The Freshman Seminar Program

The courses described in this publication are designed specifically to provide an opportunity for small groups of entering students to work with a faculty member on a scholarly topic of mutual interest. These courses 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.

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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.

Anthropology 24, Section 1
Native Maya and Aztec Literature from the Sixteenth Century (LG)
Professor Rosemary Joyce
Tuesday 1:00-2:00, 2251 College Avenue in Room 101, CCN: 02589
This course will provide an opportunity for interested students to read poetry, mythology, and history written in native languages by Maya and Aztec authors in the sixteenth century. Using the Roman alphabet introduced by the Spanish, Maya and Aztec scribes recorded their own rich oral tradition of spoken poetry, and created new compositions that integrated native texts and oral literature. While some of these texts were recorded for Spanish administrators and missionaries, much was written for indigenous audiences. We will draw on the many excellent modern translations to explore the poetics and literary imagination of the first few generations of Maya and Aztec people living under the new colonial regime.

Professor Rosemary Joyce, a Professor in the Department of Anthropology, specializes in the study of the ancient societies of Central America. She received her B.A. from Cornell University in 1978, her Ph.D. from the University of Illinois-Urbana in 1985, and was curator, assistant director, and a professor of anthropology at Harvard University from 1985 to 1994. She conducts archaeological fieldwork in Honduras, currently emphasizing the period before 1000 BC, and has published widely on Maya art and on gender, sexuality, and the body in prehispanic societies.

Chemical Engineering 24
An Introduction to Chemical Engineering: Traditional Careers and New Directions (P/NP)
Professor David Graves
Tuesday 4:00-5:00, 88 Haas Pavilion, CCN: 10403
This course is intended to be an introduction to chemical engineering, with descriptions of both traditional careers and the variety of new directions being taken in the profession. Traditional areas of employment include process, design and control engineering in the chemical, petroleum, food and pharmaceutical industries. Newer areas include biotechnology and life science applications, environmental applications, and semiconductor manufacturing. The goal is to provide some context for students who have chosen chemical engineering as a major or who are simply interested in a better understanding of chemical engineering and its evolution as a profession. Basic chemical engineering concepts in physical and mathematical models will be illustrated in a series of case studies.

David B. Graves is a Professor in the Chemical Engineering Department. His research area is plasma processing for microelectronics manufacturing; the use of ionized gases for surface modification of thin solid films. He serves as a consultant to several semiconductor equipment and chip manufacturing companies.

HELPFUL THINGS TO REMEMBER:
For late additions and last-minute changes, check the Freshman Seminar Program website at http://fsp.berkeley.edu.
You may enroll in only one seminar during Phase One of TeleBEARS, so choose carefully!
Review the entire Freshman Seminar Program brochure for seminars of interest. There are many hidden treasures: topics offered in unexpected departments. See additional boxes for a few samples. You can find the rest.
Select a couple of alternatives in case the seminar you are most interested in is full.
If you are enrolled, be sure to show up for the first session. Otherwise, you may be dropped from the course.
If you are on the wait list, be sure to show up for the first session. You may be added if enrolled students do not attend.

For updates, visit the FSP website at http://fsp.berkeley.edu.
Civil and Environmental Engineering 24, Section 3
Superstructures – Engineering Wonders (P/NP)
Professor Juan M. Pestana
Wednesday 2:00-3:00, 210 McLaughlin Hall, CCN: 13903

This seminar will focus on interdisciplinary issues involved in the construction of large superstructures ranging from skyscrapers to tunnels, from nuclear submarines to the International Space Station. One common element in all of these projects is the intricate nature of engineering design focused on large integrated systems and the incorporation of the new technologies for smart or intelligent structures. Professor Pestana received his M.S. and Sc.D. in Civil and Environmental Engineering from the Massachusetts Institute of Technology and joined the faculty at UC Berkeley in 1994. He is a licensed civil engineer in the state of California and he is a consultant in geotechnical and geoenvironmental engineering. His professional and research interests include the numerical modeling of geomechanics, seismic soil structure interaction and geoenvironmental problems in general. He offers graduate and undergraduate courses in the areas of soil mechanics and numerical modeling in Geomechanics.

Civil and Environmental Engineering 24, Section 4
California Water: Past, Present, and Future (P/NP)
Professors John A. Dracup and Kara L. Nelson
Wednesday 11:00-12:00, 217 McLaughlin Hall, CCN: 13906

This seminar will focus on California's water quantity and quality issues and problems in the past, present, and future. The first part of the course will provide a historical perspective on the development of water systems, including UC Berkeley's water supply from Strawberry Creek as well as the major water systems in California. Next, the current major water controversies that affect the state will be discussed, such as the division of water between agriculture, municipal, and industry; the reuse of treated wastewater; chlorination of drinking water and disinfection byproducts; privatization of water services; water as a regulation on growth; and whether California will eventually run out of water. There will be a focus on paradigms for water supply and ecosystem management in an era of environment enhancement and growing population.

Professor Dracup teaches and conducts research in water resources and hydrology. His undergraduate courses include fluid mechanics and the Design of Water and Environmental Systems. He currently teaches a graduate course on Global River Basins in Conflict. His research is in the area of the impact of climate variability and climate change on hydrologic processes. Professor Nelson teaches and conducts research on water quality. She teaches an undergraduate course on the principles of environmental engineering and science. Her graduate courses are on physical-chemical environmental processes and the control of waterborne pathogens. Professor Nelson's research interests include natural systems for water and wastewater treatment and the detection and inactivation of pathogens in water and sludge.

Civil and Environmental Engineering 24, Section 5
Skyscrapers and the World Trade Center (P/NP)
Professor Abolhassan Astaneh
Wednesday 11:00-12:00, 4 Evans Hall, CCN: 13909

This seminar discusses skyscrapers first; how they are designed and constructed; what motivates us to build them; and who designs and constructs them. Then for the remainder of the semester we will focus on the World Trade Center. Topics will include the initial design and construction of the World Trade Center, the 1993 unsuccessful terrorist attack on it, and the attacks in 2001 that resulted in the tragic collapse of the towers and the loss of lives of more than 3000 innocent people. Finally, the plans for rebuilding the World Trade Center will be presented. Although the focus of the course is on design and construction aspects of skyscrapers and the World Trade Center, other aspects such as economic, political, social and historical issues will not be excluded from the discussion. The students are expected to participate in classroom discussions and select a topic related to the course title and prepare and submit a three-to-five page term report on the subject.

Professor Astaneh is a member of the faculty in the Department of Civil and Environmental Engineering. His area of specialty is behavior as economical, political, social and historical issues will not skyscrapers and the World Trade Center, other aspects such as economic, political, social and historical issues will not be excluded from the discussion. The students are expected to participate in classroom discussions and select a topic related to the course title and prepare and submit a three-to-five page term report on the subject.

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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.

Comparative Literature 24, Section 2
Stories about Stories (P/NP)
Professor Kathleen McCarthy
Monday 4:00-5:30, 235 Dwinelle Hall, CCN: 17268

Although we tend to take for granted many of the forms of story-telling that we use in everyday life, putting together narratives and understanding them depend on a number of complex processes that draw together our intellectual, social and aesthetic lives. In this class, we will look at a small set of texts, representing a variety of genres and media, in which the story is about the ways that people organize and make sense of (as well as make use of) narrative. The four major texts we will study are an ancient Roman novel (Apuleius’ The Golden Ass), a contemporary Irish novel (Deane’s Reading in the Dark), a film (Kurosawa’s Rashomon) and a semi-fictional travelogue about post-communist Albania (Jones’ Biograph). There will be some brief writing exercises to help students synthesize the ideas of the course, but no major paper. This seminar will meet for ten weeks, beginning September 8, 2003 and ending November 17, 2003.

Kathleen McCarthy teaches in the Departments of Classics and Comparative Literature. She is currently working on a project that focuses on narrative, and especially characterization, in Latin poetry.

Comparative Literature 24, Section 3
The Golden Age of Arabic Literature: The Early Abbasid Period in Baghdad (132/750-334/945) (P/NP)
Professor James T. Monroe
Thursday 1:00-2:00, 211 Dwinelle Hall, CCN: 17479

This seminar will focus on representative readings in verse and in prose, from Arabic authors writing at the caliphal court in Baghdad from the eighth to the tenth centuries, a period considered by many to constitute the Golden Age of Arabic literature. Poems and prose works will be analyzed in translation, while close references to the original Arabic will be provided. At the end of the course, a brief term paper will be expected.

Professor James T. Monroe is a specialist in Arabic literature who teaches in the Departments of Comparative Literature and Near Eastern Studies. He has authored numerous publications in the field.

Demography 24
The National Family: Marriage and Childbearing in Modern America (P)
Professor Jennifer Johnson-Hanks
Tuesday 10:00-11:00, 2232 Piedmont Avenue in Room 100, CCN: 18203

This course will examine contemporary American families as things made on purpose—that is, as the products of legal, political, and individual decisions. We will closely read and discuss four recent, semi-popular books about American families (The Case for Marriage; Families of Two; Making Babies, Making Families; and Families We Choose). Throughout, the course will address three questions. First, how do people make decisions about when and whom to marry, and whether, when and how to have children? Second, organizations (e.g. the courts, legislatures, insurance companies, etc.) also make effective decisions about the forms of American families? Third, is there a way of thinking about family-making outside the framework of individual rational action and choice?

Jennifer Johnson-Hanks is an Assistant Professor of Demography, whose research focuses on the social organization of marriage and childbearing in West Africa (Cameroon and Burkina Faso).

Earth and Planetary Science 24, Section 1
From Geologic Maps to Earth History (P/NP)
Professor Walter Alvarez
Monday 3:00-4:00 pm, 55A McConell Hall, CCN: 19024

In 1815, William "Strata" Smith published the first map that showed where different kinds of rocks occur on the surface of the Earth. His accurate and beautiful geologic map of England was the key to understanding the history of the Earth, which is recorded in the layers of sedimentary rocks. Geologic maps continue to be the primary tool of field geologists, valued for the scientific data they contain, as well as for their romance and mystique. We will examine many fascinating geologic maps, and learn how they are made and how to interpret them as documents of Earth history. This Freshman Seminar is open to students who have taken or are currently enrolled in at least one of the following courses: Earth and Planetary Science 50, Math 1A, Physics 7A or Chemistry 1A.

Walter Alvarez is a Professor in the Department of Earth and Planetary Science. He was the geologist on the Berkeley research team that discovered the first evidence that impact caused the extinction of the dinosaurs, and was involved later in the proof that the Chicxulub Crater in Mexico was the site of that impact. He is a member of the National Academy of Sciences, and is one of the major advisors for the Department of Earth and Planetary Science.

Education 24
Civil Rights Law in Higher Education (LG)
Sheila O’Rourke
Wednesday 2:00-4:00, 2525 Tolman Hall, CCN: 23524

This seminar will provide an introduction to civil rights issues in higher education such as affirmative action, race discrimination, sexual harassment, sex discrimination, regulation of hate speech, and civil rights protections for lesbian/gay/bisexual students. Reading materials will include actual court cases involving colleges and universities, as well as articles and commentaries. Students will be expected to complete weekly reading assignments and participate in classroom discussions. This seminar will meet the first ten weeks of the semester. The instructor will hold office hours from 3:30-4:00 after class.

Sheila O’Rourke is Executive Director and Special Assistant to the Provost in the Academic Personnel Department of the University of California Office of the President. She was formerly the Assistant Provost for Academic Compliance at the Berkeley campus. She received her J.D. from Boalt Hall and is a member of the California Bar. She previously served as a civil rights attorney for the U.S. Department of Education, Office for Civil Rights, where she was responsible for the enforcement of federal civil rights laws in education. She has taught constitutional law at the University of San Francisco Law School and legal writing at Stanford Law School.

Electrical Engineering 24
Gadgets Electrical Engineers Make (P/NP)
Professor Jeffrey Bokor
Wednesday 1:00-2:00, 125 Cory Hall, CCN: 25257

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 will take a look at what is 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 is a Professor of Electrical Engineering and Computer Sciences. After twelve years at Bell Laboratories, he joined the UC Berkeley faculty in 1992. His research is on the ultimate limits of integrated circuit technology.

English 24, Section 1
Writing the High Sierra (P/NP)
Professor Susan Schweik

For updates, visit the FSP website at http://fsp.berkeley.edu. Freshman Seminar Program Fall 2003 - Page 3
English 24, Section 4

**Visual Culture and Autobiography (P/NP)**

**Professor Hertha D. Sweet Wong**

**Tuesday 5:00-7:00, 305 Wheeler Hall, CCN: 28505**

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, postindustrial 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, hatepages, "zones," and more. Course requirements include attendance, participation, completion of in-class activities, and a short course journal. This seminar will meet the first eight weeks of the semester, beginning August 26, 2003 and ending October 14, 2003.

