbia in 1989. In 1999, Dr. Glass moved to UC Berkeley, in the Department of Plant and Microbial Biology. The Glass laboratory studies the molecular mechanisms of communication and self-signaling mechanisms mediating hyphal fusion, and nonself recognition mechanisms resulting in programmed cell death using the filamentous fungus *Neurospora crassa* as a model system to understand microbial cell specialization and cell communication.

**Portuguese 24, Section I**  
**Travel Narratives from the Atlantic (1 unit, P/NP)**  
**Professor Ana Maria Martinho**  
**Tuesday 11:00-12:00, 204 Wheeler Hall, CCN: 86605**

This course will present and discuss narratives concerning the history of Atlantic cultures and of mobility within its boundaries. Having fostered all sorts of multicultural experiences between Europe, America and Africa, the Atlantic witnessed the constant dislocation of experiences ranging from different forms of trading to scientific discoveries or political challenges. Sailors, adventurers, writers, scientists, politicians and journalists have crossed it for centuries in search of new experiences and thus contributed to a constant reification of History. Within this context we find all sorts of testimonies that address emerging or fallen empires, as well as today's nations and their peoples. Oral documents, a variety of written texts, videos, music and ethnographic works will be at the center of our discussions during this seminar.

**Readings and discussions will be in English.**

Ana Maria Martinho is an Assistant Professor in the Department of Spanish and Portuguese. Her main interests are Portuguese and Luso-African Cultures and Literatures; Atlantic Cultures; African Diaspora and Emigration. Professor Martinho travels frequently to Africa and has worked with universities across the world.

**Psychology 24, Section I**

**The Control of Behavior (1 unit, P/NP)**

**Professor Karen K. De Valois**

**Wednesday 2:00-3:00, 3105 Tolman Hall, CCN: 74096**

**Food for Thought dining arrangements will be discussed in class.**

Psychologists study behavior. Behavior that is well understood can also be controlled. In this seminar we will discuss both ethical concerns and scientific questions that occur when the lessons of psychology are applied to everyday life. We will consider such topics as attempts to hone the political message of candidates for high office (in order to control the voting behavior of the public) and whether or when society should compel behavior that is against the expressed will of an individual. Students will be expected to do the required reading, participate in class discussions or debates, and write one-to-two-page position papers on topics of interest. **This course is intended especially for students who are living away from home for the first time and for those who are particularly interested in the possible control of behavior by political entities. Any student who is interested in the control of behavior will be welcome. This seminar is part of the Food for Thought Seminar Series.**

Professor De Valois received her Ph.D. from Indiana University. She has a joint appointment at UC Berkeley in Psychology and Vision Science. Her research has focused on vision, psycho-physics and physiology.

**Rhetoric 24, Section I**

**Prosecuting Sexual Violence in International Law: Case Studies from Bosnia, Rwanda, Sierra Leone, and East Timor (1 unit, LG)**

**Professor David Cohen**

**Thursday 10:00-12:00, 7415 Dwinelle Hall, CCN: 77860**

**This seminar will meet the first ten weeks of the semester.**

Sexual violence was prosecuted as a war crime following WWII, but since the establishment of new international criminal tribunals since 1993/1994 this area of international law has undergone rapid development and expansion. Because of the systematic nature of sexual violence in conflicts like those in Bosnia, Rwanda, Sierra Leone, Darfur and elsewhere courts have begun to examine the nature of sexual violence in armed conflict and its relation to other international crimes such as torture, genocide, and enslavement. In our seminar we will study cases that have played a key role in these developments.

David Cohen is the Director of the Berkeley War Crimes Studies Center. The Center engages in research programs on war crimes and human rights trials from World War II to today. The Center also monitors trials and conducts judicial training programs for war crimes and human rights tribunals in Sierra Leone, Rwanda, East Timor, Cambodia, and Indonesia.

**Scandinavian 24, Section I**  
**Ecology and Culture in Scandinavia (1 unit, P/NP)**  
**Professor Linda Rugg**  
**Monday and Friday 12:00-1:00, 6415 Dwinelle Hall, CCN: 78732**

**This seminar will meet the first ten weeks of the semester.**

The Scandinavian countries are known internationally for their concerted efforts to preserve their environments, which in the case of Iceland, Norway, and Sweden remain largely wild. Referring to theoretical essays on deep ecology and ecocriticism, this course will consider how the ideas of "nature" and "environment" are formulated through cultural concepts and practice, in literature, film, and other arts. How does the Scandinavian attitude to the environment take form, and how does it differ from that of other cultures? How does the threat of global warming, which has some of its earliest and most serious affects in the Arctic region, find expression in Scandinavian culture? **Any student who is intrigued by the ways in which art can respond to environmental issues is welcome; no particular interest in Scandinavia is required, though we will focus our study on that region as a special case.**

Linda Haverty Rugg is one of four professors in the Scandinavian Department. She has lived in Sweden and speaks Swedish, but has also travelled in and studied the cultures of Denmark, Norway, and Iceland, as well as Germany and the United States. She is interested in how cultural and artistic expressions try to mend the damage caused by human culture to the environment and reassert the integration of humanity and nature.

**Slavic Languages and Literatures 24, Section I**  
**The Brothers Karamazov: Let's Read It Together (1 unit, P/NP)**  
**Professor Hugh McLean**  
**Friday 9:00-11:00, 6115 Dwinelle Hall, CCN: 79742**

This seminar is a collective exploration of this great novel, seen both as a work of literary art and as a response to philosophical issues of its time. **Enrollment is limited to twelve students. No knowledge of Russian is required, nor are there any special qualifications. No term paper. Grade will be based on class attendance and participation.**

Hugh McLean is a Professor Emeritus of Slavic Languages and Literatures at UC Berkeley. He has taught a wide range of courses on Russian literature and was an active member of the faculty from 1967 to 1994. Since then he has been recalled to teach regular courses and more recently has taught Freshman-Sophomore and Freshman seminars.

**Spanish 24, Section I**  
**Talking Funny: Language Variation in Spanish and English Literary Texts (1 unit, LG)**  
**Professor Milton Azevedo**  
**Tuesday 2:00-3:00, 262 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. 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.

**Theater, Dance, and Performance Studies 24, Section I**  
**Documentary Playmaking: School Integration, Little Rock, 1957-58 (1 unit, P/NP)**  
**Professor Dunbar Ogden**  
**Monday 2:00-4:00, 8 Zellerbach Hall, CCN: 88042**

**This seminar will meet for eight weeks, beginning September 17, 2007 and ending November 5, 2007.**

On the fateful morning of September 4, 1957, a small group of African-American students walked up to the doors of Central High, Little Rock, to enroll in school -- and were turned away by the National Guard. Arkansas State Governor Faubus had called out the Guard to surround the building. "Blood will run in the streets," said Faubus, "if Negro pupils should attempt to enter Central High School." A racist mob seethed out front. Eventually the courageous group of children did enter. The first of them graduated in the spring of 1958. They came to be known as The Little Rock Nine; Central High as the first major integrated high school in the South. Nowadays many people regard their mentor, Daisy Bates, on a level with Martin Luther King, Jr. Each student in our Freshman Seminar will select a person who participated in the integration of Central High, study historical documents linked with that individual, and develop a monologue in the role of the person, perhaps as one of the Little Rock Nine or as the Governor or as the principal of Central High. We will encourage each student to experiment with a role different from his or her own gender and cultural background.

