



FALL 2006

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**Freshman and Sophomore Seminars
University of California, Berkeley
301 Campbell Hall
Berkeley, CA 94720-2922**

Freshman & Sophomore Seminars at Berkeley

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

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

- Updates to the seminar lists included in this document on easy-to-follow web pages
- Revisions to this document
- Pop-up menus to help students find seminars of interest based on seminar topics
- Information regarding the Food for Thought Seminar series, a wonderful way for faculty and students to get better acquainted in an informal setting before or after class
- Success, Seminars, and You – a web page full of good ideas and helpful links to support students in registering for a seminar and getting the most out of their seminars before, during and after taking a seminar

L&S Discovery Courses

The seven-course breadth requirement can be an unparalleled opportunity to explore fascinating worlds of knowledge. The Letters & Science Discovery Courses, which the College is launching in fall 2005, will take the guesswork out of satisfying the breadth requirement. Taught by some of the most distinguished faculty on campus and deliberately designed to engage and ignite the minds of non-experts, these courses are destined to be unforgettable. For details on the Discovery Courses planned for the upcoming semester, see <http://lsdiscovery.berkeley.edu>.

This document was last updated on August 31, 2006.

FRESHMAN SEMINARS

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

African American Studies 24, Section I

Researching "Mixed-Race" Identity and History in the United States (1 unit, LG)

Professor Stephen Small

Wednesday 10:00-12:00, 650 Barrows Hall, CCN: 00538

This seminar will meet for eight weeks, beginning September 6, 2006 and ending October 25, 2006.

People of mixed racial origins are one of the fastest growing populations in California, and across the USA. This course describes the various sources and methods available for studying the history and identity of people of various racial backgrounds, (including those of mixed Asian, Black, Chicano, Native American or white ancestry). We will review some of the main themes in writings about people of mixed racial origins; we will examine various sources for identifying mixed race populations, including census, biographies, literature and films; and we will consider various methods for carrying out research, including use of historical documents, interviews and analysis of images and representations. This course will equip students with basic research skills that can be utilized for other projects in African American Studies, Ethnic Studies, History, Sociology and Anthropology. We will watch a number of short videos and parts of films about people of mixed racial origins. Requirements include a number of short readings.

Dr. Stephen Small is Associate Professor and Chair in the Department of African American Studies where he teaches courses on Black Family, Research Methods, Globalization and Minority Communities, and People of Mixed Racial Descent (cross listed with Ethnic Studies). He has written several articles on people of mixed racial descent in England, the Caribbean and the USA, and is currently writing a book on Blacks of mixed racial descent in the Caribbean and the United States in the nineteenth century.

Architecture 24, Section I

Contemporary Architecture: Learning from the Architecture Lecture Series (1 unit, P/NP)

Professor Susan Ubbelohde

Wednesday 11:00-12:00, 801A Wurster Hall, CCN: 03702

In addition to the weekly class meetings, students are required to attend a minimum of five lectures in the UC Berkeley Architecture Lecture Series. The schedule of lectures each semester is posted on the College of Environmental Design's website at <http://arch.ced.berkeley.edu/news/index.htm>. All lectures in this series are on Wednesdays at 7:00 p.m. unless otherwise noted on this website.

Each semester the Department of Architecture and College of Environmental Design invite architects from all over the world to present and discuss their current work in a public lecture series. These lectures serve as a window into the issues and concerns of contemporary architecture and can be an ideal introduction to the discipline of architecture. However, for those not already in the field of architecture, the lectures can be hard to understand and learn from. This seminar is designed to contextualize these lectures so they become accessible and understandable to a freshman student enrolled in any major. The weekly seminar sessions will develop background information on the architects and their work and explore the intellectual and creative context in which they operate. Preparation for attending the lectures will alternate with post-lecture discussions of the presentations and

the work. This seminar will require students to attend a minimum of five lectures in the Wednesday night lecture series as well as coming to class weekly. **This seminar is intended to serve as an introduction to the field of architecture for students from any discipline.**

Susan Ubbelohde is an Associate Professor in the Department of Architecture at UC Berkeley, LEEDTM Accredited Professional and Principal of Loisos + Ubbelohde. At Berkeley she teaches graduate design studios and seminars in design theory, lighting design and sustainability. Professor Ubbelohde has directed research for the U.S. Department of Energy, the National Science Foundation, the University of California Energy Institute, and the California Institute for Energy Efficiency on daylighting design, daylighting software, climate-responsive design and monitored building performance. Her current consulting work includes daylighting and energy modeling for Apple Stores, the New York Times Building and the Art Center College of Design in Pasadena.

Chemical Engineering 24, Section I
The Hydrogen Economy (1 unit, P/NP)
Professor Jeffrey Reimer
Monday 4:00-5:00, 109 Gilman Hall, CCN: 10402

Considerable attention has been focused recently on the development and use of hydrogen as the primary fuel for our energy economy. This attention has its lure: hydrogen as H₂ is a simple chemical, is based on the most abundant element in the Universe, and is readily available as water all over the planet. Generation, transportation, storage, and use of H₂ are fraught with problems, and scientists and engineers around the planet are scoffing at the whole notion. How quickly can we make a hydrogen economy happen? Join this seminar and engage in a series of readings and discussions about our energy budget, the problem with carbon, and the myriad of technical challenges that, according to some, condemn the hydrogen economy to forevermore be a dream of the future.