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.

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English 24, Section 5

**Contemporary Irish Theater:**

**The Plays of Brian Friel (P/NP)**

**Professor Robert Tracy**

**Monday 3:00-5:00, Library in Unit Three at 2400 Durant Avenue, CCN: 28508**

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. This seminar is part of the new Freshman Seminar Program Dinner Series and Professor Tracy looks forward to dining with his students after each seminar meeting between 5:00 – 7:00 p.m. in the Unit Three Dining Commons. This seminar will meet for eight weeks, beginning September 15, 2003 and ending November 3, 2003.

Robert Tracy is Emersus 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 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.

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English 24, Section 6

**Reading Medieval English (P/NP)**

**Professor Steven Justice**

**Wednesday 3:00-4:00, 262 Dwinelle Hall, CCN: 28510**

This will be an introduction to the English language, and the literature written in it, before about 1500. In the first five weeks, students will learn how to pronounce Old English, and to read simple sentences in it (Old English is virtually a foreign language to speakers of Modern English). For the rest of the semester, we will study the development of Middle English (the language of Chaucer), learn to pronounce and read it, and gain some acquaintance with the variety of writing from this period. We will spend a lot of time becoming familiar with the sound and workings of Old and Middle English by reading aloud.

Steven Justice is an Associate Professor of English. His research concerns the political and religious cultures of the western Middle Ages.

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Environmental Science, Policy and Management 24, Section 1

**Discussions on Evolutionary Biology (P/NP)**

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For updates, visit the FSP website at [http://fsp.berkeley.edu](http://fsp.berkeley.edu). Freshman Seminar Program Fall 2003 - Page 4
Professor Philip Spieth
Wednesday 3:00-4:00, 2301 Tolman Hall, CCN: 30466
Discussions on Evolutionary Biology is a seminar for freshmen that explores the intellectual excitement of evolutionary biology and examines its significance for understanding how we live. 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. For more information, please visit the seminar’s website at http://cnr.berkeley.edu/~pts.

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 1964, 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 2
Sustainable Gardening (P/NP)
Professor Oenes C. Huisman
Tuesday 2:00-3:00, 139 Mulford Hall, CCN: 30469
In this seminar, we will utilize gardening as a vehicle for examining issues surrounding sustainability. How do gardening practices contribute to environmental problems? What can be done to minimize environmental impacts? How do the long-term impacts of organic, sustainable and conventional gardening compare? Topics will include soil fertility (nurturing it and the soil ecosystem), mining the soil (nutrient cycles and their disruption), working with nature (promoting bio-diversity, biological control, and symbiotic and beneficial interactions), unintended consequences (pesticide and fertilizer side effects, the good and the bad of lawns, loss of biodiversity), and the local and the global (indirect costs and effects, preserving the genetic base—heirloom cultivars and wild species).

Professor Oenes Huisman is a plant pathologist who works on soil-borne plant pathogens. His research program is directed at understanding the ecology and population dynamics of fungi that attack plant roots, and he is working on developing biological control of wilt pathogens as well as other environmentally friendly control measures. Professor Huisman teaches two upper-division courses titled Microbial Ecology and Urban Garden Ecosystems. One of his hobbies is gardening; he has a strong interest in the science behind environmentally responsible gardening.

Environmental Science, Policy, and Management 24, Section 4
Issues in Natural Resource Conservation (P/NP)
Professor David L. Wood
Friday 9:00-10:00, 139 Mulford Hall, CCN: 30472
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; adopt a stream in the San Francisco Bay Area; the competition for water; and many more topics to be selected by the students. 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.

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/free interactions.

Environmental Sciences 24
Sustainability: The Future Is Now (P/NP)
Professor William B. N. Berry
Wednesday 4:00-5:00, 55A McCone Hall, CCN: 33727
This seminar involves discussion of issues involved in sustaining our resources and environment. Topics to be discussed include green buildings–sustainable architecture for the future; the energy-transportation-air-quality-health connections; managing our wastes; uses and abuses of our water; impacts of purchasing decisions on materials and resources; and habitat development and fragmentation–a look at local examples of the Alameda County whipsnake and California red-legged frog.

Professor Berry teaches introductory courses in environmental sciences, environmental geology, and climate changes through time. As well, he teaches a course in Bay Area Environmental Issues and topics in environment, health and safety. He conducts research that involves undergraduates in local environmental restorations.

Ethnic Studies 24
Multiracial/Multiethnic Democracy (P/NP)
Professor Carlos Muñoz, Jr.
Wednesday 10:00-11:00, 104 Genetics and Plant Biology Building, CCN: 34217
This seminar will examine the challenge of establishing a multiracial and multiethnic democracy in the United States during the twenty-first century.

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.

Film Studies 24, Section 1
The Idea of Recording (P/NP)
Professor Mark Sandberg
Thursday 9:00-10:30, 226 Dwinelle Hall, CCN: 34820
This seminar takes as its topic of discussion the historical, philosophical, and representational implications of the idea of recording. Throughout the course, we will be reading historical and theoretical reactions to the disjunction of time and space introduced by the recording of sound and image. We will also watch five different films that deal explicitly with the issue of recording and discuss more generally the transformation of the idea of recording in our own age. There will generally be a single short essay to read or a film (available in the Moffitt Media Center) to watch before each discussion. The readings will be of two kinds: 1) an interesting historical reaction to the invention of a new technology, or 2) a later theoretical examination of the implications of a recording medium. Course requirements: Since this is a discussion oriented, P/NP, one-credit course, the emphasis will be on attendance, participation, and in-class presentations. This seminar will meet the first eleven weeks of the semester.

Mark Sandberg is an Associate Professor of Scandinavian and Film Studies. He has published and researched a wide variety of topics in early film history and late nineteenth-century visual culture. For more information, please see Professor Sandberg's biography on the website at http://filmstudies.berkeley.edu/faculty_bios/sandberg.html.

French 24
Rabelais in English: Humor and Violence (LG)
Professor Timothy Hampton
Wednesday 11:00-12:00, 192 Barrows Hall, CCN: 35705
François Rabelais is the most influential prose writer of the French Renaissance and one of the greatest humorists in European literature. His exorbitant tales of the giants Gargantua and Pantagruel offer a hilarious parody of early modern society and helped to found the genre of the novel in Western Europe. Yet Rabelais’s work is also marked by scenes of extraordinary violence, misogyny, and paranoia. His works have often been seen as morally “dangerous,” and have been censored almost since the day of their first publication. In this seminar we will consider the relationship between violence and humor in Rabelais. We will read carefully through Gargantua and Pantagruel in English translation. The instructor will provide brief historical background and we will read several theoretical essays on violence and literary representation. However our main focus will be on our experience of reading the text, and on our conversations about it. The seminar will provide students with a good knowledge of a major European writer, and will help to open a certain number of critical perspectives on the relationship of humor and violence. As Rabelais writes,
“Laughter is what makes us human.” But at whose expense? All discussions and readings will be in English.

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

German 24, Section 1
Friedrich Nietzsche's Beyond Good and Evil (P/NP)
Professor Robert Holub
Wednesday 4:00-5:00, 203 Wheeler Hall, CCN: 37472

There is no better introduction to the mature philosophy of Friedrich Nietzsche than Beyond Good and Evil, which appeared in 1886. Consisting of nine sections, this work provides insight into all the major theses in his late philosophy. It begins with reflection on epistemology and a skeptical look at the role of the philosopher, moves to a consideration of what the "free spirit" will offer as an alternative to the "slave morality" that characterized the 19th century, and then turns to detailed consideration of religion, psychology, morality, and art. We will be reading and discussing this seminal work of Nietzschean philosophy in one-hour sessions at approximately the pace of one section per session. Students will be expected to contribute to discussions and to make on occasion short presentations on individual aphorisms. One three-page written assignment is expected at the close of the course; an analysis of an aphorism or group of aphorisms, or an imitation of Nietzsche’s aphoristic style on a topic of your choice.

Professor Holub specializes in German cultural, intellectual, and literary history of the nineteenth and twentieth century. He is currently working on a book about Nietzsche and the nineteenth century.

History 24, Section 1
The Gathering Storm: Winston Churchill, Britain, and Nazi Germany on the Road to World War II (LG)
Professor Diane Clemens
Wednesday 10:00-12:00, 2303 Dwinelle Hall, CN: 38992

Winston Spencer Churchill (1874-1965) was Time Magazine's Man of the Half Century in 1950 for his crucial role as Britain's great war leader when that nation stood alone against a rampaging Nazi Germany. His complex, magnificent career reached from the glory days of Victoria's British Empire to his last Prime Ministership of an England confronting the Soviet Union in the 50's. Churchill held high government office throughout the cataclysms of two world wars, taking part in world-shaping and world-saving decisions. He is also the only politician to have won a Nobel Prize in literature, for his mastery of historical narration and superb prose style. Students will read the first 500 pages of the first book of Churchill's World War II memoirs, The Gathering Storm (1948), written at the height of his powers, and accompany these readings with episodes of the BBC-TV dramatic production, "The Wilderness Years," which brings to life Churchill, his supporters, and the political figures who sought to appease Hitler's Germany during the 1930's decade when Churchill was out of office. Churchill's personal account of this period, with its access to documents, situations, and individuals uniquely available to him, remains a persuasive and gripping description of great powers and personalities on one side of the ledger.

This seminar will meet the first nine weeks of the semester. For more information, please visit the seminar's website at http://history.berkeley.edu/faculty/Clemens/H24/.

Diane Clemens is a Professor of American Diplomatic History with the Department of History and is a member of the State Department Historical Advisory Committee. Her fields and current areas of research include U.S.-Russian diplomacy, World War II and early cold war, Vietnam, and US multiculturalism. She is currently researching issues relating to post September 11, 2001, including the implications of expanding Presidential war powers and the emerging subject of humanism in the post-9/11 popular and political culture. Professor Clemens has written articles and conference papers on the cold war. Her current publication in progress is titled From War to Cold War: American Policy at the Crossroads, 1944-46. She has continued a life-long project of visiting the battlefields of both World Wars, with travel in the last three years to Galipoli (Turkey), England (especially the Churchill War Rooms), and Italy (Anzio and the Caserta surrender site).

Movies as Historical Documents: America, 1920-1945 (LG)
Professor Samuel Haber
Wednesday 2:00-5:00, 125 Dwinelle Hall, CCN: 38995

During the years 1920 through 1945, Americans experienced prosperity, depression, and war. These left a lasting imprint on our culture. We will use eight movies as documents to appraise the affects of those events. Though these movies have significant artistic merit, our principal interest will be on what they tell us about American life and culture during the era. Students will be expected to buy and study carefully the reader of supplemental materials that was prepared to help better understand the movies and the historical period. There will be a ten-page critical essay required at the end of the semester. This seminar will meet on every other Wednesday (beginning August 27) from 2:00–5:00 pm to view movies, and on alternate Wednesdays (beginning September 3) from 2:00–3:00 pm for discussion. This seminar is part of the new Freshman Seminar Program Dinner Series and Professor Haber invites his students to dine with him in the Unit Three Dining Commons between 5:00–7:00 pm after each movie to informally discuss their responses to the film.

Samuel Haber is a Professor Emeritus in the History Department. His chief interest is the intellectual and cultural history of the United States. He has written a book on the influence of the Free Speech movement in the Progressive Era and another on the history of the professions in America from 1750 to 1900. He is now writing a book on the intellectual and cultural history of American Jews in the era between 1920 and 1945.

History 24, Section 3
Racial War: World War II in Central and Eastern Europe (P/NP)
Professor John Connelly
Wednesday 4:30-6:00, 3104 Dwinelle Hall: 38998

Unlike any war before or since, World War II in Eastern Europe was about race: through its campaign in Central and Eastern Europe the Nazi regime attempted to secure racial domination in a vast expanse of territory extending deep into Russia, but including much of today's Belarus, Poland, Ukraine, Slovenia, and the Czech Republic. This course examines the ideological underpinnings of this crusade, a number of case studies, the singular position of the Holocaust of the Jews, and historical controversies of the past several years. It attempts to combine perspectives of policy makers and the intended subject populations, and to give students a sense of how historians weigh evidence on some of history’s greatest crimes.

John Connelly is an Associate Professor in the Department of History. His teaching interests include the history of modern East and Central Europe, Communism, and nationalism. His publications have focused on the history of higher education in East Central Europe, Nazi policies toward Slavic groups, the history of intellectuals under Communism, and the history of religion and ethnicity.