Professor Dunbar H. Ogden is writing a book about the integration crisis at Central High School, Little Rock. During his previous research work—he is the author of books on actors, set design, and theatrical space—he has recorded live interviews in order to focus on the individual in an historic event.

**Vision Science 24, Section 3**  
**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? **Enrollment is limited to ten students.**

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.

**Vision Science 24, Section 5**  
**Oh Say Can You See (1 unit, P/NP)**  
**Professor Dennis Levi**  
**Monday 4:00-6:00, 491 Minor Hall, CCN: 66406**

**This seminar will meet every other week throughout the semester, beginning the Monday after Labor Day (September 10th).**

Visual illusions are tricks that the eye plays on the brain. Illusions can tell us a great deal about the heuristics (rules of thumb) and algorithms (structural rules) that might operate in the visual cortex. This seminar focuses on visual illusions and the eye and brain mechanisms that underlie them. The class will include demonstrations, a field trip to view "natural" illusions on the Berkeley campus, and another to view illusions at the Exploratorium. This seminar will meet approximately every other week throughout the semester, beginning the first week of the semester.

Dennis M. Levi is the Dean of the School of Optometry at the University of California, Berkeley. He received his initial training in Optometry in South Africa, and did advanced training in London and New York. He received the O.D. and Ph.D in Physiological Optics from the University of Houston, where he became a Professor of Optometry and Physiological Optics, and Associate Dean for Research and Graduate Studies in the College of Optometry. In 1996, he became the Cullen Distinguished Professor of Optometry, a lifetime University Chair. Dr. Levi achieved international prominence as a vision scientist for his research in amblyopia, a major cause of vision loss in children. He has been a recipient of the American Academy of Optometry's Garland Clay and Glenn Fry awards as well as an honorary doctorate of science from the State University of New York. He has served as Chair of the National Institutes of Health Visual Sciences B Study Section and a member of the institute's special review committee as well as on the editorial boards of a number of scientific journals.

## 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.

### **Anthropology 84, Section I**

**Has Feminism Changed Science? (1 unit, P/NP)**

**Professor Margaret Conkey**

**Monday 11:00-12:00, Room 101 in 2251 College Avenue, CCN: 03242**

In this seminar, we will consider the question, "has feminism changed science?" from two perspectives: first, we will try to take the question at face value and review several fields of science, ranging from anthropology/archaeology to physics, and see if, and in what ways, the practice of the field have been influenced by feminist critiques of science and feminist issues; second, we will approach this question as an example of the anthropology or social studies of science and technology. Thus, students will get a sense both of how anthropologists study science and scientific practices, as well as what changes and influences the feminist critiques of science have had on some specific disciplines. **It would be excellent to have students from a mix of experiences in different fields, as well as potential anthropology majors, especially if students have had some science backgrounds or are doing a major or a minor in a science field. Such fields include the bio-chem-physic-geology-engineering-medicine type of fields but also psychology, archaeology/biological anthropology and physical geography. Students with interests in general feminist critiques, in gender/women's studies, and /or science studies are also more than welcome.**

Professor Conkey has been active in the feminist critique and practice of anthropological archaeology since the 1970's and is the author of many papers on the topic. She has served as Chair of the Association for Feminist Anthropology, is on the affiliated faculty of Women's Studies and the Designated Emphasis in Women, Gender and Sexuality, and has recently published a paper in SIGNS entitled: "Has feminism changed archaeology?"

### **Architecture 84, Section I**

**Can Billionaires Save the World? (1 unit, P/NP)**

**Professor Jill Stoner**

**Thursday 2:00-3:30, 801A Wurster, CCN: 03705**

**This seminar will meet for ten weeks, beginning September 6, 2007 and ending November 8 2007.**

This seminar will explore interdisciplinary issues of the politics of wealth, integrating readings in current affairs that focus on wealth and poverty, theories of capitalism, and experiments in statistical representations. We will attempt to reframe the subject of architecture as a global construct, involving matters of ethics, biodiversity, and human rights. We will quantify the wealth of the world, and experiment statistically, verbally and graphically with its redistribution, in an effort to answer the question "Can Billionaires Save the World?" **This seminar is intended for sophomores who would like to explore and debate the extremes of global poverty and global wealth, using both statistics and theory to test hypotheses concerning the redistribution of the world's resources.**



Jill Stoner is an Associate Professor of Architecture. Her professional practice has centered on visionary concepts of reintegrating nature into the city, and built work in public schools and housing. Her philosophical approach to architecture is one of "second nature"—that is, reworking the already built environment, rather than building upon virgin ground. Publications include the book *Poems for Architects*, William Stout Publishers 2001, and the book chapter "Rain in the City" in *Visualizing the City*, Routledge, 2007.

**Astronomy 84, Section I**  
**The Dark Side of the Universe (2 units, LG)**  
**Professor Chung-Pei Ma**  
**Monday 3:00-5:00, 501 Campbell Hall, CCN: 06820**

Just as we have come to accept that planet Earth revolves around an ordinary, middle-aged star in an ordinary galaxy occupying no special place in the cosmos, we are confronted with an even more humbling realization --- we do not know for certain what most of the Universe is made of! We will explore questions such as these: How do we know the Universe is expanding and was once hot? How did the first elements in the Universe get created? How do we know there is dark matter and dark energy? How can gravity be used to bend light? Why is a black hole black? **Students who have taken or are enrolled in Astronomy 10 may not take this seminar.**

Chung-Pei Ma is a Professor of Astronomy at UC Berkeley. Her speciality areas include theoretical cosmology; dark matter and energy; galaxy and structure formation; black holes; gravitational lensing; and cosmic microwave background. For more information regarding Professor Ma, please visit her faculty webpage at <http://astro.berkeley.edu/~cpma/>.

**Computer Science 84, Section I**  
**Interactive Choreography in 3D Tele-Immersive Spaces - Expanding Human Perception through Creative Practice (2 units, P/NP)**  
**Professors Ruzena Bajcsy and Katherine Mezur**  
**Friday 4:00-6:00, 405 Soda Hall, CCN: 26421**

In this seminar we will combine research, theory, and creative practice in a unique interactive technological environment. Our studies will be actively interdisciplinary, with each class devoted to the intersection of experimentation with 3D immersive technology and dance composition. Our experimentation will compare, contrast, and expand on 3D virtuality vs. 3D liveness in both theory and practice. Drawing on a "practice as research" model, students will design experiments that intersect choreographic concepts of space, time, and force with the tele-immersive 3D principles such as tele-presence, rendering, and calibration. The class will include discussions on readings in technical and theoretical areas of tele-immersion and presence, new technologies and hypersurface, performance and choreographic systems such as the Laban effort shape principles. **There are no prerequisites for this seminar. Students with some technical aptitudes and an interest in the arts, especially dance, are encouraged to enroll.** This seminar may be used to satisfy the Arts and Literature requirement in Letters and Science.