Jeffrey A. Reimer is a Professor of Chemical Engineering at the University of California, Berkeley and Associate Dean in the UC Berkeley Graduate Division. In 1998 he won the Donald Sterling Noyce Prize for Excellence in Undergraduate Teaching in the Physical Sciences, and was given the AIChE Northern California Section Award for Chemical Engineering Excellence in Academic Teaching. In 2000 he was awarded the Chemical Engineering Departmental Outstanding Teaching Award. Professor Reimer was awarded the campus' Distinguished Teaching Award in 2003. The goal of Professor Reimer's research is to provide a scientific basis for the systematic design of new materials and devices for technological development, with particular attention to those technologies aimed at environmental protection. His group consists of experimentalists that use many different tools for their research, yet retain special expertise and interest in magnetic resonance (MR) spectroscopy and imaging methods. For more information regarding Professor Reimer, please visit his faculty web page at <http://india.cchem.berkeley.edu/~reimer/>.

Chicano Studies 24, Section I
Chicano Civil Rights Movement (1 unit, P/NP)
Professor Carlos Munoz Jr.
Monday 10:00-11:00, 140 Barrows Hall, CCN: 13003

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

Professor Carlos Muñoz, Jr. is a Professor Emeritus in the Department of Ethnic Studies. He is the award-winning author of *Youth, Identity, Power: The Chicano Movement*, and is working on a book on the topic of the seminar.

Civil and Environmental Engineering 24, Section I
Field Trips in Environmental Engineering: River and Wetland Restoration and Dam Removal (1 unit, P/NP)
Professor John Dracup
Wednesday 6:00-7:00, 406 Davis Hall, CCN: 13902

This seminar will meet for four one-hour lectures/discussions, which could possibly run longer, in 406 Davis Hall: on September 6, 2006 for a group orientation and September 27, October 25, and November 15, 2006 for pre-field trip discussions. This seminar will meet for three four-to-six hour field trips, time and location TBA, on the following Saturdays: September 30, October 28, and November 18, 2006. Food for Thought dining arrangements and field trip details will be discussed in class.

Three Saturday field trips are scheduled to the following: 1. a river restoration site, 2. a wetland restoration site, and 3. a dam removal site. A one-hour lecture/discussion concerning the science/engineering aspects of the field trip will be held before proceeding to the Saturday field trip. All field trips will be in the San Francisco Bay area and be four to six hours in duration. Transportation will be provided to and from the Berkeley campus. Students must attend all of the seminar meetings and three field trips to receive a passing grade in the seminar. **Enrollment is by instructor approval only and is limited to fourteen students. To obtain the instructor's approval, potential students must email Professor Dracup at dracup@ce.berkeley.edu and state in a brief paragraph why they wish to take this course and their intended major. If student interviews are needed to determine enrollment in this seminar, they will be conducted during Welcome Week. This seminar is intended for undeclared students in engineering, environmental science, geology and geophysics and biology. This seminar is part of the Food for Thought Seminar series.**

John Dracup is a Professor of the Graduate School in the Department of Civil & Environmental Engineering. He has taught and conducted research in the University of California system for over forty years. His expertise is in water resource engineering and hydrology. His awards in 2006 include being inaugurated into the "Order of the Black Blouse" by the Water Rights Court of Valencia, Spain and the designation of a Diplomat of the American Academy of Water Resource Engineers of the American Society of Civil Engineers. He swims competitively with Pacific Masters Swimming and skis competitively with Far West Masters Ski Racing.

Earth and Planetary Sciences 24, Section I

The Day the World Exploded: The 1883 Eruption of Krakatoa (1 unit, P/NP)

Professor Michael Manga

Wednesday 2:00-3:00, 401 McCone Hall, CCN: 19008

In 1883 Krakatoa erupted explosively killing more than 36,000 people. We will use this eruption to understand why volcanoes exist, how and why they erupt, the hazards they pose, and their role in human history and the evolution of life.

Michael Manga is an Associate Professor of Earth and Planetary Science. His areas of expertise include planetary science, fluid mechanics, hydrology, geodynamics, and physical volcanology. For more information regarding Professor Manga, please visit his faculty webpage at <http://seismo.berkeley.edu/~manga/rsch.html>.

Education 24, Section I

Hot Topics in Higher Education (1 unit, LG)

Ms. Ellen Switkes

Wednesday 3:00-5:00, 4635 Tolman Hall, CCN: 23517

This seminar will meet the first eight weeks of the semester. The instructor will hold office hours after class.

This seminar will focus on current topics of interest in higher education such as admissions, financial aid, athletics, effective teaching and learning, student speech codes and academic freedom, crime on campus, and high-school-to-college transition in a university setting. Student-selected topics may also be included.

Ellen Switkes is Assistant Vice President in the University of California Office of the President. She has responsibility for academic personnel, including compensation and diversity policies, on all UC campuses.