History 24, Section 4
"Let There Be Light": The History of the University of California, Berkeley (P/NP)
Chancellor Robert M. Berdahl
Thursday 4:00-5:00, Location TBA, CCN: 39001

This course will survey the history of the University of California, Berkeley. Utilizing the published memoirs of former Chancellor and UC President Clark Kerr and other materials, the course will have a special focus on an era when Berkeley was dramatically transformed from the end of World War II through the 1960s. Major changes and events included the Loyalty Oath controversy, the Free Speech Movement, the “Baby Boom” generation of college students, dramatic increases in federal and state funding for research and education, extensive physical development on the Berkeley campus, and creation of California’s Master Plan for Higher Education. Course discussion will examine how these and other changes to the University came about and how they relate to the history of higher education as well as their relevance for student life and education at today’s Berkeley campus. For the location of this seminar, please visit the Freshman Seminar Program website at http://fsp.berkeley.edu.

Robert M. Berdahl is UC Berkeley's eighth Chancellor, serving since July of 1997. He previously served as President of the University of
Texas at Austin (UT) from 1993 to 1997. Before assuming his post at UT, he served as Vice Chancellor for academic affairs at the University of Illinois at Urbana-Champaign from 1986 to 1993. Born and raised in South Dakota and educated at the University of Illinois and the University of Minnesota, he is a specialist in German History and higher education policy. Selections from his writings, speeches, and Berkeley campus radio show “Bear in Mind” can be found at his website: http://cio.chance.berkeley.edu/chancellor/homepage.html.

History of Art 24, Section 1
Looking at Berkeley Buildings (P/NP)
Professor David Wright
Wednesday 2:00-4:00, 308B Doe Library, CCN: 05509
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. Attendance at the first seminar meeting is necessary. This seminar will end on Wednesday, November 19, 2003 to leave students free for work in other courses.

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
Images of Peace and War in the Art of South & Southeast Asia (P/NP)
Professor Joanna Williams
Thursday 2:00-4:00, 425 Doe Library, CCN: 05512
India has both a powerful pacifist tradition and a martial one (as do many adjoining cultures). Much sculpture and painting that seems to represent righteous battles includes ambiguous references to the costs of war. We will discuss these as a seminar, considering complex meanings that may differ for artist and patron as well as for participants in the religious or political combat. The seminar will serve as an introduction to the arts and history of South and Southeast Asia, to the value of close looking at images in context, and to considering significant issues from both sides.

Joanna Williams began her career at Berkeley teaching the Art of Southeast Asia during the Vietnam War. Her research has ranged from ancient Indian sculpture to paintings of the nineteenth and Southeast Asia during the Vietnam War. Her research has ranged from ancient Indian sculpture to paintings of the nineteenth and twentieth centuries, and she is at work now on traditional artisans still at work in villages.

Industrial Engineering and Operations Research 24
Seminar Title TBA (P/NP)
Instructor TBA
Wednesday 4:00-5:00, 3102 Etcheverry Hall, CCN: 41003
For the seminar title, seminar description, and instructor information, please visit the Freshman Seminar Program website at http://fsp.berkeley.edu.

Journalism 24, Section 1
Old Time Radio (LG)
Professor William J. Drummond
Friday 12:30-1:30, 104 North Gate Hall, CCN: 48002
This course will examine pioneering radio programming, which dominated American life and culture before television. It will examine news broadcasters, such as Edward R. Murrow, H.V. Kaltenborn and Eric Severide, as well as entertainment, variety and drama programs. The seminar will examine the many contributions of Orson Welles, from The Shadow mystery series, to the Mercury Radio Theater, to the famous "War of the Worlds" broadcast. The class will rely on the many old time radio web sites to listen. Students will be required to do one major project to get a grade in the course.

William J. Drummond joined the faculty in 1963 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. Cases he handled included 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 Welfar, 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 H. Howard Award for Journalism Excellence, and a 1994 Excellence in Journalism Award from the Society of Professional Journalists’ Northern California Chapter for an advanced reporting class experiment in civic journalism. He was a member of the planning committee that created the Public Radio International program The World.

Journalism 24, Section 2
The Presidential Campaign Trail in Print (and Occasional Film) (LG)
Susan Rasky
Friday 10:00-12:00, 104 North Gate Hall, CCN: 48204
The 2004 presidential primary campaign will be in high gear by late Fall, a perfect time for political junkies and just plain spectators to check in on the candidates and the first leg of the race for the White House. We will read a selection of great campaign writing and reporting from presidential seasons past—drawn from Making of the President, Selling of the President, Fear and Loathing on the Campaign Trail, Miami and the Siege of Chicago, What It Takes, and Primary Colors as well as various newspaper and magazine articles and the occasional film. All the while, we will be sampling the current crop of political writers and candidates to see how they measure up against those who came before and each other. This seminar will meet for eight weeks, beginning October 10, 2003.

Susan Rasky is a Senior Lecturer in the Graduate School of Journalism where she teaches political reporting and opinion. Prior to joining the Journalism School faculty in 1991, Professor Rasky was the chief congressional reporter for The New York Times. She began her career in Washington covering tax and economic policy for the Bureau of National Affairs Inc. and later Congress and the White House for Reuters. A native of Los Angeles, Rasky received her B.A. in history from UC Berkeley and her M.Sc. in economic history from the London School of Economics. She is a contributing editor to the California Journal and Sacramento Bee, and a frequent political commentator for public radio and television news programs.

Journalism 24, Section 3
Story Telling for Television News (P/NP)
Joan Bieder
Tuesday 10:00-12:00, 101 North Gate Hall, CCN: 48003
This seminar looks at story telling in television news, from hard news and news features, to television magazine segments and documentary production. It focuses on structure, writing and analysis of story telling techniques, and
it concentrates on the major components of visual storytelling—sound, picture sequences, writing, reporting and interviewing. In previous classes students have produced their own short television story. Enrollment is limited to twelve students. The seminar meets for eight weeks, beginning September 16, 2003 and ending November 4, 2003.

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 network news television producer for nine years 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 continued her own work, producing a series of videotapes on broadcast journalism and a film on female journalists in Asia. She frequently spends the summer in Singapore, doing research on freedom of the press, consulting with news staff at the Television Corporation of Singapore and lecturing undergraduates in communications at the Nanyang Technological University. Supported by a UC research grant, she began studying the Jewish Community in Singapore and recently published a lengthy article on the history of the community. She holds a bachelor’s degree in history from Goucher College.

Journalism 24, Section 4
Human Rights in China (P/NP)
Visiting Instructor Xiao Qiang and Dean Orville Schell
Tuesday 5:00-7:00, 127 North Gate Hall, CCN: 48006

Since 1978, China has undergone a very rapid pace of economic reform. However, the pace of political reform has been much slower. This means that even though the government has put more emphasis on “the rule of law,” the protection of basic political and human rights in China has lagged far behind the protection of economic rights. This seminar will examine the conception of human rights in traditional China under Confucian orthodoxy, during the Chinese Communist Revolution until Mao, and finally during the period of reform begun by Deng Xiaoping as China began to seek to find both a new political sense of itself and a new cultural identity for its people in an increasingly globalized world. This seminar will meet for eight weeks, beginning September 16, 2003 and ending November 4, 2003. Enrollment is limited to twelve students.

Xiao Qiang, a recipient of a MacArthur fellowship, is the Founding Executive Director of Human Rights in China, an international non-governmental organization founded by Chinese scientists and scholars in 1989.

Orville Schell, dean of the Graduate School of Journalism, is a long-time observer of China and the author of numerous books, including Virtual Tibet, Mandate of Heaven, and Discos and Democracy. He has also written widely about Asia for Wired, The New York Review of Books, the New Yorker, Harper’s, Newsweek and other national magazines.

Linguistics 24, Section 1
Language and Politics in Southern Africa (P/NP)
Professor Sam Mchombo
Wednesday 3:00-4:00, 2519 Tolman Hall, CCN: 52163

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; and language use in the politics of democratic transition. 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.

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 and “Democratization in Malawi: Its Roots and Prospects,” which was published in a volume entitled Democratization in Late Twentieth-Century Africa.

Linguistics 24, Section 2
Heritage Languages (P/NP)
Professor Leanne Hinton
Wednesday 10:00-1:00, Location TBA, CCN: 52165

A “heritage language” is a language that is in one’s family background, whether or not one actually speaks it fluently oneself. This seminar will be of special interest to students whose families use, or used to use, a language other than English at home. We will discuss and read about the social, political and personal issues surrounding bilingualism and language shift. The history and roles of languages other than English in the United States will be examined. Family dynamics of language use will be studied, including incomplete language learning, language rejection, and use of mixed languages. Students will look into their own backgrounds and experiences, and will also conduct interviews of other people. For this seminar’s location, please visit the Freshman Seminar Program website at http://fsp.berkeley.edu.

Leanne Hinton is a Professor and chair of the Linguistics Department. She has written about heritage languages and about the politics and sociology of language. She is also a specialist in minority languages and endangered languages in general and Native American languages in particular. She consults around the nation with communities who are trying to maintain or revitalize their languages.
Mass Communications 24
The Disappearance of Information (LG)
Professor Thomas C. Leonard
Monday 3:30-5:00, 245 Doe Library, CCN: 53236
Each week in this semester we will review a different cry of alarm about the loss of some part of our cultural heritage or modern research findings because a library failed to preserve this information. We will ask: Is this true? Does this matter? What, if anything, should be done? Expect one reading assignment for each meeting. Berkeley library liaisons and archivists will participate in this seminar and in some cases they will lead tours of their collections. Reading may include selections from Double Fold: Libraries and the Assault on Paper by Nicholson Baker; Fahrenheit 451 by Ray Bradbury; and The Future of the Past by Alexander Stille. In a final paper or journal, students will pull together our weekly assignments.
Professor 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.

Mathematics 24, Section 1
What is Happening in Math and Science? (P/NP)
Professor Jenny Harrison
Friday 3:00-4:00, 891 Evans Hall, CCN: 54651
In this seminar, we will discuss the latest developments in science and math. Students will present short oral reports from articles in their choice from the Science Times, Scientific American, Science News, or articles in What is Happening in the Mathematical Sciences. Discussion and debate is 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 fractal domains and soap film modeling. Applications of this theory to sciences may arise during this seminar.

Mathematics 24, Section 2
Elementary Group Theory (P/NP)
Professor Nicolai Reshetikhin
Monday 3:00-5:00, 891 Evans Hall, CCN: 54653
This will be a seminar about groups and their applications. Group theory is one of the fundamental subjects in mathematics. It is equally important in physics because it reflects a natural notion of symmetry. The notion of symmetry in physics can be found anywhere from crystallography to the theory of elementary particles. In this seminar, the notion of a group will be introduced or reintroduced to those who already know it. Then we will see why this notion is a formalization of a natural notion of a symmetry. We will discuss how groups are related to graphs and some of the applications. A group of permutations will be one of the main examples. It will be expected that students will prepare a presentation at the end of the class either on a topic of their choice or on one of the suggested topics. This seminar will meet the first seven weeks of the semester.
Nicolai Reshetikhin was born in Leningrad, USSR and received his Ph.D. from Leningrad Branch, Steklov Mathematical Institute. He is currently a Professor at UC Berkeley. His research is focused on mathematical physics, representation theory and geometry. His particular interest is the theory of integrable systems and algebraical structures involved there.

Mechanical Engineering 24, Section 1
Art and Science on Wheels (P/NP)
Professor Benson H. Tongue
Wednesday 1:00-2:00, 6153 Etcheverry Hall, CCN: 56003
This seminar will examine two devices near and dear to many people’s hearts—the automobile and the bicycle. Both of these have undergone a long history of change and innovation; both inspire passion in their users and both embody technical as well as artistic excellence. Some issues we will look at will be efficiency, alternative power sources, environmental impact, dynamics, aerodynamics and handling. Along the way we’ll dispel some myths, and ideally people will leave with a deeper appreciation for what bicycles and cars truly represent. Enrollment is limited to thirteen students.
Benson H. Tongue is a Professor in the Department of Mechanical Engineering and has been a member of the faculty since 1988. His interests lie in the fields of dynamics, dynamics and controls, robotics, and vehicle handling. Along the way we’ll mention Scottish dancing, bicycling and bird watching. He is the author of Principles of Vibrations.