Ruzena Bajcsy is the Director of the Center for Information Technology Research in the Interest of Society (CITRIS) and a Professor in Electrical Engineering and Computer Science at UC Berkeley. Prior to coming to Berkeley in November 2001, she was Assistant Director of the Computer Information Science and Engineering Directorate (CISE). Professor Bajcsy is a pioneering researcher in machine perception, robotics and artificial intelligence. She is a member of the Neuroscience Institute and the School of Medicine at the University of Pennsylvania. She has done seminal research in the areas of human-centered computer control, cognitive science, robotics, computerized radiological/medical image processing and artificial vision. In November 2002, *Discover Magazine* listed Professor Bajcsy as one of the fifty most important women in science. She has received several awards of distinction in her field, including the 2003 ACM Distinguished Service Award.

Katherine Mezur is an Assistant Professor in the School of Drama, University of Washington, Seattle, WA. Prior to this appointment, she was on the faculty of the Dance Department and Intermedia Arts Program at Mills College, Oakland, CA. She is one of the team of engineers and artists on an NSF pilot grant project, "SGER: Collaborative Research: Interactive Choreography in 3D Tele-Immersive Spaces - Expanding Human Perception through Creative Practice," for 2007-08. Dr. Mezur is a feminist scholar, director, and choreographer whose research focuses on corporeality and media, gender studies, and transnational performance in the Asia Pacific region. She is author of *Beautiful Boys/Outlaw Bodies: Devising Female-likeness on the Kabuki Stage* (Palgrave Macmillan, 2005), a history of the kabuki female gender performance and its contemporary practice, aesthetics, and politics. She is currently working on the manuscript *Cute Mutant Girls: Contemporary Japanese Performance and New Media Art*, which focuses on Japanese women choreographers/directors, performers, and visual artists who intersect live and virtual performance and media art. She holds a Ph.D. in Theatre and Dance, emphasis on Asian Performance, from the University of Hawai'i at Manoa, an MA in Dance (Mills College) and a BA in Film and Photography (Hampshire College). Recent performance work includes *Skin*, an interactive video performance installation; "The Resonance Project: The Reception" (2006-07), a live and tele-immersion dance performance project, in collaboration with Lisa Wymore (UCB) director Ruzena Bajcsy (UCB), and CITRIS; and a 3D Tele-immersive study pilot in conjunction with UC Berkeley Department of Theatre, Dance, and Performance Studies, CITRIS, and University of Illinois, Urbana-Champaign. She is also working on "Animation: Fantastic Choreography," a performance and media study based on Japanese animation, which intersects virtual game culture with live performance. A new "performance as research" project focuses on transnational projects among American, Asian, and African dance theatre artists.

#### **Earth and Planetary Science 84, Section I**

#### **Climate Change and Water in California: Past, Present, and Future (2 units, LG)**

**Professor Lynn Ingram**

**Tuesday 11:00 - 1:00, 325 McCone, CCN: 19038**

Water is critical for sustaining California's wildlife, natural resources, industries, and its large and growing population. California is the fifth largest economy in the world, with a twenty-eight-billion-dollar-a-year agricultural industry, yet it has an unreliable water source. California's economy was based on climate conditions during the 20th century, but according to studies of past climate change, the past 100 years were relatively wet and benign compared with the past several thousand years. In this seminar, we will examine the long-term history of climate in California, including examples of past megadroughts and catastrophic floods. Most of these past extreme events were of much longer duration and severity than any we've experienced over the past century. What are the implications for water resources and ecosystems in California in a future world of global warming? **The seminar is intended for students interested in exploring multiple lines of evidence for climate change and water availability in California's past (so for students with an interest in geology, geography, or environmental science).** This seminar may be used to satisfy the Physical Sciences requirement in Letters and Science.

B. Lynn Ingram is a Professor in the Departments of Earth and Planetary Science and Geography. Her research is focused on past climate change. She uses environmental-sensitive isotopes in sediment cores from oceans, estuaries, and lakes to unravel changes in past climates and environments, including temperature, salinity, ocean circulation, and coastal upwelling. Her field areas include San Francisco Bay, Santa Barbara Basin, and coral reefs in the Pacific Ocean.

**English 84, Section 1**  
**High Culture, Low Culture (2 units, P/NP)**  
**Professor Julia Bader**  
**Thursday 2:00-5:00, 300 Wheeler Hall, CCN: 28186**

**Dates and details regarding the Cal Performances events will be discussed in class.**

We will discuss a novel and a collection of stories, view the films of the Coen brothers, and attend some Cal Performances events in order to analyze the role and affect of cultural productions. Readings will include *The Interpreter of Maladies* (Lahiri) and *The Night Watch* (Water). This seminar may be used to satisfy the Arts and Literature 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.

**English 84, Section 2**  
**Socrates as a Cultural Icon (2 units, P/NP)**  
**Professor John Coolidge**  
**Tuesday 2:00-4:00, 108 Wheeler Hall, CCN: 28188**

Socrates has often been compared to Jesus, an enigmatic yet somehow unmistakable figure who left nothing in writing yet decisively influenced the mind of his own and later ages. We will read Aristophanes' comic send-up of Socrates in *Clouds* and the Platonic dialogues purporting to tell the story of Socrates' trial and death (*Euthyphro*, *Apology of Socrates*, *Crito*, and selections from *Phaedo*) attempting to trace the construction of the Socratic icon and assess its relevance to issues in our contemporary "culture wars," e.g. identity, freedom of speech, elitism, science and religion, "know thyself," the aims of education, authority, male chauvinism, virtue, anti-intellectualism, academic freedom, family, civil disobedience, "spin," body and soul, self-esteem, anomie, patriarchy, individualism, relativism, reductionism, self-ownership, conscience, reason, etc. Links to Wikipedia articles and other on-line resources on these topics are provided in the syllabus. To get discussion going, each meeting (after the second) will begin with a brief (five-to-ten-minute) individual or panel presentation on one or another such issue, assigned on a volunteer basis at the conclusion of the previous meeting and prepared in office-hour consultation with the instructor. **The course is intended to appeal especially to students who are desirous of getting in on the intellectual conversation of our time and curious about its cultural antecedents.** This seminar may be used to satisfy the Arts and Literature requirement in Letters and Science.

John Coolidge, emeritus professor of English and amateur classicist, has taught courses in the Renaissance and seventeenth century, Milton, Jane Austen, the English Bible as Literature, etc. His publications include articles on Shakespeare, Milton, Marvell, and Fielding, and a book on Puritanism and the Bible.

**History 84, Section 1**  
**Concept and Image: Movies as Historical Documents for the Study of the United States, 1920-1945 (2 units, P/NP)**  
**Professor Samuel Haber**  
**Wednesday 2:00-5:00, 125 Dwinelle Hall, CCN: 39237**

**This seminar will meet the entire semester. For eight of those weeks we will meet from 2:00-5:00 p.m. to view and discuss eight movies. During the alternate weeks the seminar will meet for approximately an hour and a half to further examine the issues raised by the movies and those presented by the course reader. The movie schedule will be available at the first class meeting. Participation in "Food for Thought" voluntary dinner meetings will be discussed in class.**

We will be studying the history of this country over a brief period of twenty-five years. Yet during those years the nation entered into and responded to three drastically different eras—those of prosperity, depression, and war. Movies provide invaluable evidence of what it was like to be alive in these eras. Movies have great advantages and great shortcomings as historical documents. We will examine both. What are the advantages and shortcomings of images and concepts as ways of knowing? Can movies adequately cope with a complex historical event? In what sense can movies tell the truth? In what way do movies help define the values of their audiences and in what way are the movies themselves shaped by existing values of their audiences? These are some of the questions that we will try to answer. In addition to viewing the movies, each student must purchase and study closely a reader providing information and background for the course. At the end of the semester, each student must submit a ten-page typewritten critical summary paper tying the course together in his/her own way. No additional reading is required for this paper, only additional thinking. **This seminar is open to freshmen and sophomores. Enrollment is limited to fifteen students. At the first and second meeting of class, a few students may be admitted, with the permission of the instructor, to replace those enrollees who have decided to go elsewhere. This seminar participates in the Food for Thought Seminar Series as well as the On the Same Page initiative: <http://onthesamepage.berkeley.edu>.** This seminar may be used to satisfy the Historical Studies or Social and Behavioral Sciences requirement in Letters and Science.