Engineering 24, Section I

Time, Money, and Love in the Age of Technology (1 unit, P/NP)

Lecturer Americ Azevedo

Monday 1:00-2:00, 237 Cory Hall, CCN: 2762 I

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

Americ Azevedo blends thirty-five years in the information technology world with spiritual studies and practices, resulting in a vision of simple wisdom in a complex world. He is Founding Director of the Collaborative Intelligence Laboratory (CI Lab) at the University of California, Berkeley. He has taught "Spirituality and Leadership" for the Master's Program in Leadership at St. Mary's College of California; philosophy and religion at San Francisco State University and Dominican University of California; information systems, leadership, management and finance at Golden Gate University, University of San Francisco, and John F. Kennedy University. His consulting career includes work as an acting CEO during technology company reorganizations, development of e-learning systems for universities and companies, database management, web site development, and contractor management services. He is co-founder and architect of the CyberCampus at Golden Gate University (now serving over 2000 students and 90 faculty per semester) and holds degrees in Philosophy from University of California, Irvine and San Francisco State University. For more information regarding Americ Azevedo, see his website at <http://socrates.berkeley.edu/~americ/>.

English 24, Section I

Growing Up Chicano (1 unit, P/NP)

Professor Genaro Padilla

Wednesday 4:00-5:00, 121 Wheeler Hall, CCN: 28075

We will read a small group of narratives about growing up Chicano/Latino. By focusing on Chicano youth we will glimpse their experience as they come into sexuality and gender identity, the early formations of social identity, as they work through personal aspirations over against familial expectations and peer pressure, and how they see themselves coming into their own lives. We will read some of the best writers on childhood and adolescence: Sandra Cisneros's *House on Mango Street* and stories from *Woman Hollering Creek*, Gary Soto's *Living up the Street*, and other material I will either copy or order before the term opens. We will also discuss the films "and the earth did not devour him" based on the story by Tomas Rivera, "Mi Vida Loca" directed by Allison Anders, "Real Women Have Curves" and possibly "Mi Familia" directed by Gregory Nava.

Professor Genaro Padilla has taught at UC Berkeley since 1987, and has written or edited numerous books, including *My History, Not Yours: The Formation of Mexican American Autobiography*, *The Short Stories of Fray Angelico Chavez*, *Recovering the U.S. Hispanic Literary Heritage* (ed.), *Nuevomexicano Cultural Legacy: Forms, Agencies, and Discourse* (ed.) and *Power, Race, and Gender in Academe: Strangers in the Tower?* (ed.). He currently serves as the Vice Chancellor for Student Affairs.

English 24, Section 2

The Essays of Virginia Woolf (1 unit, P/NP)

Professor Katherine Snyder

Wednesday 2:00-3:00, 224 Wheeler Hall, CCN: 28078

In addition to the novels for which she is most famous, Virginia Woolf produced a voluminous body of short prose, with more than 500 essays and reviews on a dazzling array of topics including, but far from limited to, peace and war, consciousness and selfhood, modernity and urban experience, national and class identity, Shakespeare and women writers. In this class, we will take the opportunity to read slowly and with close attention to stylistic and rhetorical detail some of Woolf's most brilliant and influential essays, in order to understand more not only about the author's own views and experiences, but also about how she crafted her luminous and compelling prose. Assigned work will include informal written responses to the readings and in-class presentations of selected passages, and will culminate with an attempt at a short essay of your own, with revisions guided by a peer-group writing workshop.

Katherine Snyder is an Associate Professor in the English Department and, as of fall 2006, will serve as Director of the College Writing Programs. Her research interests encompass nineteenth- and twentieth-century British and American literature, the novel and the essay, the history of masculinity, and the city and the rise of literary modernism.

English 24, Section 3

Joyce's Dubliners in Joyce's Dubliners (1 unit, P/NP)

Professor Robert Tracy

Monday 3:30-5:30, Room L20, Unit Two at 2650 Haste Street, CCN: 28080

This seminar will meet for eight weeks, beginning September 11, 2006 and ending October 30, 2006.

James Joyce's *Dubliners* (1914) is a collection of short stories about the inhabitants of his native city. Joyce helps invent the modern short story as he tries to evoke the mood or atmosphere of Dublin as it manifests itself in the behavior of Dublin men and women. When Joyce wrote, Ireland was still ruled from London both politically and culturally. Joyce's book is a declaration of cultural independence, as he makes his subject matter the muted lives of middle class Dubliners. His characters are protagonists of their own dramas, but at the same time are shaped by their environment and so part of the larger Dublin story.

Text: James Joyce, *Dubliners* (Penguin paperback)

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

English 24, Section 5

Two Novels by Jane Austen (1 unit, P/NP)

Professor Morton D. Paley

Tuesday 3:30-5:30, 305 Wheeler Hall, CCN: 28807

This seminar will meet for eight weeks, beginning August 29, 2006 and ending October 24, 2006. There will be no meeting on September 19.

This seminar is meant to be an interesting and pleasant introduction to the study of a great novelist: Jane Austen. We'll read and discuss two novels: *Pride and Prejudice* and *Northanger Abbey*. We'll approach the novels from a number of different perspectives, including (but not limited to) the roles of class and gender, Austen's language, plot structure, "point of view," the thematization of moral concerns, and the interplay of her fiction and the history of her time. We'll also discuss various critical approaches to these two works.