Mechanical Engineering 24, Section 2
Laser Microfabrication and Nanotechnology (P/NP)
Professor Costas P. Grigoropoulos
Tuesday 4:00-5:00, 289 Cory Hall, CCN: 56006
This seminar will begin with a simple introduction to the operation principles of laser systems covering different wavelengths, pulse durations and energies. Practical examples of laser-assisted microfabrication and rapid prototyping of microdevices will be examined next. The concepts of laser energy absorption, development of rapid temperature field and phase transformations (including melting, crystalization, ablative material removal) will be discussed. Design principles and examples of laser-assisted tools for nanomachining, processing of nanostructures and nanoscale diagnostics will be demonstrated.
Costas P. Grigoropoulos earned his Ph.D. at Columbia University in 1974 and joined the Mechanical Engineering faculty at UC Berkeley in 1990. His current research interests are in micro/nano engineering, laser materials processing and micro/nano-machining, change of phase transformations in semiconductors and electronic materials, laser-driven thin film crystal growth, laser-induced nanodeposition, microscale fuel cells, thermal management in micro-devices and transport diagnostics in MEMS devices. He has taught courses in heat transfer, thermodynamics, fluid mechanics, laboratory instrumentation and experimentation, laser processing and diagnostics at both the undergraduate and graduate levels.

Molecular and Cell Biology 90A
Insulin as a Window on Discovery in Biology (P/NP)
Professor Randy W. Schekman
Tuesday 2:00-3:00, 107 Genetics and Plant Biology Building, CCN: 58169
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 cellular 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.
Randy Schekman is a Professor of Molecular and Cell Biology and an Investigator of the Howard Hughes Medical Institute. For further information, please visit the following websites:
http://mcb.berkeley.edu/labs/schekman/, and

Molecular and Cell Biology 90D
Infection, Immunity, and Public Health (P/NP)
Professor Mark Schlissel
Wednesday 2:00-3:00, Life Science TBA, CCN: 58178
We share the earth with a vast array of microorganisms, many of which have the potential to harm us. Humans have evolved a complex and elegant immune system to prevent microbial infection and disease. This Freshman Seminar course will consist of a series of discussions of various aspects of human immunology including the immune response to diseases such as AIDS, smallpox, and anthrax. We will discuss strategies for developing vaccines and how sustainable public health interventions can prevent the spread of infectious disease. We will also consider how antimicrobial and antiviral drugs work and how new drugs are developed. Discussion will be focused at a level that requires only a high school biology background and will also involve consideration of public policy aspects of microbial disease.
Molecular and Cell Biology 90E
Consciousness: One of the Last and Deepest Unsolved Biological Problems (P/NP)
Professor Gunther S. Stent
Monday 2:00-4:00, 2326 Tolman Hall, CCN: 58181

Consciousness differs in three essential aspects from other phenomena of the natural world: its qualitative character, its subjectivity, and the unity of its experience. Those aspects do not exclude consciousness from the realm of natural phenomena, however. Since consciousness is the product of processes that occur in our brain, understanding it is obviously a biological problem, albeit an especially difficult, fascinating, and troublesome one. For that very reason, the study of consciousness has become very à la mode among the romantics in science, such as the Faustian types who, fifty years ago laid the conceptual foundations for molecular biology. Their work has been greatly facilitated by the recent development of powerful, novel imaging methods, such as positron emission tomography (PET), capable of directly observing the living brain of conscious human subjects while they think, perceive, and initiate voluntary movements.

Gunther Stent is a Professor Emeritus of Neurobiology in the Department of Molecular and Cell Biology. He has been a member of the UC Berkeley faculty since 1952. His teaching and research have concerned both molecular genetics and neurobiology, as well as the history and philosophy of science. He is a member of the US National Academy of Science, the American Academy of Arts and Sciences, and the American Philosophical Society.
constraints in the museum. In this seminar, we will examine the background and history of the collection, the sites from which the collection derives, and various objects from the collection. Classes will be held in the museum, and students will both learn to use various resources of the museum and also have the opportunity to work with ancient objects.

Carol Redmount is an Associate Professor in the Near Eastern Studies Department. She specializes in the archaeology of Egypt and the Levant, and directs the GCR Bethlevy excavations at Es-Hibeh, a settlement site in Middle Egypt. She began her archaeological career the summer of her freshman year in college and has been excavating ever since. She first excavated 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.

**Nutritional Sciences and Toxicology 24, Section 2**

**Toxins in Daily Life (P/NP)**

**Professor John Casida**

**Wednesday 3:00-4:30, 138 Morgan Hall, CCN: 64593**

This seminar will consider aspects of our interaction with toxic chemicals on a daily basis by intent or accident. Specialists in toxicology will describe survival in a sometimes hostile or toxic environment. Students will be expected to participate in discussions of these topics including the scientific, social and legal aspects. Each student will also give a short seminar on a topic of personal interest. This seminar is open to freshmen and sophomores.

Professor Casida's research interest is in the mode of action and metabolism of organic toxicants with emphasis on pesticide chemistry and toxicology. He obtained his degrees in biochemistry, entomology and plant physiology from the University of Wisconsin, where he taught until joining the UC Berkeley faculty in the Department of Environmental Science, Policy, and Management (Division of Insect Biology) and the Department of Nutritional Sciences and Toxicology.

**Nutritional Sciences and Toxicology 24, Section 3**

**Nutrition in the News (P/NP)**

**Lecturer and Director of Dietetics Program Nancy Hudson**

**Wednesday 12:00-1:00, 138 Morgan Hall, CCN: 64596**

This seminar is designed to help students interpret the food and nutrition news that they encounter in the media. Discussion topics will come from the Wednesday food section of various newspapers around the country.

Nancy Hudson's career as a nutrition educator spans more than twenty years, during which she has taught medical, nursing, allied health and other students at both the undergraduate and graduate levels. She finds teaching to be especially rewarding when working with individuals planning to become Registered Dietitians. In addition to teaching, she has directed the undergraduate program in dietetics at the University of California at Berkeley since 1992. This program is ranked first in the country (The Gastronomy Report, 1998). In relation to practice, Ms. Hudson has worked in dietetics management and clinical nutrition, and volunteered as the resident diettian for a summer camp for children with diabetes. She received the College of Science and Engineering, and the Lindley Lecturer at the University of Kansas. He is currently President of the British Society of Aesthetics and a member of the faculty of the San Francisco Psychoanalytic Institute.

**Philosophy 24**

**John Stuart Mill as an Apostle of Liberalism (P/NP)**

**Professor Richard Wollheim**

**Thursday 11:00-12:00, 206 Wheeler Hall, CCN: 67172**

This seminar will explore the leading principles of liberalism, and what they presuppose in the way of the attitudes of the general citizenry, as seen through the eyes of one sensitive and subtle thinker. A careful reading of John Stuart Mill’s *On Liberty* and *Considerations on Representative Government* will be required.

Richard Wollheim is a Professor in the Department of Philosophy at UC Berkeley and served as the Department’s Chair from 1998 to 2002. Prior to coming to UC Berkeley in 1985, he taught at University College, London, where he also served as Head of the Philosophy Department, and Columbia University. Professor Wollheim has been a Fellow of the British Academy since 1982 and of the American Academy of Arts and Sciences since 1986. In recent years he has been the Cassirer Lecturer at Yale, the Luce Visiting Scholar at Yale’s Humanities Center, the Gareth Evans Memorial Lecturer at the University of Oxford, the Roland Penrose Lecturer at the Tate Gallery, the Werner Heisenberg Lecturer at the Bavarian Academy, and the Lindley Lecturer at the University of Kansas. He is currently President of the British Society of Aesthetics and a member of the faculty of the San Francisco Psychoanalytic Institute.

**Physics 24**

**The Big Bang and the Early Universe (P/NP)**

**Professor Bernard Sadoulet**

**Thursday 12:30-2:00, 430 Birge Hall, CCN: 69885**

Each week a scientist from the Department of Astronomy or the Department of Physics will present an one-hour seminar on his/her own research in cosmology, followed by an informal discussion. Topics that will be covered include the Big Bang, the synthesis of the elements, the cosmic microwave background radiation, the matter-antimatter asymmetry in the universe, the size of the universe, gravitational collapse and the formation of large-scale structures, the birth and death of stars, planetary systems, the emergence of life, and searching for extraterrestrial intelligence.

Prerequisites: First, a curious mind! In addition, an advanced placement course in physics in high school, or an introductory physics course (7A or 8A, which can be taken concurrently with this course).

Professor Sadoulet was born in Nice, France. He earned his Ph.D. in Physical Science at the University of Orsay, France. After a long and productive tenure as a physicist at Cern, he was appointed as a full Professor in the UC Berkeley Physics Department. His area of work includes searches for dark matter particles with ionization and cryogenic detectors and development of gas scintillation drift chambers for x-ray astrophysics.

**Plant and Microbial Biology 24, Section 1**

**The Evolution of Crops: You Are What You Eat (P/NP)**

**Professor Sarah Hake and Dr. Fred Hempel**

**Wednesday 4:00-5:00, Mulford Hall, CCN: 70806**

We will start with tomatoes and corn, two favorite crops to eat and study, then move to other crops as time permits. We will learn the biology of these two plants, how they evolved, how they develop from seed to flower, and how they are used as genetic tools. The seminar will involve hands-on analysis of these crops, as something to eat, as well as genetic tools for study. We will discuss how humans have accelerated the process of evolution in the domestication of wild species for plants useful for consumption.

Sarah Hake is a Adjunct Professor in the Department of Plant and Microbial Biology and is the Director of the Plant Gene Expression Center in Albany, California. Dr. Fred Hempel is a Research Scientist with Mendel Biotechnology in Hayward.

**Plant and Microbial Biology 24, Section 2**

**Metabolic Diversity of Microbes (P/NP)**

**Professors Paul W. Ludden and Dr. Luis Rubio**

**Thursday 4:00-5:00, Location TBA, CCN: 70808**

Microbes display an amazing metabolic diversity and possess the ability to grow under a range of conditions. In this seminar we will discuss the metabolic capabilities of microbes in the environment and under unusual circumstances. Topics of discussion will include the ability of microbes to grow on carbon monoxide, to use ammonium as a nitrogen source, to assimilate nitrogen and carbon from the atmosphere. Students will meet an interesting array of microorganisms in this class. Students will be provided with *Scientific American* level readings and discussions will be accessible to all freshmen with an interest in biology.

For the location of this seminar, please visit the Freshman Seminar Program website at http://fsp.berkeley.edu.

Paul Ludden is a Professor of Plant and Microbial Biology in the College of Natural Resources and also serves as Dean of the College of Natural Resources. Dr. Ludden and his laboratory study several organisms with unique metabolic capabilities and have described a number of mutants containing co-factors that enable organisms to carry out these unusual transformations.

Dr. Luis Rubio will assist Dr. Ludden in this course. He is a microbiologist in the Department of Plant and Microbial Biology. He received his Ph.D. from the University of Seville and has identified genes responsible for a number of interesting metabolic steps.

**Political Science 24**

**Problems in East Asian Politics (P/NP)**

**Professor Lowell Dittmer**

**Tuesday 5:30-7:00, Room A10 in Unit Three at 2400 Durant Avenue, CCN: 72179**

East Asia is the only region to increase its GNP relative to the rest of the world in the past two decades. Yet it has also...
been a problematic region, involving the United States in two
costly land wars since World War II, afflicted by poverty and
inequality as well as progress. This seminar will focus on
three persistent problem areas in East Asia: 1) East Asia
and terrorism since September 11th; 2) the divided nations of
Vietnam, China, and Korea; and 3) the Asian financial crisis
and the problem of globalizaton. This seminar is part of
the new Freshman Seminar Program Dinner Series and
Professor Dittmer looks forward to doing with his
students in the Unit Three Dining Commons from 6:00 -
7:00 pm each week to continue the discussion in a more
informal setting.

Lowell Dittmer is a Professor of Political Science and editor of Asian Studies. He has authored four books, co-authored two books, co-edited three books, and written numerous papers on various aspects of Chinese domestic and foreign policy.

Psychology 24, Section 1
Fat in America (P/NP)
Professor Seth Roberts
Monday 1:00-2:00, 2231 Tolman Hall, CCN: 74508
We will read Fat Land (published 2003) by Greg Critser, a book about why Americans have gotten a lot fatter in the last twenty years. We will also collect data to see if the average freshman here gains fifteen pounds (“the freshman fifteen”) and if so, why.

Seth Roberts does research on weight control.

Psychology 24, Section 2
Human Benevolence (P/NP)
Professor Dacher Keltner
Tuesday 4:00-5:00, 2235 Tolman Hall, CCN: 74510
This seminar will explore the evolutionary and cultural foundations of benevolence. The course will then look at different facets of benevolence, including altruism, compassion, love, gratitude, play, and laughter.

Professor Dacher Keltner was a Psychology and Sociology undergraduate at UC Santa Barbara, where he graduated in 1984, and a graduate student at Stanford University, where he received his Ph.D. in 1989. He taught for four years at University of Wisconsin, Madison and is now in his fifth year at UC Berkeley. Professor Keltner is a social psychologist who is interested in emotion, facial expression, culture, and such topics as power, teasing, morality, and beauty.