Samuel Haber is an Emeritus Professor in the History Department who is writing a book on American History during the era 1920-1945.

**Journalism 84, Section I**  
**Visual Storytelling with a Social Conscience (2 units, LG)**  
**Lecturer Mimi Chakarova**  
**Tuesday 12:30-3:30, 104 North Gate Hall, CCN: 48008**

**This seminar will meet the first ten weeks of the semester.**

This photography seminar will explore how to tell complicated photo essays well. Each student will work on an assigned project throughout the semester. The seminar will include guest speakers, lectures and examples, as well as short assignments. **No prior photo experience necessary.** This seminar may be used to satisfy the Arts and Literature requirement in Letters and Science.

Mimi Chakarova received her BFA in photography from the San Francisco Art Institute and her MA in visual studies from UC Berkeley. She has had numerous solo exhibitions of her documentary projects on South Africa, Jamaica, Cuba, Kashmir and Eastern Europe. She teaches photography at UC Berkeley and Stanford University. She is the recipient of the 2003 Dorothea Lange Fellowship for outstanding work in documentary photography and the 2005 Magnum Photos Inge Morath Award for her work on sex trafficking. For more information regarding Mimi Chakarova, please visit <http://journalism.berkeley.edu/faculty/chakarova/> and <http://www.mclight.com/>.

**Mass Communications 84, Section I**  
**The Disappearance of Information (1 unit, LG)**  
**Professor Thomas Leonard**  
**Monday 3:30-5:00, 247 Evans Hall, CCN: 53239**

Today, on the Berkeley campus, more than \$100 million is being invested to restore the Bancroft Library, centered on California collections, and to build the Starr East Asian Library. Societies have been building libraries since ancient times, but it is remarkable that this work continues in a digital age. Do we need more space when so much information can be delivered to a computer screen? All of the ancient libraries, both buildings and collections, crumbled. Should we put more faith in modern libraries?

We will tackle these questions through background reading on how libraries evolved around the world and by questioning the professionals on the Berkeley campus who are building Bancroft and Starr. Architects, project managers, and librarians will be our guests and we will go on site with hard hats to see the two libraries take shape. You will see the drawings for both buildings and come to understand the functional and social objectives that guide the project.

While this seminar is about the built environment of your own school, it opens up wider public questions. How do we provide access to knowledge? Should we address individuals or groups? Is private giving consistent with public purpose?

Your reflections on these matters will be the only written assignment: a paper of about eight pages. It can be in the form of a journal, tracking your reactions each week. Or, you may sum up what seems most important at the end of the semester. Either way, you will be sure to give concrete examples from the material we covered. This writing is due Monday, December 17, 2007 (one week after the last class).

Assigned reading: Library: An Unquiet History by Matthew Battles

**Enrollment is limited to ten students. This seminar is part of the On the Same Page initiative: <http://onthesamepage.berkeley.edu>.**

Professor Thomas Leonard has published three books on the development of American media and leads one of the largest research libraries in the United States. He has taught in the Graduate School of Journalism since 1976 and is a past director of the Mass Communications Group Major.

### **Natural Resources 84, Section I**

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

**Professors Whendee Silver and Kate O'Neill**

**Thursday 5:00-6:00, Classroom A in Foothill I, CCN: 61312**

**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.**

Whendee Silver is a Professor in the Ecosystem Science Division of the Department of Environmental Science, Policy and Management. She received a B.I.S. in International Environment Studies from The School for International Training, and a Ph.D. in Ecosystem Ecology from Yale University. Her research addresses ecosystem ecology, terrestrial biogeochemistry, and tropical ecology, and integrates the basic science of C and nutrient dynamics with applied research into the effects of climate change and human impacts on the environment.

Kate O'Neill is an Associate Professor in the Society and Environment Division of ESPM. She has a BA in Philosophy, Politics and Economics from Oxford University, and a Ph.D. in political science from Columbia University. She is particularly interested in questions of global and comparative environmental politics and governance, ranging from the politics of the international trade in toxics, to the World Trade Organization, to the creation and implementation of international environmental agreements, to the

emergence of transnational protest movements. She has also published several articles on Mad Cow Disease.

**Peace and Conflict Studies 84, Section I**

**Peace on Earth, Golden Rules, and the World's Religions (2 units, P/NP)**

**Lecturer Americ Azevedo**

**Tuesday 2:00-4:00, 202 Wheeler, CCN: 66736**

Religions, which preach peace and love, are often blamed for causing the bloodiest wars. This is the great paradox of religion and war. Can we resolve it? The "golden rule" is expressed by all major world religions. "Do unto others as you would have them do unto you." Essentially, great religions are rooted in love. But we often see love replaced by fear and the hate that follows. Can the great world religions reaffirm their common roots? This will be a semester-long Socratic dialogue. Students will engage in thinking deeply on these issues. The weekly topic agenda may be modified as the collaborative group process deepens our inquiry.

Americ Azevedo has pursued a life-long study of world religions and spirituality, along with a continued commitment to Socratic & Bohmian dialogue. Though his background is in Philosophy, his business and teaching career have brought him extensively into the world of information technology, with an emphasis on collaborative technologies, e-learning, and their cultural implications. He is especially concerned with how we can maintain our humanity in an increasingly technological world. He has been at U.C. Berkeley since Fall 2000, and is currently teaching Time, Money, and Love in the Age of Technology (Engineering 24, section I), Theory and Practice of Meditation (PACS 94) and Introduction to Computers (Engin 110).

**Statistics 39D, Section I**

**Teaching Statistics with Demos, Activities, and Projects (2 units, P/NP)**

**Professor Deborah Nolan**

**Tuesday 5:00-6:30, 340 Evans Hall, CCN: 87413**

**The dates and times of the supervised teaching activities in a local high school will be discussed in class.**

The seminar is for students who are interested in improving their ability to communicate statistical concepts. It will include supervised teaching activities in a local high school, including the design and implementation of a hands-on activity for teaching a statistical concept. **This seminar is for students interested in majoring in statistics, or who are exploring the possibility of becoming a mathematics teacher. Students must have taken/be taking Statistics 2, or they must be willing to learn this material as part of the seminar.**

Deborah Nolan has been teaching at Berkeley since 1986. She is co-director of the Berkeley campus' Science Math Initiative, a program to increase the number of credentialed math and science teachers graduating from the UC system to 1,000 a year. Her interests include the use of technology in education and the teaching of statistics. She has co-authored two books: Stat Labs: Mathematical Statistics through Applications (2000, Springer-Verlag) with T.P. Speed and Teaching Statistics: A Bag of Tricks (2002, Oxford University Press) with A. Gelman.