Your responsibilities will be 1) to attend regularly, bringing with you the assigned texts (see the note about the specific editions, below); 2) to participate in discussion; 3) to make a 15-minute (not longer) presentation; and 4) to write a short essay (about 1500 words, 7-8 double-spaced pages) on a subject of your own choice, due at the last seminar meeting. I'll be glad to read rough drafts of your essays in advance.

At our first meeting we'll consider a number of possible presentation subjects for you to choose from, and of course you may also suggest your own. Each of you will have a meeting with me during my office hours to help prepare for this. Some of you may wish to collaborate on presentations. In the latter part of the term, conferences on choosing an essay topic will be encouraged.

I'll begin by providing an introduction to the early Austen, using some passages from her early prose works, and we'll talk about *Pride and Prejudice*. Please bring your copy of the Oxford World's Classics edition and be prepared to discuss the first 100 or so pages.

Book List: Because we'll be examining a number of passages closely each time, going quickly from passage to passage, we'll need to locate these quickly by page number. For that reason it's important that everyone have the same text of the two novels. I have chosen two paperback editions that are well-edited and easily available: *Pride and Prejudice* and *Northanger Abbey* (both Oxford World's Classics editions).

Morton D. Paley studies the literature and art of the Romantic period. His most recent books are "The Traveller in the Evening: The Last Works of William Blake," "Portraits of Coleridge," "Apocalypse and Millennium in English Romantic Poetry," and "Coleridge's Later Poetry."

English 24, Section 6
Shakespearean Comedy: Twelfth Night (1 unit, P/NP)
Professor Alan Nelson
Tuesday 9:00-11:00, 305 Wheeler Hall, CCN: 28813

This seminar will meet for eight weeks, beginning October 3, 2006 and ending November 21, 2006.

Our seminar will concentrate on one of Shakespeare's best and most beloved comedies, *Twelfth Night*. We will read every word of the play as a group, and do trial readings and enactments of various scenes. Members of the seminar will give at least two oral reports each, covering various aspects of plot, character, action, gender representation (and confusion) and, most particularly, language and poetry.

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

Environmental Science, Policy, and Management 24, Section 1
Issues in Natural Resource Conservation (1 unit, P/NP)
Professor David Wood
Friday 9:00-10:00, 106 Mulford Hall, CCN: 29136

There is one optional field trip to a Bay Area location on a Saturday from 8:00 am to 3:00 p.m. to be arranged.

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

Professor Wood's research interests include host-selection behavior of forest insects, chemical ecology, the biology and ecology of bark beetles, forest pest management, the biodeterioration of wood by insects, and insect/pathogen/tree interactions.

**Environmental Science, Policy, and Management 24, Section 2
Science Goes to the Movies (1 unit, P/NP)**

Professor Vincent Resh

Monday 3:00-5:00, 2301 Tolman Hall, CCN: 29139

This seminar will meet for fifteen weeks and will include film viewing and critiquing time.

Since cinema began, the characterization of scientists in film has ranged from depictions of inspirational visionaries intrigued with the drama of discovery to power seekers who either deliberately or unwittingly lead society toward death and destruction. In this seminar, we will examine how scientists in different fields and at different times are depicted, how societal fears about technology affect moviegoers' perceptions, and how scientists actually practice their craft compared to how their activities are presented in film.

Professor Resh is an aquatic ecologist in the Department of Environmental Science, Policy and Management. His research interests range from the assessment of water pollution to the control of water-borne disease vectors.

**Environmental Sciences 24, Section 1
Sustainability: The Future is Now (1 unit, P/NP)**

Professor William Berry

Wednesday 4:00-5:00, 55A McCone Hall, CCN: 30427

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

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

**Geography 24, Section 1
Exploring American Cities (1 unit, P/NP)**

Professor Paul Groth

Tuesday 3:30-6:00, 135 McCone Hall, CCN: 36472

This seminar will meet for the first eight weeks of the semester, beginning Tuesday, August 29, 2006, and ending October 17, 2006.

The visual and spatial artifacts of cities—their buildings, lots, streets, signs, front yards, even graffiti—provide useful clues to past and present meanings, social identities, political struggles, and economic realities within America. These visual aspects of cities are not random; they often fit into repeating patterns and processes. Thus, learning to see the cities of the Bay Area can provide basic tools for understanding any American city built after 1850. We will travel by foot and BART to explore parts of Berkeley, Oakland, and San Francisco with six field trips, usually with two hours of discussion and lecture on site, and a half hour for travel back to campus. A few longer trips will mean we get back to campus late, about 6:30 PM. Course requirements include brief readings and participating in on-site discussions. Course costs include the reader (about \$25) and about \$20 in BART tickets. **This is a general interest course, for students from any major. The two requirements are curiosity**

about American cities, and a willingness to get back to campus a bit late after the San Francisco trips.

Paul Groth is a Professor in geography, architecture, and American studies. His overarching interests and publications are in cultural landscape studies—that is, the history, form, and meaning of ordinary built environments, particularly in the United States. He has studied urban buildings and districts in dozens of cities, and is currently at work on a book connecting changes in American workplaces, public recreation, and homes.