Psychology 24, Section 3
Getting to Know the UCB Faculty (P/NP)
Professor Christina Maslach
Monday 4:00-5:30, 2235 Tolman Hall, CCN: 75846
Research has shown that faculty-student contact plays a key role in the quality of the undergraduate experience. So naturally, students should jump at the chance to meet the faculty and visit them regularly during office hours, right? Unfortunately, that doesn’t happen as much as it should, and the question is “why?” In this seminar, we’ll tackle this challenge in a number of ways, including doing some of our own research on the topic. Students will not only develop their own skills in meeting faculty, but will develop some new recommendations on how to enhance student-faculty engagement on the Berkeley campus. This seminar will meet for ten weeks, beginning August 25, 2003 and ending November 3, 2003.

Vice Provost Christina Maslach received her undergraduate degree from Harvard-Radcliffe College, and her Ph.D. from Stanford University. She has conducted research in a number of areas within social and health psychology, and is best known for her pioneering research on job burnout. She has won the Distinguished Teaching Award at UC Berkeley, and in 1997 she was given national recognition as “Professor of the Year.”

Psychology 24, Section 4
Personal and Family Accounts of Mental Disorder (P/NP)
Professor Stephen Hinshaw
Monday 3:00-4:00, 3112 Tolman Hall, CCN: 75867
This seminar will explore the growing number of personal and family-based narratives regarding the experience of mental disorder. Accounts of schizophrenia, depression, bipolar disorder, and severe anxiety disorder will be included. Although some material will be more “clinical in nature, focusing on symptoms and causes of serious mental illness, the main focus will be on the perspective of the person or family member experiencing the mental disorder. The goal is to provide increased sensitivity to the phenomenology of mental disorder and to view the ways in which narrative accounts can supplement scientific accounts of mental illness.

Stephen Hinshaw is Professor of Psychology and the former Director of the Clinical Science program. His research focuses on developmental psychopathology, the study of normal and atypical development in children and adolescents, with specific focus on peer and family risk factors, neuropsychological correlates, processes related to success in multimodal intervention (medication and psychosocial treatments), and long-term outcomes. His recent book The Years of Silence are Past, chronicles his father’s lifelong struggle with misdiagnosed bipolar disorder.

Public Health 24, Section 2
A Biological Perspective on War (P/NP)
Professor Malcolm Potts
Thursday 4:00-5:00, 24 Warren Hall, CCN: 75942
This seminar looks at contemporary events from September 11th to Iraq, using the paradigm of evolutionary psychology. It posits that human behaviors, along with chimpanzees and wolves, are a highly unusual species where young males have a predisposition to engage in team aggression on members of their own species. There is nothing deterministic about this paradigm and most of the world most of the time is at peace. The seminar will use selected readings as a background to discussing current events as they unfold in the semester. An evolutionary paradigm provides a new perspective posing such questions as: Why does peace break out (not why does war break out)? Relative to our numbers is the world more or less violent than in the past? What role do women play in determining war and peace? Are wars and acts of terrorism the same or different? How are modern communications influencing our attitudes to conflict?

Malcolm Potts is a Bixby Professor in the School of Public Health. He grew up in World War II and has worked internationally in family planning, AIDS prevention and women’s health for thirty-five years. He has been active during or following wars in several countries, most recently Afghanistan. He co-teaches Public Health 182: Understanding War: The Biological Origins of Human Warfare with Professor Barnes in the History Department. Professor Potts is completing a book on the wars of nature.

Public Health 24, Section 3
Women, Weight and Food (P/NP)
Professor Barbara Abrams
Tuesday 10:00-12:30, 123 Dwinelle Hall, CCN: 75942
The United States combines the most abundant food supply in the history of the world with a cultural obsession with thinness and perfection that affects women’s body image, sexuality, and sense of power. In this seminar, we will study these relationships from medical, public health, cultural, social, historical, economic, psychological and political perspectives. Topics include food, physical activity, psychological health, obesity and eating disorders, the effectiveness and drawbacks of various dieting regimens, views of beauty, eating and weight in different subcultures, cultures and societies, the food industry and social messages underlying media advertising. Through readings, discussion and experiential exercises, we will attempt to arrive at a definition of healthy weight and strategies for healthy eating for women.

Dr. Abrams is a Professor of Public Health. She teaches courses in epidemiology, nutrition, maternal and child health and women’s health. Prior to teaching at UC Berkeley, she worked as a nutritionist and taught in the Department of Obstetrics, Gynecology and Reproductive Sciences at UC San Francisco. Her research focuses on the relationship between maternal nutrition and the outcome of human pregnancy, postpartum health, and menopause. She is currently working on a study that addresses the prevention of HIV transmission from mother to child.

Rhetoric 24, Section 1
Bad Books and How to Spot Them (LG)
Professor Daniel F. Melia
Thursday 10:00-11:00, 7415 Dwinelle Hall, CCN: 77862
The world is full of Bad Books—not just uninteresting or uninformative or morally repugnant books, but books that set
out to present or defend positions that are unsustainable in logic. I speak here not of books like Hitler's Mein Kampf, but of books such as von Daniken's Chariots of the Gods, which presents "proof" of visits to earth by extra-terrestrials, or Barry Fell's America B.C. which "proves" that ancient Celts reached North America before the time of Christ. Often these Bad Books become quite popular. This seminar will examine the proposition that there is a recognizable rhetoric common to many such Bad Books and investigate possible reasons why they often gain a wider audience than Good Books on the same subjects.

Daniel F. Melia is an Associate Professor in the Department of Rhetoric and the Program in Celtic Studies. His areas of interest include oral literature, Celtic languages (Welsh, Irish), Folklore, Medieval History and literature. For more information, please see Professor Melia's faculty biography on the web at http://rhetoric.berkeley.edu/faculty_bios/daniel_melia.html.

Rhetoric 24, Section 2
George Orwell's Nineteen Eighty-Four Today (P/NP)
Professor Michael Mascuch
Tuesday 3:30-5:00, 261 Campbell, CCN: 78187

In 1949, the year his novel Nineteen Eighty-Four was first published, George Orwell explained the concept behind it this way: "I believe that totalitarian ideas have taken root in the minds of intellectuals everywhere, and I have tried to draw these ideas out to their logical consequences. The scene of the book is laid in Britain in order to emphasize that the English-speaking races are not innately better than anyone else and that totalitarianism, if not fought against, could triumph anywhere." Despite Orwell's intentions, for years, at least until the demise of the Soviet Union in the late 1980s, Nineteen Eighty-Four had been regarded by many in the Anglo-American world as presenting a serious but highly unlikely scenario, a reminder of what it might be like if we became like "them"—totalitarian subjects. More recently, it has supplied material for some ironic but not terribly anxious commentary on aspects of our media-saturated society, keeping in circulation but also rendering harmless some of the novel's more ominous characters, settings, and situations, especially the unforgettable phrase, "Big Brother is watching you." Now—that is, after September 11th and in the early stages of a perpetual, global "War on Terror"—Orwell's book has the potential to bear new meanings for contemporary readers, ones that are perhaps closer than ever to those Orwell himself imagined when he conceived it over a half century ago. For our discussion, we will take Orwell's statement of his original concept as our starting point and consider Nineteen Eighty-Four as a mirror of our own times, to discover how today's reality measures up to the fantastic world Orwell warned us against. This seminar will meet the first ten weeks of the semester.

Michael Mascuch is an Associate Professor of Rhetoric who earned a B.A. in English at UC Berkeley and a Ph.D. in History from Cambridge University. His research areas, broadly defined, include the culture and society of early modern Britain, the novel, autobiography, orality and literacy, narrative theory, and social theory. He is an avid consumer of popular culture, especially that of the 1970s.

Scandinavian 24
Photography and War (P/NP)
Professor Linda Rugg
Thursday 11:00-12:30, 6415 Dwinelle Hall, CCN: 78729

The invention of photography in the mid-nineteenth century brought about a revolution in the way war is portrayed and imagined. For the first time, access to battlefields was offered to non-combatants through means other than literature, text journalism, or drawings and paintings. Now there was a machine that could record actual scenes. Paper photography was pressed into service immediately after its invention in the Crimean War (British photography) and the American Civil War. From the very first, however, the "reality" captured by the photographs was framed in narratives: the story of our brave soldiers, the story of the horror and loss of war, the story of the enemy, etc. Reading war photographs requires an understanding of this narrative: what the position of the photographer was, how these images were selected, collected, and exhibited, who the intended audience was, what the proposed effect was imagined to be, what the actual effect was, and so on. We will look at war photographs from the Crimean to today's Gulf War and see how photography works as a filter for our understanding of war and our relation to it. This seminar will meet for ten weeks, beginning September 11, 2003 and ending November 13, 2003.

Linda Rugg is an Associate Professor in the Scandinavian Department. Her background in this seminar’s topic stems from her first book, Picturing Ourselves: Photography and Autobiography, and an article she wrote on an exhibit of photographs confiscated from German soldiers who were taken as prisoners of war by the Soviet Union after World War II.

Social Welfare 24, Section 1
Children's Rights (LG)
Professor Mary Ann Mason
Wednesday 11:00-12:00, 4 Haviland Hall, CCN: 80703

This seminar will deal with the rights of children as defined by the law and society, from pre-birth to adulthood. Topics covered will include free speech, reproductive rights, and juvenile court issues.

Mary Ann Mason is a Professor in the School of Social Welfare and Dean of the UC Berkeley Graduate Division. Her research interests include law and social welfare, and policies relating to families and children, especially regarding custody issues and women's issues. Professor Mason's publications include From the Father's Property to the Children's Rights: A History of Child Custody in the United States, The McMartin Case Revisited: The Conflict between Social Work and the Criminal Justice System, Social Work, and The Equality Trap.

Social Welfare 24, Section 2
Introduction to Community Organization and the Nonprofit Sector (P/NP)
Professor Ralph Kramer
Wednesday 2:00-4:00, 4 Haviland Hall, CCN: 80705

This new seminar is an overview of the changing roles of voluntary, nonprofit organizations in the San Francisco Bay Area in the social services, education, arts, and the environment. Included are lectures on current trends and social advocacy, as well as panel discussions with social agency and foundation staff on their programs in the community. Assignments include selected readings and a five-page paper with bibliography on a topic selected from the course outline. This seminar will meet the first eight weeks of the semester.

Professor Emeritus Ralph M. Kramer earned his Ph.D. from the School of Social Welfare at UC Berkeley and joined the School's faculty in 1964 after a professional career in psychiatric social work and social planning in the San Francisco Bay Area. He established and taught in the new Masters program in community organization and administration at Berkeley. Many of his recent research publications are based on comparative studies of nonprofit organizations in Europe and the United States.
Statistics 24  
**Probability in Science, Sports and Life (P/NP)**  
Professor David Aldous  
Day, Time, and Location TBA; CCN: 87437

The mathematical rules of probability apply very well to pure games of chance—roulette, blackjack, lotteries—but their use in other parts of the real world is more problematic. We will discuss examples such as the stock market, winning streaks in sports, risky strategies in sports, male versus female mating strategies, coincidences, why waiting lines get long, and the tipping point in epidemics. Students are expected to do and present in class a small project: preferably finding data to support or refute some theoretical prediction discussed in class; or alternatively a reading project. For more information regarding this seminar, please visit http://www.stat.berkeley.edu/users/aldous. For the day, time, and location, please visit the Freshman Seminar Program website at http://fsp.berkeley.edu.

David Aldous is a Professor in the Statistics Department and does research in the theory and applications of probability.

Theater, Dance and Performance Studies 24  
**Documentary Playmaking: School Integration, Little Rock, 1957-58 (P/NP)**  
Professor Dunbar Ogden  
Monday 2:00-4:00, 125 Dwinelle Hall, CCN: 88030

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, and Central High made history for being the first major integrated public high school in the South. Nowadays many people regard their mentor, Daisy Bates, on a level with Martin Luther King, Jr. Each student in our 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 experiment with role playing in order to come to know key people in photographs, newspaper reports, and eyewitness accounts of a powerful moment in the American story. Each student will be encouraged to experiment with a role different from his or her own gender and cultural background, though this experimentation is not necessary. Daisy Bates' *The Long Shadow of Little Rock* and Melba Pattillo Beals' *Warriors Don't Cry* will be the required books. This seminar will meet for eight weeks, beginning September 8, 2003 and ending October 27, 2003. This seminar was formerly taught as Dramatic Art 24.

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 (P/NP)
Professor Richard C. Van Sluyters
Wednesday 3:00-5:00, 394 Minor Hall, CCN: 66403
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—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? This seminar will meet approximately every other week throughout the semester, beginning the first week of the semester.