## 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.

### **Classics 39H, Section I**

#### **The Trojan War: History or Myth? (4 units, LG)**

**Professor Kim Shelton**

**MWF 11:00-12:00, 140 Barrows Hall, CCN: 14739**

The infamous story, the epic battles, the characters and conflicts that have spanned the ages—the Trojan War has inspired countless generations cross-culturally in so many areas. But was there ever an actual war between two powerful Bronze Age Aegean cultures? Did Hektor and Achilles ever really clash on the battlefield? Did the Trojan Horse cause the destruction of a powerful city and its people? Was Helen really "a face that launched 1000 ships?" We will explore the evidence for the Trojan War, one of the greatest stories ever told: literary, historical, visual and archaeological. The history of the search for the reality behind Homer's epic and its scholarship will be examined as well as detailed analyses of the theories currently in play. Through reading, visual analysis, discussion and writing, students will discover for themselves the ancient world of the heroes and their legends. This seminar may be used to satisfy the Arts and Literature requirement in Letters and Science.

Kim Shelton is a faculty member in the Department of Classics and the Director of the Nemea Center for Classical Archaeology. She has two excavation projects in Greece, including the UC Berkeley Excavations at the Sanctuary of Zeus at Nemea and at the prehistoric Bronze Age site of Mycenae. She began excavating at a very young age and has never looked back. Her experience includes field work in this country as well as twelve years of full-time research in Greece. Other important personal facts include her cats named after famous archaeologists and her favorite Halloween costume - what else? Indiana Jones, whip and all. For more information regarding Professor Shelton, please visit her faculty web page at <http://shelton.berkeley.edu>.

### **Comparative Literature 41B, Section I**

#### **Forms of the Lyric: Lyric Time (4 units, LG)**

**Ms. Amanda Jo Goldstein**

**TuTh 11:00-12:30, 24 Wheeler Hall, CCN: 17301**

Attempting to give one name to the way many lyric poems seem at once to capture a humble instant and to initiate a "momentous" discourse outside time, Earl Miner asked, "In a double sense, is lyric not of moment?" From William Blake's attempts to harbor "Moments Satan cannot find," to Emily Dickinson's "Life" that "stood—a Loaded Gun," this course will examine the varied mischief lyric poems perform on standard clock-time and our perception of its irrevocable progression. How do meter and rhythm, repetition and elision, accelerate or suspend the progression of moments? To what extent might lyric apostrophe—which purports, with varying sincerity, to animate the dead, the insensate, the abstract—meaningfully evade finitude? What about the lapse between the time of writing and that of reading? Can the notoriously personal lyric genre claim relevance to social and collective history? Via a wide array of temporal distortions—from poems classed as Romantic, Symbolist, Modern and post-Modernist, among others—and accompanied by the genre theory that attempts to describe them, we will re-animate and contest the (suitably chronic) question, what is lyric? For more information regarding this seminar, please visit the Comparative Literature course website at

<http://ls.berkeley.edu/dept/complit/courses.php>. This seminar may be used to satisfy the Arts and Literature requirement in Letters and Science.

Amanda Jo Goldstein is a graduate student in Comparative Literature interested in aesthetics and medicine as rival (and related) sciences of perception, generation, and history. Her current work in early romanticisms (English, German, French) takes up scientific and literary models of generation, as well as questions of optics and visual imagination--and the political potentials and pretenses of these. She led a section in the English department's Modernism survey course (45C), and has taught Comp Lit R1A/B courses on "New York," "Ghosts," and "Muses."

### **Comparative Literature 41C, Section I**

#### **Novel Nations: Writing Nationality in Modern Narrative (4 units, LG)**

**Mr. Luis Ramos**

**TuTh 9:30-11:00, 123 Wheeler Hall, CCN: 17302**

In his landmark study on modern nationalism, Benedict Anderson identifies the novel as one of the principal vehicles by which the experience of national consciousness is transmitted. Taking Anderson's claim as its point of departure, this course will investigate the intimate, if vexed, relation the novel is said to maintain with the nation-form. In short, we will be concerned with the following kinds of questions: How do both categories of "novel" and "nation" offer distinctly new forms of representation? That is, what distinguishes both from previous modes of ordering literary and political life and of mediating subjective and collective experience? What textual strategies do novels employ in order to transmit the feeling of national consciousness toward readers? Conversely, what formal elements do novels have recourse to that disrupt or displace the nation in favor of alternate notions of community and belonging? Our approach, then, will be two-fold: Not only will we examine narratives of masculine conquest (Conrad) and emancipation (Márquez), but will be concerned with feminist versions of resistance (Desai) and self-awareness (Brontë). Not only will we broach representative works of European realism (Brontë) and modernism (Conrad), but will underscore the ways in which postcolonial fiction resists approaches to the novel that rely on unilinear conceptions of historical progression (Márquez) and economic development (Desai). Finally, not only will we examine each work in its textual singularity, but will make sense of the specific ways in which it corresponds (or collides) with the theoretical material brought forth in class. In so doing, students may expect to gain a fuller appreciation of both the limitations and possibilities of a branch of novel theory that takes the nation-form as its object of inquiry. For more information regarding this seminar, please visit the Comparative Literature course website at <http://ls.berkeley.edu/dept/complit/courses.php>. This seminar may be used to satisfy the Arts and Literature requirement in Letters and Science.

Luis Ramos is doctoral candidate in the Department of Comparative Literature, where he is at work on a dissertation on that deals with questions of democracy and revolution in twentieth-century Latin American fiction. His research interests include colonial and post colonial studies, as well as literatures from the Latin American, Francophone and Anglophone Caribbean. In addition to the IA and IB reading and compositions requirements, Luis Ramos has taught courses on US immigrant literatures in a transnational and comparative framework. 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.

### **Computer Science 39J, Section I**

#### **The Art and Science of Photography: Drawing with Light (2 units, P/NP)**

**Professor Brian Barsky**

**Tuesday 12:00-2:00, 405 Soda Hall, CCN: 26269**

**On the first day of instruction please meet Professor Barsky at 12:10 at the Foothill Dining Common at the long table in the main dining room near the windows at the opposite end of the room from where the food is dispensed. At 1:10 class will meet**



**in 405 Soda Hall. Additional Food for Thought dining arrangements will be discussed in class.**

This seminar explores the art and science of photography. Photographs are created by the control and manipulation of light. We will discuss quality of light for the rendering of tone, texture, shade, shadow, and reflection. The seminar examines the photographic process from light entering the lens through the creation and manipulation of the final image. Topics include composition and patterns, mathematics of perspective projection, refraction, blur, optics of lenses, exposure control, color science, film structure and response, resolution, digital image processing, the human visual system, spatial and color perception, and chemical versus electronic processing. Class assignments will be primarily based on color slides and secondarily on digital images. Although print film assignments are welcome, there are unfortunately no darkroom facilities available. Student work will be critiqued in class. To read an interesting article about this seminar, please see <http://inst.eecs.berkeley.edu/~cs39j/fa06/engnews/>. While this seminar is offered through the Computer Science Division, the focus of this seminar is not computer science. The focus of this seminar is photography. **The seminar is open to freshmen only. Students must have their own cameras to complete the course assignments. Students should have experience using a camera with manual control of exposure and focus that either has interchangeable lenses of different focal lengths or has a zoom lens. Students should have an interest in science (at least chemistry and physics). Student work will be critiqued in class. Participation and attendance at all classes is required to receive a "pass" grade, except for emergencies or prior arrangement with the instructor. Committee on Educational Policy states that 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.**

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 are CAD/CAM, computer-aided geometric design and modeling, computer graphics, geometric modeling, visualization in scientific computing, and computer-aided cornea modeling and visualization.