German 24, Section 2

Language and Identity (1 unit, P/NP)

Professor Claire Kramsch

Tuesday 3:00-4:00, 123 Dwinelle Hall, CCN: 37478

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

All readings will be in English, or English translation.

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

History 24, Section 1

The Creation, Operation, and Dismantling of Apartheid in South Africa (1 unit, P/NP)

Professor Tabitha Kanogo

Tuesday 2:00-4:00, 2303 Dwinelle Hall, CCN: 39219

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

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

History 24, Section 2

Concept and Image: Movies as Documents for the History of the United States, 1920-1945 (1 unit, LG)

Professor Samuel Haber

Wednesday 2:00-5:00, 123 Dwinelle Hall, CCN: 39222

This seminar will meet the entire semester. For eight of those weeks we will meet from 2:00-5:00 p.m. to view and discuss eight movies. During the alternate weeks the seminar will meet for approximately an hour and a half to further discuss the issues raised by the

movies and those presented by the course reader. The movie schedule will be available at the first class meeting. Food for Thought dinner meeting dates and times will be discussed in class.

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

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

**History 24, Section 3
Scientific Revolutions (1 unit, P/NP)
Professor Cathryn Carson
Wednesday 2:00-3:00, 214 Haviland Hall, CCN: 39225**

How does science progress? Does it change smoothly or discontinuously? Build on past ideas or reject and replace them? In this seminar we will read and think together about Thomas S. Kuhn's famous book *The Structure of Scientific Revolutions*. Kuhn's book will be our launching point for wide-ranging discussions about the nature and history of science.

Cathryn Carson spent her undergraduate years taking physics and math courses. Officially she majored in the history and philosophy of science. Before finally realizing she was a historian, she ended up with a master's degree in physics. Now she teaches and researches the history of physics. She first read Kuhn's book in high school.

**History of Art 24, Section I
Looking at Berkeley Buildings (1 unit, P/NP)
Professor David Wright
Wednesday 2:00-4:00, 425 Doe Library, CCN: 05445**

Attendance at the first seminar meeting is necessary. This seminar will end on Wednesday, November 15, 2006 to leave students free for their work in other courses.

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.

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.

Industrial Engineering and Operations Research 24, Section I

Overview of IEOR (1 unit, P/NP)

Professor Ilan Adler

Monday 4:00-5:00, 1174B Etcheverry Hall, CCN: 41003

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

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

Integrative Biology 24, Section I

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

Professor Roy Caldwell

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

A homing pigeon can return to its loft after being shipped one thousand km to a place it has never been. A whale spends its summers in the Bering Sea and its winters near Maui. A female sea turtle returns for the first time to a beach where she hatched thirty years earlier to lay her own eggs. A Monarch butterfly flies south two thousand km to spend the winter in a secluded grove in central Mexico. A limpet returns forty cm to a favorite depression in a rock. The abilities of animals to navigate have intrigued biologists for decades. We will read a series of papers describing how animals navigate and how they use such methods as landmarks, celestial cues, and geomagnetic fields to determine where to go and what route to follow. We will also attempt to replicate experiments that suggest that humans are able to navigate using geomagnetic fields. At the end of the semester, each student will be required to write a short review paper discussing navigation and orientation by an animal of his or her choice. **This seminar is designed for students with a general interest in animal biology and more specifically animal behavior. Registration for this seminar is by instructor approval only. Interested students should put their names on the waitlist and then attend the first class meeting.**

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

Integrative Biology 24, Section 2

Dinosaur Biology: An Introduction to Research (1 unit, LG)

Professor Kevin Padian

Wednesday 12:00-1:00, 5192 Valley Life Sciences Building, CCN: 43006

If dinosaurs are all extinct, how can we know anything about their biology? The answer to this question gives you the key to how we learn about the past: how we gather information, form and test hypotheses, and propose new questions to ask. This seminar focuses on the methods we use (field, lab, and most importantly intellectual methods), the kinds of information available and not available from fossils, and how we integrate information from living forms to try to reconstruct a view of long-extinct ones. The course sessions require reading preparation,

contributions to discussion, and some hands-on experience. By the end, you will probably know more about dinosaurs, but especially about how paleontologists, geologists, and evolutionary biologists know about the processes of life that have produced the biodiversity of the past as well as the present.

Kevin Padian would like to play first base for the Oakland A's, but he is over the hill for that one. Inasmuch as his dreams of becoming a rock guitarist are similarly frustrated, he spends his time doing research on how new major evolutionary changes and adaptations get started. Part of his focus is on the Age of Dinosaurs, because he is a curator in the Museum of Paleontology. He was recently an expert witness at the trial in Dover, Pennsylvania, where Judge John Jones III determined that ID was not science and should not be taught as such.