Professor Richard C. Van Sluyters has been a member of the UC Berkeley faculty in the School of Optometry since 1975. He teaches courses on the anatomy and physiology of the visual system and he holds doctorates in optometry and vision science. His research interests are in the area of developmental visual neuroscience.

Vision Science 24, Section 5
Oh Say Can You See (P/NP)
Professor Dennis Levi
Tuesday 4:00-6:00, 395 Minor Hall, CCN: 66408
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 brain mechanisms that underlie them. The class will include 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.

Freshman and Sophomore Seminars

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

African American Studies 39C
Jews and Blacks: Converging and Conflicting Interests in American Society (2 units, LG)
Professor Bil Banks
Tuesday 9:30-11:00, 122 Barrows Hall, CCN: 00553
This seminar is designed to examine, through readings, films, guest lecturers and informed discussion, the record of both cooperation and contention between two important ethnic groups in the United States. Going beyond simplistic frameworks of “racism” and “anti-semitism,” we will search for deeper and more sophisticated understandings of harmony and tension between Jews and African Americans in the nation’s history. A fairly structured intellectual journal will be required, and class attendance is mandatory.

Bil Banks is a Professor of African American Studies and author of Black Intellectuals: Race and Responsibility in American Life, winner of the 1997 American Book Award. Professor Banks has offered many Freshman and Sophomore Seminars.

Architecture 39A
Ancient Construction Technologies (2 units, P/NP)
Professor Jean Pierre Protzen
Day, Time and Location TBA, CCN: TBA
This seminar will be an exploration of how the ancient builders quarried, transported, cut and dressed stones sometimes weighing over a hundred tons, and how they fitted them together into walls and buildings. Examples will be shown from a variety of ancient civilizations: Egypt, Assyria, the Megalithic Cultures of Western Europe, Greece, the Roman Empire, the Chaco Culture of the American Southwest, the Maya and the Incas. Discussions will include the qualities of the different stone materials, the toolkits of the ancient quarriers and masons, their means of transportation and the labor organization. For the day, time, location and course control number for this seminar, please visit the Freshman Seminar Program website at http://fsp.berkeley.edu.

Professor Protzen studied architecture at the Swiss Institute of Technology at Zurich and Lausanne. He was chief designer for Han Brechbuhler, Bern. In 1967, he was awarded a research fellowship by the Swiss National Science Foundation. He emigrated to the U.S.A. and joined the Berkeley faculty of architecture in 1968 to teach in the area of Design Theories and Methods. He has published seminal work on Inca stonemasonry and a book on Inca architecture and construction at Ollantaytambo.

Comparative Literature 40
Women in Literature: From Automatons and Aesthetics to Autonomy: The Fin-de-siècle in Theme and Form (4 units, LG)
Anna Stenport
TuTh 12:30-2:00, 20 Wheeler Hall, CCN: 17269
In the fantasy of woman as a perfect machine—a feminine, submissive, and modern Eve—is where our journey through the European fin-de-siècle imagination of femininity will begin. Then we will make our way through a fecund terrain of late nineteenth-century understandings of femininity and what was meant by the female sex; from the decadent fascination with the feminized male to the complex celebration of early lesbian representation, to the portrayal of the New Woman and the early suffragette movement. The course spans French, British, German, and Scandinavian texts that are all intensely preoccupied with the demarcations of sexuality and gender roles during this period of rapid social change, especially in terms of urbanization. Through a series of close readings, we will analyze in detail some of the underlying presumptions of the prevailing views of gender and also relate these representations to more mainstream versions of gender formation at that time. In addition, this course will look closely at how these in many ways quite radical texts also achieve their force on formal and narrative levels, and where some of them can be seen as precursors in their representation of desire and subjectivity to the modernist movement. Texts will include Villiers d’Adam’s Future Eve, Henrik Ibsen’s A Doll’s House, and Djuna Barnes’ Nightwood.

Anna Stenport is writing her dissertation on the Swedish playwright August Strindberg and how Stockholm at the end of the nineteenth century came to be imagined as a Paris of the North. Her research interests include theories of urban modernity, visual studies, and comparative literature, and she works in German, French, and Scandinavian literature.

Comparative Literature 41B
Formal Explosions in the Lyric (4 units, LG)
Robert Adler Packer
TuTh 11:00-12:30, 205 Dwinelle Hall, CCN: 17275
This course is devoted to the close reading of the lyrical mode in poetry and, to a lesser extent, in film. Our first objective is to master a vocabulary of poetics that will facilitate our discussions and written work on the texts. There are three main components to the class: masters of prosody and vers forms; innovations and transformations of form; and the lyric in film. We will be looking first at a core group of English language poets and move on to a collectively determined, multilingual selection of poets in English and in translation.

Robert Adler Packer is a doctoral candidate in the department of Comparative Literature. He works with Yiddish, Hebrew, and German literature at the turn of the twentieth century. His research interests are concerned with the interrelations of majority and minority culture in Central and Eastern Europe.

Comparative Literature 41C
Introduction to the Novel: Play (4 units, LG)
Petrus Liu
TuTh 9:30-11:00, 205 Dwinelle Hall, CCN: 17272
It has been argued that the emergence of the novel in Western literature was intimately connected to the rise of a new leisure class and a new culture of recreation. In this course, we will study several novels—traditional and postmodern, western and non-western— to reassess that thesis. In particular, we will be interested in the relation between the conventions of the novel (the tools and limitations of this genre) and different narratives of play. We will explore the connections between the novelistic representation of forms of pleasure and the rise of a consumer culture that is said to be the precondition for this genre. Several questions will guide our discussion: What is the relation between the culture of recreation that is represented in novels and the culture of recreation that produced the novel as a commodity? How does pleasure define itself against work? What are the ideological implications of the type of character or plot development that thematizes the seductiveness and destructive power of play? And finally, how do novelists imagine and fictively represent the consequences of the absence of play?

Petrus Liu is a Ph.D. Candidate in the Department of Comparative Literature whose research interests include queer theory, postcolonial studies, and problems in cultural materialism. He has taught courses on theories of ignorance, "weapons of the weak," and literary nationalism. He is currently completing a dissertation on Chinese martial arts fiction and dissident sexualities.

Earth and Planetary Science 39A
Geological Influences in California Society Today (2 units, LG)
Instructor TBA
MW 5:00-6:00, 3108 Etchevery Hall, CCN: 19030
In addition to five or six one-hour class meetings, this course includes one four-day field trip that will examine natural features of California that are of scientific and societal importance, such as volcanoes, mountain ranges, earthquake faults, rivers, coastlines, landslides, strata
recorded earth history, mines, water and energy sources. Field trips go to different parts of California in spring and fall. Students must bring a sleeping bag and tent, and pay a transportation and a commissary fee. Attendance at each lecture and one field trip is mandatory. Class will initially meet together, but after a few lectures, students will be assigned to a field trip of thirty students with one instructor per group. This course is restricted to freshmen only. It was formerly listed as Geology 39A. For information regarding the instructor, please visit the Freshman Seminar Program website at http://fsp.berkeley.edu.

Environmental Economics and Policy 39A

Critical Choices in the Use of Natural Resources
(2 units, P/NP)
Professor David Zilberman
Wednesday 12:00-2:00, 321 Haviland Hall, CCN: 01215
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.

Professor David Zilberman received his Ph.D. from UC Berkeley in 1979. His research interests include the effect 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 39A

Fairy Tales (3 units, LG)
Professor Winfried Kudszus
Tuesday 2:00-5:00, 175 Dwinelle Hall, CCN: 37484
Dreams, active imagination, and questions of gender and identity will play leading roles in this semester’s explorations. Psychological insights spring from witches and sorcerers, crooks and adventurers, strangers and dwarfs. What significance does evil have in these tales? How do we approach the magical accounts? What accounts for the appeal to both children and adults? Why are fairy tales so enormously influential in contemporary cultures? Our point of departure: Grimmel’s Tales for Young and Old. Readings, lectures, discussions, and course assignments will be in English. Course work will include the writing of a tale of one’s own. Enrollment is limited to sophomores only.

Professor Winfried Kudszus studied literature, philosophy, and psychology at the Universities of Zurich, Freiburg and Munich. He joined the UC Berkeley German Department faculty in 1968. His research and publications explore questions and interrelationships of literature, psychology, philosophy, semiotics, culture, and psychoanalysis.

History 39F

Classics in American History (4 units, LG)
Professor Richard Abrams
Tuesday 2:00-5:00, 205 Wheeler Hall, CCN: 39022
This seminar is designed especially to introduce college freshmen and sophomores to American history by acquainting them with some of the major works in the literature. Some are old classics, e.g., Ben Franklin’s autobiography and Tocqueville’s Democracy in America, which have become renowned almost as much as historical documents as for their historical content. Others, e.g., Kenneth Stampp’s Peculiar Institution, Winthrop Jordan’s White Over Black, and Matthew Josephson’s Robber Barons, have taken on the character of classics in that almost from the moment they were published they became, and remained, indispensable reference points for every scholar who thereafter worked on their subjects. Finally, some of the books we read (e.g., Kessner’s Hidden Door) may not deserve the title “classic” in either of the above senses, but rather serve exceptionally well to get into important modern subjects, or use special historiographical techniques, that as yet enjoy no classic treatment. All the books have been chosen because they make good reading as well as provoke thought about American history. Faithful attendance and active class participation are required.

Richard M. Abrams earned his undergraduate and graduate degrees from Columbia University and has been a Professor of History at UC Berkeley since 1961. He is Associate Dean of International and Area Studies. His special interests include United States political, legal, business, and foreign affairs history.

History 39U

World War I in Experience and Memory (4 units, LG)
Professor Margaret Lavinia Anderson
Monday 10:00-12:00, 129 Barrows Hall, CCN: 39024
The seminar will examine the origins and nature of what George Kennan has called “the seminal catastrophe of the twentieth century.” We shall begin by considering the “war anxiety” that preceded the crisis of the international system that led to the outbreak of war in summer of 1914; the crisis itself, and popular responses. We will then analyze the industrialized killing on the Western Front, the impact of the war on the three multi-national empires (Russian, Hapsburg, and Ottoman) in the East, the genocide of the Armenians and the pre-genocide of the Jews, and the reasons for the German defeat. In the course of our discussions, we shall be concerned with such central problems as what allows men to remain in the trenches for four nightmarish years; the sources of obedience and mutiny; the impact of rape on a society’s values; and the war’s reflection in culture and memory. Assignments will include historical works, documents, fiction, poetry, autobiography, and film. Perfect attendance and vigorous participation in discussion will be required; also weekly one-page responses to the reading and one substantial term paper (fifteen pages). There may also be a brief quiz toward the end of the semester. Enrollment is limited to twelve students.
Margaret Lavinia Anderson is a professor of European history with a specialty in Germany in the nineteenth and twentieth centuries. She has written numerous articles and two books: Windthorst: A Political Biography and issues dealing with the intersection of religion and politics, and Practicing Democracy: Elections and Political Culture in Imperial Germany on the development of democratic institutions and practices in Germany from the late nineteenth century to 1918. She is currently working on the German involvement in the Armenian genocide.

History of Art 39A
Photography as a Fine Art (4 units, LG)
Professor David H. Wright
Tuesday 1:30-5:00, 308B Doe Library, CCN: not available
This seminar is based on the critical study and discussion of the work of selected master photographers from about 1860 to 1940, from Carleton Watkins to Walker Evans, with nine assignments to try making photographs in their styles. The course is designed for students experienced in practical photography, including printing in black and white. There will be a term paper on a topic developed by each student with the instructor's help. There will be no examination. Registration for this course is by instructor approval only. Enrollment is limited to eight students. An interview is required between August 22 and August 27, 2003. Further information and an interview sign-up sheet will be posted at that time by the instructor's office, 465 Doe Library Annex. To qualify, students must have darkroom experience and bring samples of their black-and-white photography to the interview.

Professor David H. Wright invented this course nearly twenty years ago when he realized what he would have to take when he was a freshman just after the war; he continues to delight in offering it.

Integrative Biology 39C
The Field of Veterinary Medicine (2 units, P/NP)
Dr. Helen Diggs
Thursday 2:00-4:00, 4110 Valley Life Sciences Building, CCN: 42912
The field of veterinary medicine encompasses a web of diverse career directions all related to professional animal health care. As an example, veterinarians work in the areas of public health, regulatory medicine, teaching and research, private clinical practice, uniformed services, private industry, food production, aquaculture, environmental medicine, and zoological medicine. Are you interested in a career in veterinary medicine? Interested individuals 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 also must work in teams and relate well to people. 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/realities regarding a veterinary career. Students will be expected to actively participate in class discussions, complete reading assignments, pass a weekly review quiz and attend scheduled field trips.