**Earth and Planetary Science 39A, Section I  
Geological Influences in California Society Today (2 units, LG)  
Professor Donald J. Depaolo  
MW 4:00-5:00, 145 McCone Hall, CCN: 19012**

**Field trip dates TBA. For additional field trip and meeting schedule details and updates, visit the seminar's website at <http://eps.berkeley.edu/courses/eps39/>.**

The theme of this course is the influence of geology in California society. As a freshman seminar, the class involves close personal interaction between students and senior 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 trips are preceded by two or three one-hour lectures and two or three video presentations. Students are expected to attend one logistical meeting for the section of the field trip they are attending. Each student goes on only one field trip: Group 1 or 2. Each group will take one continuous four-day trip to 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. Enrollment is limited to ~30 freshman students. The class will be split into two field-trip groups of a size small enough to ensure an interactive seminar experience. This course is restricted to freshmen only. If you have any questions regarding this seminar, please contact Margie Winn at 642-5574 or [margie@eps.berkeley.edu](mailto:margie@eps.berkeley.edu).

Donald Depaolo is a Professor of Geochemistry with the Department of Earth and Planetary Science. He is the Director of the Center for Isotope Geochemistry at UC Berkeley and the Lawrence Berkeley National Laboratory, and is the Department Head of the Geochemistry Department in the Earth Sciences Division at the Lawrence Berkeley National Laboratory.

**Environmental Economics and Policy 39A, Section I**  
**Critical Choices in the Use of Natural Resources (2 units, P/NP)**  
**Professor David Zilberman**  
**Wednesday 12:00-2:00, 116 Haviland Hall, CCN: 01218**

Natural resources in California are vast but finite, and demands on them are often in conflict. This seminar will examine the major decisions, private and public, that determine how our natural resources are managed and allocated. Drawing illustrations from their own work, members of the department will show the interplay of economic analysis with political and institutional factors in shaping public policies. Policy decisions on such subjects as pesticide use, forest preservation, water rights, dairy waste disposal, air pollution control, the Bay Delta ecosystem, and endangered species protection will be discussed. This seminar may be used to satisfy the Social and Behavioral Sciences requirement in Letters and Science.

Professor David Zilberman received his Ph.D. from UC Berkeley in 1979. His research interests include the effects of agricultural policies on the structure of agriculture, the economics of technological change, and the design of regional environmental policies. His current work targets water and pesticide problems. He was recently elected a Fellow of the American Agricultural Economics Association, and he has been published in many of the economics journals.

**German 39H, Section I**  
**The World of Yesterday: Vienna 1900 (3 units, LG)**  
**Professor Elaine C. Tennant**  
**MWF 11:00-12:00, 282 Dwinelle Hall, CCN: 37490**

For a few decades at the end of the nineteenth century, Vienna witnessed an extraordinary and unprecedented flowering of the arts, politics, philosophy, and industry. This cultural surge made Vienna the "city of dreams" and not a few nightmares. The capital of Austria-Hungary, Vienna had doubled in population since 1840; and while the mostly failed Revolution of 1848 had not succeeded in toppling the Habsburg monarchy, it had given the empire a constitution. Along the newly constructed Ringstrasse, a parade of monumental public buildings and grand residences separated the old central city from the suburbs that were mushrooming beyond it. Vienna in this period was a city of great variety, contrasts, and contradictions—ethnic, social, political, and economic. It was at once splendid and squalid, progressive and decadent. Fin-de-siècle Viennese society looked backward and forward at the same time. From the Hofburg and the Schönbrunn palace at the edge of town, Emperor Franz Josef maintained the aristocratic, Catholic tradition of the monarchy through social policies that were alternately enlightened and repressive. Downtown, artists, intellectuals, musicians, and businessmen from around the city and across the empire formed the coffeehouse set whose ideas shaped the Viennese Art Nouveau, the Zionist movement, the theory of psychoanalysis, and the Russian Revolution. This was the Vienna of Freud and Herzl, Hofmannsthal and Schnitzler, Bruckner and Mahler, Otto Wagner and Adolf Loos, Kokoschka and Schiele, but also of conservative Mayor Karl Lueger. Vienna in these years was preoccupied with beauty, feeling, and style, but also with class, racial, and ethnic prejudice. This brilliant chapter of the city's history, which saw the rise of the Secession, Young Vienna, and the Wiener Werkstätte, ended with the Great War. This seminar is about the remarkable aesthetic production that burgeoned in the conflicted social and intellectual climate of Vienna around 1900. We will concentrate primarily on literary and journalistic writers of the period, but will also sample the work of some of the great painters, decorative artists, and musicians who contributed to the unique atmosphere of Vienna in the prewar period. The syllabus is likely to include texts by Sigmund Freud, Arthur Schnitzler, Hugo von Hofmannsthal, Theodor Herzl, Robert Musil, and Franz Kafka; paintings and decorative art objects by Joseph Hofmann and Gustav Klimt; and a film by Max Ophüls. **Students should have sophomore standing and an interest in**

**the subject of the course. Previous knowledge of German is not required. Students with a background in German, however, are welcome (indeed encouraged) to do some of the assigned readings in the original language.** This seminar may be used to satisfy the Arts and Literature requirement in Letters and Science.

Elaine Tennant took her Ph.D. in Germanic Languages and Literatures at Harvard. Her main areas of research are the Habsburg court society in the 15th and 16th centuries, information management in the first century of printing, the development of the German language at the end of the Middle Ages, and the Middle High German narrative tradition. She conducts most of her primary research in Austria. Her publications include a monograph on the emergence of the German common language, a study of vocalism in sixteenth-century German primers, and essays on such topics as Gottfried's *Tristan*, word and image in early modern Germany, gender dynamics in the *Nibelungenlied*, New Historicism, intellectual property, and European responses to the discovery of the Americas.

**History 39K, Section I**  
**Medicine in American Society Since 1880 (4 units, LG)**  
**Professor John Lesch**  
**Wednesday 2:00-4:00, 202 Wheeler Hall, CCN: 39233**

The years since 1880 have witnessed tremendous changes in American society and in medicine. This course will examine some of these changes through readings, discussion, and writing on selected topics that illustrate the relationships between society and medical knowledge, organization, and practice. Topics include the germ theory of disease and its popular meanings and uses, medicine in literature, widespread belief in and use of vitamins, controversies surrounding the diagnosis and treatment of breast cancer, medicine and race, venereal diseases, the pharmaceutical revolution, and the HIV/AIDS pandemic. Course requirements include several papers. This seminar may be used to satisfy the Historical Studies or Social and Behavioral Sciences requirement in Letters and Science.

Professor Lesch has a long-standing interest in the history of the life sciences and medicine. His publications include works on eighteenth- and nineteenth-century science and medicine, and he has just published *The First Miracle Drugs: How the Sulfa Drugs Transformed Medicine* (Oxford).