Integrative Biology 24, Section 3
The Stone Age (1 unit, P/NP)
Professor Tim White
Wednesday 3:00-5:00, 18 Hearst Gym, CCN: 43009

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

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

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

Journalism 24, Section I
Points of View: A Photographic Story of Self (1 unit, P/NP)
Lecturer Mimi Chakarova
Thursday 1:00-3:00, 209 North Gate Hall, CCN: 48003

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

Eduardo Galeano tells the story of a film crew in the Chaco. An Indian, Ishir girl approaches the director, looks into his blue, blue eyes and says, "I want to know what colors you see." "The same as you," the director says. "And how do you know what colors I see?" the young girl asks. This is the perfect jumping-off point for a photography class that addresses race and ethnicity. The camera, used by the artist as a mechanical device, most often serves as an extension of the human body's ability to see and preserve memories. Through a series of progressive exercises, examining issues of race, ethnicity and social class, the students in this seminar will investigate inherent characteristics of the medium of self-portraiture, and determine what makes a well-formed image, how images work with one another, and how selections of images develop into coherent visual stories. Students will also critically evaluate the individual creative process as it relates to other artists' conceptual work. This seminar is an introduction to self-portraiture. Through various hands-on assignments, the students will experiment with different approaches to portraiture, will learn a collection of techniques, and will engage in critiques and discussions. Slide presentations about self-portraiture and its historical role next to other media will place photographic portrait into historical perspective with documentary and social photography. Class is open to students working in black and white, color, or digital photography. At the end of the term, we will organize an exhibit and open this up to a larger discussion on how photography can help tackle issues of identity and representation. **Prior photo experience is preferred but not required.**

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

Linguistics 24, Section I
Language and Politics in Southern Africa (1 unit, P/NP)
Professor Sam Mchombo
Wednesday 10:00-11:00, 205 Wheeler Hall, CCN: 52278

Food for Thought dining arrangements will be discussed in class.

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

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

Mass Communications 24, Section I
Keeping Up: Staying Well Informed (1 unit, P/NP)
Professor Thomas Goldstein
Wednesday 4:00-5:00, B1 North Gate Hall, CCN: 53235

Food for Thought dining arrangements will be discussed in class.

This seminar will explore what keeping informed means in the digital age. It will also offer strategies on how to be well informed. **This seminar is part of the Food for Thought Seminar Series.**

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

Materials Science and Engineering 24, Section I

Materials in Music (I unit, P/NP)

Professor Ronald Gronsky

Monday 2:00-4:00, 128 Hearst Memorial Mining Building, CCN: 53403

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

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

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

Mathematics 24, Section I

What is Happening in Math and Science? (I unit, P/NP)

Professor Jenny Harrison

Friday 3:00-4:00, 891 Evans Hall, CCN: 54484

In this seminar, we will discuss the latest developments in science and math. Students will present short oral reports from articles of their choice in the Science Times, Scientific American, Science News, or articles in What is Happening in the Mathematical Sciences. Discussion and debate are encouraged when ethical issues arise from breakthroughs such as human cloning and genetic engineering of food and animals. Students are encouraged to think of applications and possibilities of new research projects. Creative thinking is encouraged! Students considering a major in math or science have found this seminar a useful resource to help clarify their choice.

Jenny Harrison obtained her Ph.D. in mathematics in Warwick, England. She has taught at Oxford, Princeton, and Yale, as well as UC Berkeley. Her research interests include extensions of calculus to fractal domains and soap film modeling. Applications of this theory to sciences may arise during this seminar.

Mechanical Engineering 24, Section I

Art and Science on Wheels (I unit, P/NP)

Professor Benson Tongue

Wednesday 1:00-2:00, 3106 Etcheverry Hall, CCN: 56003

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

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

Mechanical Engineering 24, Section 2
Computer Graphics Tools (1 unit, P/NP)
Professor Dennis Lieu
Monday 5:00-6:00, 2105 Etcheverry Hall, CCN: 56006

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

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

Molecular and Cell Biology 90B, Section 1
The New Biology and Biomedical Science of the 21st Century (1 unit, P/NP)
Professor Richard Strohman
Tuesday 1:00-2:00, 2066 Valley Life Science Building, CCN: 57826

Our seminar will examine evidence for the asserted fact that the fields of molecular biology and medicine are now undergoing revolutionary changes in theoretical outlook and practice. During the twentieth century these two fields were dominated by genetic determinism: the simplistic idea that all of life, from the cell to the organism of millions of cells, may be understood through genetic analysis alone and that diseases of humankind are similarly approachable. Much evidence has now accumulated making clear that this research plan, or paradigm, is incomplete and is unable to lead us to the next stages of scientific progress. We will ask questions and look for answers addressing the reasons, scientific, ethical, and cultural, for why and how so many scientists and other scholars could have been so wrong for so long, and we will identify the new developing consensus concerning a new paradigm and practice that will be able to lead us to the hills of vision in biology and medicine.

Professor Strohman has been chair of UCB Zoology Department (1973-1976) and director of UC Berkeley's Health and Medical Sciences Program (1976-79). While on leave from UC in 1990, he was Research Director for the Muscular Dystrophy Association's international effort to combat genetic neuromuscular diseases. Retired in 1991, he continues to teach courses and provide critical analysis dealing with the interface between biology and medicine, and the growing crisis in theoretical biology stemming from an over dependence on genetic reductionism.