Dr. Helen E. Diggs is the Director of the Office of Laboratory Animal Care. She holds a Masters degree in Education and received her veterinary degree from Oregon State University. She 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 zoonotic diseases and occupational health.

Journalism 39F
First Acts (2 units, LG)
Professor Lydia Chavez
Thursday 12:00-2:00, 127 North Gate Hall, CCN: 48020
Screenplays generally have three distinct acts. This seminar will focus on how to write the first act--anywhere from ten to twenty pages of a 110 page screenplay. We will spend the first session analyzing successful first acts and thereafter students will be required to submit their work, which will be read and critiqued by the class. Enrollment is limited to twelve students.

Lydia Chavez is an Associate Professor in the Graduate School of Journalism. She received her M.A. in Journalism from Columbia University and has worked at the Los Angeles Times and The New York Times. She recently completed a book, The Color Bind: California's Battle against Affirmative Action. Professor Chavez has written screenplays since 1990 and has sold options and written on assignment. She is a 2002 finalist for the Paramount Chesterfield Fellowship.

Native American Studies 90
Myth, Memory, and History: Understanding Native America (4 units, LG)
Diane Pearson
MWF 11:00-12:00, 200 Wheeler Hall, CCN: 61015
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. Dr. Pearson holds a Ph.D. in American Indian Studies and specializes in American Indian law and policy, societies and culture, and education.

Optometry 39B
The Developing World: Profound Challenges, Needs, and Opportunities—An Example Applied to Eye Care in India (2 units, P/NP)
Professor Jay M. Enoch
TuTh 3:30-5:00, 394 Minor Hall, CCN: 65503
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 unmet health needs (as one example, the HIV/AIDS epidemic), inadequate resources, often inadequate schooling, caste systems, 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 which 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 is 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 seminar will meet the first five weeks of the semester. This course is also listed as South and Southeast Asian Studies 39C (CCN: 83112).

Dean Emeritus and Professor Emeritus Jay M. Enoch maintained a research laboratory in Madurai in Tamil Nadu State for many years. He has helped start a college in Madras (Chennai) in Tamil Nadu, is currently involved in developing graduate programs at the latter institution to help train additional teachers/researchers, and is organizing a new college in the Punjab. He serves on a World Health Organization Committee, which addresses refractive and low vision needs of the Developing World.

Psychology 39E
The Psychology of Art (2 units, LG)
Professor Art Shimamoto
Monday 10:00-12:00, 3105 Tolman Hall, CCN: 74511
In this course we will discuss how psychology--particularly perception, memory, and emotion--is reflected in the visual arts. Each week we will cover issues related to the psychology of art, such as linear perspective, representation
of form, and aesthetics. Specifically, we will analyze various paintings and identify those that particularly represent aspects of psychology.

Professor Shimamura completed his Ph.D. at the University of Washington in 1982 and joined the Psychology Department in 1989. He conducts research in the fields of cognitive neuroscience and basic memory functions, and teaches Psychology 1 and courses in cognitive psychology.

Public Health 39C
The Biology and Politics of Nutrition and Health (2 units, LG)
Professor Zak Sabry
Wednesday 2:00-4:00, 2311 Tolman Hall, CCN: 75945
This course treats nutrition as a biological science with far-reaching social concerns and political implications. It addresses the many issues of food quality and safety, their influence on public policy and their impact on the health of the nation. Students will be required to pass a midterm exam and to submit a final report or assignment.

Professor Sabry is concerned with public health issues of food and nutrition. His focus on the assessment of nutritional status and the development of nutrition and on health programs covers both national and international perspectives.

Slavic Languages and Literatures 39E
Science Fiction: Problems in Space–Time (3 units, LG)
Professor Anne Nesbet
TuTh 9:30-11:00, 258 Dwinelle Hall, CCN: 79860
This lower-division seminar examines some of the many ways problems of space and time have captured the imaginations of writers and filmmakers over the past hundred years. There is a long and honorable tradition of using tales of travel in space and time as a cover for the writer's criticisms (sometimes veiled, sometimes quite direct) of his/her local social environment. In the first half of the course, we will pay particular attention to the way the revolutionary aspirations of Soviet (and pre-Soviet) Russia emerged in the form of science fiction. During the seminar's second half, we will move beyond the geographical confines of Russia to sample a variety of twentieth-century meditations on the joys and perils of time travel.

Anne Nesbet is an Associate Professor in the Department of Slavic Languages and Literatures and in the Film Program. Her book on the Soviet film director Sergei Eisenstein is called Savage Junctures: Sergei Eisenstein and the Shape of Thinking.

Slavic Languages and Literatures 39J
Love among the Russians (2 units, LG)
Professor Hugh McLean
MW 10:00-11:00, 254 Dwinelle Hall, CCN: 79863
This seminar will be devoted to study and discussion of treatments of the love theme by a series of great Russian writers: Pushkin, Gogol, Turgenev, Dostoevsky, Tolstoy, and Chekhov. Readings will be mostly short stories, not long novels. There will be one term paper and no exam. All readings and discussion will be in English, although students who know Russian are encouraged to read in the original.

Hugh McLean is a Professor Emeritus in the Department of Slavic Languages and Literature. He taught a wide range of courses on Russian literature at UC Berkeley from 1968-94. He is author of Nikolai Leskov: The Man and His Art and articles on Pushkin, Gogol, Tolstoy, Chekhov, and Mayakovsky.

Social Welfare 39A
Social Problems through Literature (2 units, P/NP)
Professor Henry Miller
Wednesday 10:00-12:00, 10 Haviland Hall, CCN: 80706
The industrial revolution fell upon western civilization with a vengeance: old forms of human misfortune were exacerbated in intensity and new ones appeared for the first time on the face of the planet. Out of the turbulence and social upheaval of the last two centuries many social institutions were invented to minister to the horrible consequences of industrialization--the most significant being that set of ideas, policies, and programs called the welfare state. This seminar will address the issue from the vantage point of creative literature. Through the keen eye of imaginative artists, the phenomenological impact of industrialization, urbanization, and family disorganization becomes alive. It was the individual human being who, in the last analysis, suffered; and the vantage point of the seminar focuses on that subjective experience. The readings embrace problems such as crime, mental illness, poverty, and substance abuse. They include, among others, the works of writers like Dostoyevsky, Steinbeck, and Kafka. Enrollment is restricted to freshmen only.
Professor Henry Miller has taught on the UC Berkeley campus since 1962. His research interests have included the problems of disaffected youth, substance abuse, homelessness, and vagrancy. He has written extensively in those fields. His latest book is On the Fringe: The Dispossessed in America.

South and Southeast Asian Studies 39C
The Developing World: Profound Challenges, Needs, and Opportunities–An Example Applied to Eye Care in India (2 units, P/NP)
Professor Jay M. Enoch
TuTh 3:30-5:00, 394 Minor Hall, CCN: 83112
This course is also listed as Optometry 39B (CCN: 65503). For the course description, please see the listing under Optometry 39B.

South and Southeast Asian Studies 39G
"Think Gender" in Indian Short Stories (2 units, LG)
Kausalya Hart
Friday 10:00-12:00, 234 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 course can be used to satisfy the Arts and Literature or Social and Behavioral Sciences breadth requirement in Letters and Science.

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

Women's Studies 39F
Lower Division Seminar in Women’s Studies (3 units, LG)
Instructor TBA
MW 2:00-4:00, 856 Hildebrand Hall, CCN: 89827
This seminar is an introduction to feminist studies through the examination of a single problem area. Past courses have focused on urban life, work, food and literature—all viewed through the lens of gender.

For instructor information, please visit the Freshman Seminar Program website at http://fsp.berkeley.edu.

Want more opportunities to discuss issues relevant to women? You may want to take Public Health 24, Section 3: Women, Weight, and Food or Comparative Literature 40: Women in Literature: From Automatons and Aesthetes to Autonomy: The Fin-de-siècle in Theme and Form.
Other Small Courses and Courses of Special Interest to Freshmen

Not all of the following classes are small, but each is designated to add something special to the undergraduate experience.

Bioengineering 24  
Aspects of Bioengineering (1 unit, P/NP)  
Instructor TBA  
Wednesday 4:00-5:00, Sibley Auditorium, Bechtel Engineering, CCN: 07803  
This introductory seminar is designed to give freshman and sophomores a glimpse of a broad selection of bioengineering research that is currently underway at Berkeley and UCSF. The goal is to help students gain a feeling for the breadth of interesting problems in bioengineering and also the variety of ways that engineering principles can be applied to biological and medical problems. A series of one-hour seminars will be presented by researchers, professors, and doctors on their particular research areas.

Civil Engineering 92  
Introduction to Civil and Environmental Engineering (1 unit, P/NP)  
Professor Robert A. Harley  
Wednesday 12:00-1:00, 60 Evans Hall, CCN: 13936  
This seminar will consider several challenges facing the world: increasing population; shortages of natural resources; inadequate capacity for the flow of people, goods and information; natural disasters from droughts, floods and severe weather to earthquakes; and shifting patterns of urbanization and land use. Solutions to these challenges require advances in physical, biological, health and social sciences, and policy analysis. However, it is civil and environmental engineers who will apply these scientific developments to solve current and future problems. This seminar will explore the breadth of opportunities within this field using an analysis of historical events and speculation on the future. The course will use examples drawn exclusively from California, the Bay Area and at times the UC Berkeley campus. It is open to all students and does not assume prior knowledge of engineering.

Engineering 92  
Engineering Science Seminar: Perspectives in Engineering (1 unit, P/NP)  
Professor David Dornfeld  
Monday 4:00-5:00, Sibley Auditorium, Bechtel Engineering Center CCN: 28053  
This series of lectures provides Engineering Science students with information on the various Engineering disciplines. It will be especially useful in guiding Engineering Science-Undeclared students toward their choice of major. Lecturers will describe current activities in their own field, will share information about how they made their career choices, and will indicate future opportunities. In addition to the traditional engineering disciplines, emerging fields will also be covered. The course is strongly recommended for all Engineering Science students and is required for Engineering Science-Undeclared students. It is to be taken in the fall semester of the freshman year.

Environmental Science, Policy, and Management 6  
Environmental Biology (3 units, LG)  
Professor Ignacio Chapela  
TuTh 8:00-9:30, 150 Goldman School of Public Policy, CCN: 30418  
In this course, basic biological and ecological principles will be discussed in relation to the current environmental crisis. Human interactions with the environment and their impact on the non-human world will be explored from a biological perspective. Students will develop a biologically-based method to pose questions, understand problems, and formulate strategies for their solution.

Professor Ignacio H. Chapela researches and teaches about symbiotic relationships of microorganisms. His work aims at understanding the finely balanced relationships between organisms, including humans, in the ecosystem, which he understands as woven together by microorganisms. He has also been involved in the growing debate over our relationship with genetic resources, their appropriation and conservation. As new biotechnological methods find their way into the open environment, Professor Chapela's interests continue to grow in the understanding of human manipulations of the genetic make-up of the biosphere and their

For updates, visit the FSP website at http://fsp.berkeley.edu.
impact on the functioning of ecosystems. Professor Chapela has worked on these questions with industry, academia, indigenous communities and policy makers at the local, regional, national and international levels.

Environmental Science, Policy, and Management 11
Forest and Wildland Resource Conservation
(4 units, LG)
Professor Carroll B. Williams
TuTh 10:00-11:00 plus discussion sections,
141 Giannini Hall, CCN: 30436
This course will cover the ecological basis of forestry, and the effects of societal influence and legislation and past exploitation on forest structure and health. Current problems and their impacts on forests and other wildland ecosystems and the wood, water, and wildlife resources they contain will be examined as well.

Professor Carroll B. Williams has an extensive background in pest management, urban forestry, and forest management research. He has spent much of his career as Project Leader and Pioneering Scientist with the US Forest Service. He gained expertise in urbanization problems in wildlands while serving on the Board of Directors for the East Bay Regional Park District.

Environmental Science, Policy, and Management C12
Introduction to Environmental Studies (4 units, LG)
Professors Robert Hass and Garrison Sposito
TuTh 12:30-2:00 plus discussion sections,
105 North Gate Hall, CCN: 30445
This course is also listed as English C77 (CCN: 28592). For a course description and faculty information, please see the listing for English C77.

Environmental Science, Policy, and Management 50AC
Introduction to Culture and Natural Resource Management (4 units, LG)
Instructor TBA
MWF 11:00-12:00 plus discussion sections,
105 North Gate Hall, CCN: 30481
This course is an introduction to how culture affects the way we use and manage fire, wildland and urban forests, rangelands, parks and preserves, and croplands in America. The basic concepts and tools for evaluating the role of culture in resource use and management are introduced and used to examine the experience of American cultural groups in the development and management of western natural resources. This course satisfies the American Cultures requirement.