**History 39Q**  
**Manners and Mind in the Early American Republic (4 units, LG)**  
**Visiting Lecturer Marshall Foletta**  
**Thursday 12:00-2:00, 180 Barrows, CCN: 39915**

In the half century after the Revolution, Americans built a distinct national culture. At the center of this culture lay a novel set of political ideas. But alongside these there also emerged new religious ideas and practices, new ideas about art and literature, new forms of entertainment, and a series of new social attitudes and behaviors. In this course, we will explore the cultural developments of the early national period. After examining the political ideas of certain seminal figures--Thomas Jefferson, Thomas Paine, James Madison and Alexander Hamilton--we will examine a wider range of American intellectual and cultural developments including the religious innovations of the Second Great Awakening, the significance of new leisure activities such as prize fighting, changing ideas about men and women, courtship and sex, and the construction of new codes of etiquette. This seminar may be used to satisfy the Social and Behavioral Sciences or Historical Studies requirement in Letters and Science.

Marshall Foletta has been a lecturer in the history department since 2001. His research focuses on the literary, religious, and cultural developments of the early nineteenth century. His publications include *Coming to Terms with Democracy: Federalist Intellectuals and the Shaping of an American Culture* (2001).

**History 39X, Section I**  
**Baseball in American Society and Culture (4 units, LG)**  
**Professor David Henkin**  
**Tuesday 2:00-4:00, 2525 Tolman Hall, CCN: 39234**

This seminar explores the history of baseball as a spectator sport in the United States, paying special attention to the way that history fits into larger developments in American labor, leisure, urban life, popular entertainment, and consumer culture from the early part of the nineteenth century to the present. Course requirements include significant weekly reading assignments, short writing submissions, and active participation in seminar discussions. **You need not be a baseball fan to take this course, so long as you are interested in (or seriously puzzled by) the place of baseball in American life. The course will not deal with sports trivia, current teams and players, or theories of player value and performance. It is a History class, with an emphasis on understanding the nineteenth-century origins of the modern culture of spectatorship.** This seminar may be used to satisfy the Historical Studies or Social and Behavioral Sciences requirement in Letters and Science.

David Henkin, Associate Professor of History, has been on the UC Berkeley faculty for ten years. His undergraduate lecture courses mostly cover the cultural history of the United States during the nineteenth century, but include classes on Broadway, urban literature, slavery, and the historical craft. He is the author of *City Reading* (1998) and *The Postal Age* (2006). Raised in New York City, he dislikes both the Mets and the Yankees.

**History 39Z, Section I**  
**Hunger: A Modern History. (4 units, LG)**  
**Professor James Vernon**  
**Wednesday 10:00-12:00, 2303 Dwinelle Hall, CCN: 39912**

Hunger is as old as history itself. And yet, while it often appears to be a timeless and unchanging condition, our perceptions of hunger and of the hungry have changed over time and differed from place to place. At the beginning of the nineteenth century, hunger had been viewed as an unavoidable natural phenomenon, or the fault of the hungry themselves. By the middle of the twentieth century, a new understanding of hunger had taken root as humanitarian groups, political activists, social reformers, and nutritional scientists established that the hungry were innocent victims of political and economic forces beyond their control. Hunger was now seen as a global social problem that required new forms of government and welfare if it was to be defeated. This course traces this momentous shift as it first occurred in modern, imperial Britain over the past two centuries. Although the focus is on Britain and its empire, the course is centrally concerned with how and when the war on hunger became globalized through international NGOs and organizations like the League of Nations and the United Nations. This seminar may be used to satisfy the Historical Studies or Social and Behavioral Sciences requirement in Letters and Science.

James Vernon is an Associate Professor in the Department of History and is the Director of the new Center for British Studies. For more information regarding Professor Vernon, please visit his faculty webpage at <http://history.berkeley.edu/faculty/Vernon/>.

**Integrative Biology 39C, Section I**  
**The Field of Veterinary Medicine (2 units, P/NP)**  
**Dr. Helen E. Diggs and Dr. Gregory B. Timmel**  
**Thursday 2:00-4:00, 4110 Valley Life Sciences Building, CCN: 43012**

**Field trip arrangements will be discussed in class.**

The field of veterinary medicine encompasses a diverse group of careers all connected to professional animal health care. As examples, veterinarians work in the areas of public health, governmental regulatory medicine, teaching and research, private clinical practice, uniformed services, private industry, anthropology, food production, aquaculture, environmental medicine and science, and zoological or wildlife medicine. Are you interested in a career in veterinary medicine? You should have an inquiring mind, keen powers of observation, and an aptitude and strong interest in the biological sciences. Veterinarians not only enjoy working with a wide variety of animals but must also have excellent interpersonal skills. The goal of this course is to provide the student with a brief history and overview of the field of veterinary medicine and to provide the facts and realities regarding a veterinary career. Students will be expected to participate actively in class discussions, complete reading assignments, take a weekly review quiz, and attend scheduled field trips.

Helen E. Diggs, MEd, DVM is the Director of the Office of Laboratory Animal Care and the Consulting Veterinarian for University of California System-wide campuses. She received her veterinary degrees from Oregon State University and Washington State University and is licensed to practice veterinary medicine in the states of Washington, Oregon and California. She is a Board Certified Specialist in the American College of Laboratory Animal Medicine. Her research interests are in the area of public health, and zoonotic diseases.

Gregory B. Timmel, MS, DVM is a Clinical Veterinarian for the Office of Laboratory Animal Care. He received his veterinary degree from Colorado State University. He is licensed to practice veterinary medicine in California and Hawaii. His research interests include the behavioral enrichment of captive animals, avian/exotic animal medicine and veterinary anesthesia.

**Journalism 39H, Section I**  
**Satellite Radio: Breaking the Bonds of Earth (1.5 units, P/NP)**  
**Professor William J. Drummond**  
**Friday 12:30-2:00, 104 North Gate Hall, CCN: 48006**

Dramatic changes have taken place in the listening habits of consumers. Traditional AM and FM radio face a challenge from programming sources literally not of this earth. Satellite radio entered the scene only about five years ago and has made significant inroads. Two services are available: XM and Sirius. Both services offer a wider selection of music as well as talk and entertainment programming than terrestrial radio. This seminar will listen to and critique satellite radio. Students should be prepared to listen critically and write about their reactions to what they are hearing. The class will also examine other advances in audio technology. The goal is to develop an understanding of market forces in present-day radio programming.

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.

**Native American Studies 90, Section I**

**Myth, Memory, and History: Understanding Native America (4 units, LG)**

**Visiting Lecturer Diane Pearson**

**MWF 11:00-12:00, 166 Barrows Hall, CCN: 61124**

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

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

**Nuclear Engineering 39A, Section I**

**Issues in Nuclear Science and Engineering (2 units, LG)**

**Professor Per Peterson**

**MW 1:00-2:00, 3113 Etcheverry Hall, CCN: 64008**

This seminar is an introduction to technical, social, institutional, and ethical issues that arise in the field of nuclear engineering: nuclear reactions and radiation, radiation protection, nuclear energy production and utilization, the nuclear fuel cycle, reactor safety and risk, controlled fusion, nuclear waste, medical and other applications of radiation, and nuclear nonproliferation and arms control. This seminar may be used to satisfy the Physical Sciences requirement in Letters and Science.

Per F. Peterson is Professor and Chair of the Department of Nuclear Engineering.