Molecular and Cell Biology 90B, Section 2
Insulin as a Window on Discovery in Biology (1 unit, P/NP)
Professor Randy W. Schekman
Tuesday 3:00-4:00, 2066 Valley Life Sciences Building, CCN: 57829

The discovery and therapeutic application of insulin was one of the most dramatic developments in twentieth-century biomedical science. We will consider the impact of insulin in protein biochemistry, and molecular and cell biology. We will also explore the role of the individual scientist in the process of discovery and the importance of animal research in biomedical science. A book entitled The Discovery of Insulin by Michael Bliss will be available in the student bookstore. Glory Enough For All, a Canadian film and dramatic portrayal of the insulin story, will be available for viewing. **Students considering a major in Molecular and Cell Biology as well as all other interested students are welcome to enroll. This seminar is open to all students**

interested in the discovery process in the life sciences. A background in high school biology will be useful; AP biology is particularly appropriate preparation for the material we cover.

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

**Molecular and Cell Biology 90E, Section 2
Brain, Mind, Music, Culture (1 unit, P/NP)**

Senior Lecturer David E. Presti

Wednesday 3:00-4:00, 2070 Valley Life Sciences Building, CCN: 57844

Music has a deep and mysterious impact on human behavior. This seminar will explore music, the brain, the human mind, and how they are related within contemporary culture. Content will range from the biophysics of sound sensation and the neurophysiology of auditory perception to an exploration of the roots of music in human culture, via focus on several musicians, musical genres, and musical instruments. Students will do a project consisting of a brief descriptive presentation of the work of a favorite musician or musical genre.

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

Music 24, Section 2

Music since 1949: The New Start? (1 unit, P/NP)

Professor John Thow

Thursday 2:00-3:30, 124 Morrison Hall, CCN: 60925

This seminar will meet for ten weeks, beginning September 14, 2006 and ending November 16, 2006. Food for Thought dining arrangements will be discussed in class.

The variety of music of the twentieth century is rich, particularly in the period after the second World War. Many new ways of making music emerged in classical, popular and jazz traditions. This seminar will explore some of these paths, beginning with a series of presentations by Professor Thow and leading to a discussion and presentation of music of any style of interest to the individual students of the class. There will be some reading about the trends during this period, but the emphasis will be on the individual students' presentations. The goal is to listen to, perhaps perform, and definitely learn about the great variety of music a thoughtful group of listeners at Berkeley can suggest and to think about how, during their undergraduate years at Berkeley, participants in the seminar can develop and expand their interests on campus and in the Bay Area. **First preference is for intending music majors. Others are welcome as space provides. This seminar is part of the Food for Thought Seminar Series.**

John Thow is a Professor in the Department of Music. He studied composition, flute and piano from an early age and continued his studies at the University of Southern California (B. Mus.) and Harvard University (Ph.D.). Professor Thow also studied in Rome under a Fulbright Fellowship with Luciano Berio and with Luigi Dallapiccola in Florence and later Franco Donatoni at the Accademia Musicale Chigiana (Siena). He returned under a Harvard Travelling grant and a Rome Prize Fellowship to live in Italy, where he continued work with Berio. Professor Thow's compositions have been commissioned and performed widely in the United States and in Europe by L'Orchestra della RAI (Rome), Speculum Musicae, the Boston Musica Viva, the Brooklyn Philharmonic, the San Francisco Contemporary Music Players, the San Francisco Symphony and many others. His work has been featured at the Tanglewood and Edinburgh Festivals. Among the many awards given to Professor Thow's music have been two awards from the American Academy of Arts and Letters, a Guggenheim Fellowship and grants from the NEA

and American Music Center. Professor Thow's specialties in composition and contemporary music are reflected in the courses he teaches: composition, orchestration, counterpoint and analysis at all levels. In addition, he has been active in organizing concerts of student works and special celebratory concerts featuring the work of Andrew Imbrie, Henry Cowell and Luciano Berio. For more information regarding Professor Thow, please visit his faculty webpage at <http://ls.berkeley.edu/dept/music/Thow.html>.

Natural Resources 24, Section 1

Dean's Night Out - People and the Environment (1 unit, P/NP)

Dean Paul W. Ludden

Thursday 4:30-6:30, 133 Giannini Hall, CCN: 61303

This seminar meets for six weeks on the following dates: August 31, September 14, September 21, October 5, October 26, and November 9, 2006.

You will be introduced to the different approaches for examining the environment and finding solutions to major environmental and natural resource problems. Each session participants will meet guest speakers who will speak informally about their work, their preparation for it, and the problems their work addresses. Following guest speaker presentations, participants are encouraged to interact with the guests to fully reap the benefit of the speakers' experience.

Paul W. Ludden is a Professor in the Department of Plant and Microbial Biology and Dean of the College of Natural Resources. His research interests and expertise are in microbial and plant biochemistry, particularly the role of enzymes in biological nitrogen fixation. His studies help illuminate the role of catalysts in converting nitrogen gas into soil-enriching ammonium which helps lay the groundwork for advances in the development of non-polluting nutrients.