History of Art 35
Art and Architecture in Japan (4 units, LG)
Professor Gregory P. Levine
TuTh 2:00-3:30 plus discussion sections,
106 Moffitt Library, CCN: 05515
This course is an introduction to art and architecture in Japan and is intended for newcomers to the history of art and/or to the study of Japanese history and culture. Lectures will proceed chronologically, beginning with the archaeological objects and tumuli of neolithic Japan and ending with the popular graphic arts of the seventeenth to nineteenth centuries and modern transformations of art. The course will foreground themes such as the formats and materials of Japanese art and architecture; the social identity of artists in Japan and workshop production; the development and transmission of pictorial style; the re-use of (or rupture from) the visual past to promote ideological and cultural claims; elite patronage and commoner consumption; gender and representation; the creation of religious images and spaces; the impact of foreign art in Japan; and the creation of a "Japanese" tradition.

Gregory Levine is an Assistant Professor in the Department of History of Art. He specializes in Japanese art and architecture, particularly the temples of Zen Buddhist monasteries. He received his doctorate in Japanese Art from Princeton University.

History of Art 41
Introduction to Greek and Roman Art (4 units, LG)
Professor Andrew Stewart
TuTh 9:30-11:00 plus discussion sections,
101 Moffitt Library, CCN: 05530
This introduction to the arts of ancient Greece and Rome is designed for newcomers to the history of art and/or to the study of ancient Mediterranean culture. The lectures will survey 1500 years of Greek and Roman art and architecture both thematically and chronologically. They will begin with the story of the rediscovery of antiquity from the Renaissance to the present, and then will focus upon key topics such as art and religion, art and power, city and sanctuary, death and commemoration, the symposium, nudity and the body, art collecting, and center and periphery.

Participants will learn to acquire the perceptual, historical, and critical skills necessary to analyze, understand, and interpret the artworks in their historical and social/political contexts. Wherever possible, new discoveries will be illustrated and discussed.

Andrew Stewart is Professor of Ancient Mediterranean Art and Archaeology in the Departments of History of Art and Classics. He specializes in Greek art and archaeology, and excavates at the Israelite, Phoenician, Greek, and Roman harbor site of Dor in Israel.

History of Art 51
Introduction to Medieval Art (4 units, LG)
Instructor TBA
TuTh 3:30-5:00 plus discussion sections,
155 Krober Hall, CCN: 05542
This lecture course introduces the student to the study of medieval art and architecture, beginning with the catacomb paintings of ancient Rome, and ending with late Gothic architecture in the Americas. The emergence of new artistic media, types of art, and strategies of making and viewing will be discussed against the often wrenching historical changes at the time. Emphasis will be placed on the methods of interpreting the works, especially in relation to new social practices and cultural values. While providing a comprehensive survey of the visual arts from the first century A.D. to the eve of the Protestant Reformation, this course particularly highlights the development of western medieval art between ca. 800 and 1500, focusing especially on architecture, architectural sculpture, stained glass, wall painting and mosaics.
Physics 10
Physics for Future Presidents (3 units, LG)
Professor Richard Muller
MWF 9:00-10:00 plus discussion sections,
3 LeConte Hall, CCN: 69686
This course provides an introduction to the physical world in a way that makes physics meaningful to the modern student. It provides a strong foundation in the principles of physics, the tools of scientific analysis, and the art of argumentation. These courses will cover a range of topics, including mechanics, thermodynamics, and statistical mechanics. We will explore the fundamental principles that govern the behavior of both objects and systems. This course will prepare students for further study in physics and related fields. It will also help students develop critical thinking skills and problem-solving abilities. An emphasis on majors will be made throughout the course. Grades will be determined on a pass/fail basis. No prior knowledge of physics is assumed. This course is followed by Physics 10 or 11 in later years. For more information, please visit the Physics 10 website at http://muller.lbl.gov/schedule/lectures. Richard Muller is a Professor in the Department of Physics. For more information regarding Professor Muller, please visit his web page at http://muller.lbl.gov/.

Plant and Microbial Biology 10
Plants, Agriculture and Society (2 units, LG)
Professor Brian Staskawicz
TuTh 11:00-12:00, 160 Kroeber Hall, CCN: 70803
This course will focus on the interactions between plants and the environment, and effects of human industrial and agricultural activity on plant ecosystems. Knowledge of the physical sciences is neither required nor assumed. This course will be particularly appealing to students who are interested in learning about plants, agriculture, and genetic engineering in a social and economic context. The course has no prerequisites, and can be used to satisfy either the Biological Sciences or Social and Behavioral sciences.

Political Science 1
Introduction to American Politics (4 units, LG)
Professor William K. Muir
MWF 11:00-12:00 plus discussion sections,
2050 Valley Life Sciences Building, CCN: 72003
This course introduces students to the study of American politics. We will explore the workings of the three branches of government along with the ways in which citizens influence these branches. Major themes will include the tension between liberty and equality, the consequences of fragmentation of political power, the influence of money and the media, the role of organized interest groups, and policy-making and its sometimes unintended consequences. Course requirements will include two short (five-to-seven page) research papers, a midterm, a final and regular participation in a discussion section. This is a large lecture course of up to 400 students, with required discussion sections of 25 students each. Political Science 1 (or an equivalent) is required for the Political Science major and must be completed before declaring the major. Students who received a grade of 4 or 5 on the American Government Advanced Placement exam may substitute an upper division American Politics course for Political Science 1, before or after declaring the major.

Political Science 2
Introduction to Comparative Politics (4 units, LG)
Professor Robert Price
TuTh 11:00-12:30 plus discussion sections,
155 Dwinelle Hall, CCN: 72060
This course will introduce students to some key concepts used in contemporary comparative political analysis. It will do so through an examination of the reasons that some modern nation states provide better living conditions for their citizens. Are these differences due to factors such as political institutions, legislative arrangements, parties and party systems, or social forces such as culture and ethnicity? Class lectures will focus on developing an understanding of how political scientists use these terms and whether they provide adequate explanations for why states vary so substantially in their performance. There will be two lectures per week and one required discussion section. Class requirements include a ten-page mid-term, a final, and a ten-page paper. Political Science 2 (or an equivalent) is required for the Political Science major and must be completed before declaring the major.

Theater, Dance, and Performance Studies 10
Introduction to Acting (3 units, LG)
Instructors: Adriano Shaplin, Rae Perigoe, Joyce Lu, and Monica Stufft
Studio 1: MWF 9:00-11:00, Durham Studio, CCN: not available
Studio 2: MWF 9:00-11:00, 7 Zellerbach Hall, CCN: not available
Studio 3: MWF 10:00-12:00, 317 Zellerbach Hall, CCN: not available
Studio 4: MWF 1:00-3:00, 413 Zellerbach Hall, CCN: not available
This course is a gateway class to the more advanced acting sequence. It is a theory and performance course, which provides an overview of the actor's creative process. Fundamental acting techniques are presented in conjunction with exercises, improvisation, and text work designed to enhance concentration, imagination, vocal resonance and projection as well as self-confidence and communication skills. An audition is required; a course control number will be provided after audition. For audition information, look under Theater, Dance, and Performance Studies in the Schedule of Classes for Fall 2003.

Theater, Dance, and Performance Studies 40A
Sections 1 and 2
Beginning Modern Dance Technique (1 unit, LG)
Section 1: Carol Murota
Section 2: Instructor TBA
Studio 1: MTWTF 9:30-11:00, 2401 Bancroft Way, CCN: 88036
Studio 2: MTWTF 2:00-3:30, 170 Zellerbach Hall, CCN: 88039
This course includes basic explorations in movement emphasizing increased flexibility, strength, alignment, coordination, and muscular endurance.

Theater, Dance, and Performance Studies 60
Sections 1 and 2
Stagecraft (3 units, LG)
Section 1 and 2: Instructor TBA
Section 1: MW 1:00-2:00, Zellerbach Playhouse, CCN: 88045
Section 2: MW 12:00-1:00, Zellerbach Playhouse, CCN: 88048
This course focuses on various technical aspects of theatrical production. The course ranges from theatrical conception to actual performance and includes attention to all aspects of theatrical production with special emphasis on stage machinery and rigging, scenery building, scenery painting, and props and upholstery. The course involves a laboratory dimension: students will work on departmental productions in Zellerbach Playhouse, 7 Zellerbach, or Durham Studio Theatre.
Interpreting the Queer Past: Methods and Problems in the History of Sexuality (4 units, LG)
Instructor TBA
MWF 11:00-12:00 plus discussion sections,
102 Moffitt Library, CCN: 89033
This course examines interpretive issues in studying the history of sexuality and the formation of sexual identities and communities. We will use literature to compare gender, feminism, and sexuality, to investigate specific historiographical concerns and raise questions about historical methodology and practice. UGIS C145 is a Core Lesbian Gay Bisexual Transgender (LGBT) Minor Course.

Women’s Studies 10
Introduction to Women's Studies (4 units, LG)
Professor Barrie Thorne
MW 10:00-12:00 plus discussion sections,
3 LeConte Hall, CCN: 89803
This course is an introduction to Women's Studies as an academic discipline and to the feminist critique of the existing disciplines through an examination of several selected areas, such as sex role socialization, the women's movements, and female art.

Women’s Studies 20
Introduction to Feminist Theory (4 units, LG)
Professor Wendy Brown
TuTh 11:00-12:30 plus discussion sections,
155 Kroeber Hall, CCN: 89818
This course is an introduction to feminist theories from the eighteenth and nineteenth centuries to contemporary times. The development of feminist theories is treated in relation to pertinent social, political, and cultural theories.

Women’s Studies 50AC
Gender in American Culture (3 units, LG)
Instructor TBA
MW 12:00-2:00, 213 Wheeler Hall, CCN: 89830
This is a multi-disciplinary course designed to provide students with an opportunity to work with faculty investigating the topic of gender in American Culture. This course satisfies the American Cultures requirement.
Letters and Science College Courses

Do you want to study fields beyond your intended major, to become more intellectually well rounded?
Are you looking for a course designed for non-majors, since this is not your specialty, but you don’t want to be fed a watered-down version of the material?
Do you find that the Letters and Science breadth list is a start, but it doesn’t give you much direction?
How can you tell which breadth courses will meet you at your level and then challenge and motivate you to go deeper?

The Letters and Science College Courses have been designed to foster the ideals of a liberal arts education at the highest level of excellence. They are taught by some of the most outstanding teachers on the faculty, for students who are eager to take an intellectual risk. If you are interested in exploring a new area of interest at a deeper level than is required or offered by the usual introductory course, sign up for one of the courses listed below.

Letters & Science R44
Western Civilization (5 units, LG)
Professors Caroline Humfress and Trevor Murphy
MW 10:00-12:00 plus discussion sections,
390 Hearst Mining Circle, CCN: 51245
This College Course covers western civilization from Homeric and Classical Greece, to Rome in its transition from a republic to an empire, to the world of the Old Testament. The course is co-taught by a professor with a literary approach and a professor with a historical perspective; together they foster a spirit of interdisciplinary exchange. This is an ideal course for students who enjoy an intellectual challenge, and who would appreciate the unique rewards of this course: it’s the only course on campus that simultaneously fulfills Reading and Composition and L&S Breadth. This course can be used to satisfy either half of the Reading and Composition requirement and a Letters & Science Breadth requirement: Arts and Literature or Historical Studies or Social and Behavioral Sciences.

Letters & Science 126
Toward An Anthropology of Biology: Genomics and Citizenship (3 units, LG)
Professors Roger Brent and Paul Rabinow
TuTh 3:30-5:00 plus discussion sections,
A1 Hearst Annex, CCN: 51272
L&S College Courses foster and support the ideals of a liberal arts education at the highest level of excellence. One goal of this multi-disciplinary, upper level College Course is to provide an overview of the current state of genomic biology as well as the world it functions in and that has shaped it. Another is to help students to develop a critical and informed perspective on these topics so as to participate as citizens in the shape of their future developments. We call this topic “anthropology” because we believe that the kind of being we are—Anthropos—is currently in the process of being reshaped by the revolution in the life sciences—logos—that is underway. It is worth remembering that the term “biology” was coined in 1802. Today, we wonder whether we are crossing a threshold where biology will affect human self-understanding as powerfully as did the Darwinian synthesis. To address that question we must think through the question of how to understand “bios” as well as to effect and govern changes to it. This course can be used to satisfy a Letters & Science Breadth requirement: Biological Science, Philosophy and Values, or Social and Behavioral Sciences.