**Optometry 39B, Section I**

**The Developing World: Profound Challenges, Needs, and Opportunities—An Example Applied to Eye Care in India (2 units, P/NP)**

**Professor Jay Enoch**

**TuTh 2:30-4:00, 394 Minor Hall, CCN: 65503**

**This seminar will meet the first five weeks of the semester. There are also two late afternoon and evening sessions which will be added towards the end of the period of time in which the class meets.**

The developing world and its profound problems will remain with us throughout our lifetime. Continued population growth, rapid aging of these populations and provision of care for the aged; questionable adequacy of harvests, greatly increased health needs (for example, the HIV-AIDS epidemic); often inadequate schooling; the caste system, and religion and the family as foci of society; the roles and needs of men and women; and many other problems all contribute to the complex of issues that need to be faced in these environments. While these problems are enormous, individuals (singly or working together) can make a difference. There are opportunities, and these people are both cooperative and willing to share in their development. One must limit oneself to a defined problem set. In this symposium, we will explore this complex of issues, and the teacher will define those things he was/is able to achieve (and problems and difficulties encountered) in the field of eye and vision care during more than a decade of active participation in India. With India's population passing the one billion mark, the importance of

addressing the very great needs of India and other developing countries are emphasized. Individuals will be encouraged to participate actively in discussions, and to examine situations in other countries to better understand both existing problems and opportunities. Students will be asked to prepare oral presentations and written materials on related issues of personal interest. This course is also listed as South and Southeast Asian Studies 39C (CCN: 83112). This seminar may be used to satisfy the International Studies or Social and Behavioral Sciences requirement in Letters and Science.

Dean Emeritus and Professor of the Graduate School Jay M. Enoch maintained a research laboratory in Madurai in Tamil Nadu State for many years. In 1985, he helped start a successful college in Madras (Chennai) in Tamil Nadu, and he is currently involved in developing graduate programs at the latter institution to help train additional teachers/researchers, and is participating in the organization of additional new college programs in India.

**Political Science 41, Section I  
Choosing a President (4 units, LG)**

**Professor David Karol**

**Tuesday and Thursday 10:30-12:00, 706 Barrows Hall, CCN: 71462**

This freshman seminar will offer a broad perspective on the nomination and election of U.S. Presidents from the Founding down to the current campaign. It will emphasize changes and continuities in the form and behavior of political parties and in the modes of campaigning. **Enrollment is limited to freshmen.** This seminar may be used to satisfy the Historical Studies or Social and Behavioral Sciences requirement in Letters and Science.

David Karol is one of the newest members of the department. He is a specialist in American politics with interests in political institutions, parties, interest groups/social movements and American political development. A product of UCLA's Political Science Department, he was a Visiting Scholar at the Center for the Study of Democratic Politics at the Woodrow Wilson School of Public and International Affairs at Princeton University in 2002-2003. David Karol's work has appeared in *International Organization* and *Brookings Review* and is forthcoming in the *Journal of Politics and Studies in American Political Development*. He is a co-author (with Marty Cohen, Hans Noel and John Zaller) of "Beating Reform" (forthcoming, University of Chicago Press), a study of the revived role of party establishments in determining presidential nominations in the post-reform era. His current research focuses on how and why political parties and institutions change policy positions. In related work he addresses the question of how the House, Senate and Presidency came to have predictable relative positions on trade policy.

**Slavic Languages and Literatures 39K, Section I  
Boredom (3 units, LG)**

**Professor Luba Golburt**

**MWF 2:00-3:00, 258 Dwinelle Hall, CCN: 79757**

"This book is so boring!" is a reaction that you might have often heard or even voiced yourself. What does boredom mean? In this seminar, we will read several interesting (not boring!) classic works of nineteenth-century Russian literature that consider the multiple meanings and consequences of boredom. As works of social criticism, these narratives treat boredom, a shared mental state, as a sign of society's corruption and decadence. As narrative experiments that are meant to offer diversion, they approach boredom as a challenge: how to make the bland and monotonous interesting to the reader, how to create a captivating plot that is initiated and propelled by its characters' boredom? Framing our readings of nineteenth-century Russian fiction with theoretical writings on the psychology and philosophy of boredom (from the reader), we will explore broader questions of realism, ordinariness, entertainment, narrative construction, and reader response. Texts will include *A Hero of Our Time* by Mikhail Lermontov, *Oblomov* by Ivan Goncharov, *A Boring Story* by Anton Chekhov, *Lady Macbeth of the Mtsensk District* by Nikolai Leskov and *Anna Karenina* by Leo Tolstoy. **This course is intended for freshmen and sophomores who have an interest in literature, psychology, philosophy and history.**

**Students should expect to read around 150 pages a week. Knowledge of Russian is not required, but students who want to read the novels in the original are encouraged to do so.** This seminar may be used to satisfy the Arts and Literature requirement in Letters and Science.

Luba Golburt specializes in eighteenth- and nineteenth-century Russian literature and culture. She is especially interested in genre theory, visual culture, literary polemics, readership and consumer practices.

**South and Southeast Asian Studies 39C, Section I  
The Developing World: Profound Challenges, Needs, and Opportunities—An Example Applied to Eye Care in India (2 units, P/NP)  
Professor Jay Enoch  
TuTh 2:30-4:00, 394 Minor Hall, CCN: 83112**

**This seminar will meet the first five weeks of the semester. There are also two late afternoon and evening sessions which will be added towards the end of the period in which the class meets.**

The developing world and its profound problems will remain with us throughout our lifetime. Continued population growth, rapid aging of these populations and provision of care for the aged; questionable adequacy of harvests, greatly increased health needs (for example, the HIV-AIDS epidemic); often inadequate schooling; the caste system, and religion and the family as foci of society; the roles and needs of men and women; and many other problems all contribute to the complex of issues that need to be faced in these environments. While these problems are enormous, individuals (singly or working together) can make a difference. There are opportunities, and these people are both cooperative and willing to share in their development. One must limit oneself to a defined problem set. In this symposium, we will explore this complex of issues, and the teacher will define those things he was/is able to achieve (and problems and difficulties encountered) in the field of eye and vision care during more than a decade of active participation in India. With India's population passing the one billion mark, the importance of addressing the very great needs of India and other developing countries are emphasized. Individuals will be encouraged to participate actively in discussions, and to examine situations in other countries to better understand both existing problems and opportunities. Students will be asked to prepare oral presentations and written materials on related issues of personal interest. This course is also listed as Optometry 39B (CCN: 65503). This seminar may be used to satisfy the International Studies or Social and Behavioral Sciences requirement in Letters and Science.

Dean Emeritus and Professor of the Graduate School Jay M. Enoch maintained a research laboratory in Madurai in Tamil Nadu State for many years. In 1985, he helped start a successful college in Madras (Chennai) in Tamil Nadu, and he is currently involved in developing graduate programs at the latter institution to help train additional teachers/researchers, and is participating in the organization of additional new college programs in India.



**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, 242 Dwinelle Hall, CCN: 83115**

In this seminar, students will read fifteen 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 two five-page research papers. This seminar may be used to satisfy the Arts and Literature or Social and Behavioral Sciences requirement in Letters and Science.

Kausalya Hart (M.A., Annamalai University, 1962) is the author of Tamil for Beginners, Tamil Madu, and Tamil Tiraipadam (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.