Natural Resources 24, Section 2

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

Professor Stephen Welter

Thursday 5:00-6:00, Classroom A in Foothill I, CCN: 61306

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

The goal of this Freshman Seminar is to bring students and faculty together to explore issues such as global environmental change, policy and management of natural resources, sustainable rural and urban environments, and environmental leadership. The seminar will provide students and faculty a forum to exchange ideas, challenge each other's thinking, and share experiences in a small group setting. Students will have the opportunity to do research and teach their peers about regional to global environmental issues in preparation for Theme Program field trips and guest speakers. Discussions will also explore the freshman experience, and how it, too, is an environmental phenomenon, shaped by and in turn shaping the physical, social, and intellectual environment of the Berkeley campus. **This seminar is part of the Food for Thought Seminar Series. Course enrollment restricted to Global Environmental Theme House participants. Obtain CEC from the instructor.**

Steve Welter is Professor and Division Chair of the Division of Insect Biology in the Department of Environmental Science, Policy and Management. He received his PhD from UC Riverside in Agriculture Entomology/Plant-Insect Interactions. His research focuses on developing environmentally rational integrated pest management programs for tree fruit or vegetable crops with a strong emphasis on the behavioral ecology of moths in pheromone-permeated environments. He will be organizing the field trips for this seminar.

Natural Resources 24, Section 3

Dean's Day Out: Follow Your Food (1 unit, P/NP)

Professors Sally Fairfax and Lynn Huntsinger
Friday 4:00-5:00, 260 Mulford Hall, CCN: 61308

This seminar will meet on Friday, September 8, 2006 from 4:00 to 5:00 p.m. for an organizational meeting in 260 Mulford Hall and the following three Fridays from 4:00-5:00 p.m. in 260 Mulford Hall for background and trip planning: September 15, 22 and 29, 2006. The seminar's field trip will be held on Saturday, September 30, 2006 from 7:00 a.m. to 10:00 p.m. and will begin at West Circle on campus.

Follow your food from seed to salad (and steak) with four discussion meetings and a one-day, all day field trip from lab to farm to dinner. Learn about the nutritional, environmental, and controversial aspects of food production in the Bay Area. Full field trip, class attendance, and all day participation is required to pass.

Sally K. Fairfax is Henry J. Vaux Distinguished Professor of Forest Policy in the S & E Division of Environmental Science, Policy and Management (ESPM) and the Associate Dean of Instruction and Student Affairs for the College of Natural Resources. Her expertise is public land management and land conservation. She and her lab are presently working on a book on alternative food systems.

Lynn Huntsinger is Associate Professor in the Department of Environmental Science, Policy and Management (ESPM) and the Associate Dean of Instruction and Student Affairs for the College of Natural Resources. Her expertise is in agriculture, ecological history, and rangeland ecology and management.

Near Eastern Studies 24, Section 2

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

Professor Carol Redmount

Wednesday 1:00-2:00, Exhibit Gallery in Hearst Museum (first class) and 205 Wheeler Hall, CCN: 61439

The first seminar meeting will be held in the Exhibit Gallery in Hearst Museum. Future seminar meeting locations will be announced in the first class.

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

Carol Redmount is an Associate Professor in the Near Eastern Studies Department. She specializes in the archaeology of Egypt and the southern Levant, and directs the new UC Berkeley excavations at El-Hibeh, a three-thousand-year-old provincial town and cemetery site in Middle Egypt. She began her archaeological fieldwork the summer of her freshman year in college and hasn't stopped excavating since. She first worked in Egypt in 1978 and lived in Cairo for three years in the mid-1980s. She also has taken part in archaeological research in Cyprus, Israel, Jordan, Tunisia, and the United States.

Nutritional Sciences and Toxicology 24, Section I

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

Professor George Chang

Tuesday 11:00-12:00, Unit 2 Towle Residence Hall L3 Seminar Room, CCN: 64595

Food for Thought lunch meeting dates and times will be discussed in class. Unit 2 is located at 2650 Haste Avenue between College and Bowditch. Unit 2's front desk staff can direct you to the room if needed.

The freshman experience offers problems and challenges to the first-year student. For example: How can I cope with The Roommate from Hell? What about the "freshman fifteen" pounds of weight gain? Why do I have more reading in one week than I had in all of high school? Is Chemistry 1A really more frightening than death itself? Why can't my GSI speak Californian English? Are assignments and exams really necessary? Each week a team of students will select a question like these, research it for a week, and then present their findings to the class. A lively discussion will follow, with each student speaking every week. In fall 2006, "The Freshman Experience" will be held in Unit 2 Towle Residence Hall L3 Seminar Room to enhance the living-learning connection in the residence halls. **This seminar is part of the Food for Thought Seminar Series. After seminars, students and faculty can continue their discussions over lunch at the Crossroads Dining Commons.**

Professor Chang received an A.B. in chemistry from Princeton and a Ph.D. in biochemistry from Cal. His research is in food microbiology with an emphasis on detecting fecal contamination in water and food. He has been heavily involved in undergraduate affairs, serving on the Undergraduate Affairs Committee, the Committee on Courses, and the Committee for Undergraduate Scholarships and Honors of the Academic Senate. He has also served on ad hoc committees dealing with disabled students and the need to develop a sense of community on each of the UC campuses. His most exciting assignment in the 20th Century was to serve on The Chancellor's Commission to Study the University's Responses to a Diversified Student Body. Recently Professor Chang became the inaugural professor in Cal's new Residential Faculty Program.

Philosophy 24, Section I

The Ethics of Mortality: Is It Ever Okay to Kill Someone? (1 unit, P/NP)

Professor R. Jay Wallace

Monday 11:00-12:00, 234 Moses Hall, CCN: 67195

This seminar will consider whether and under what conditions it might be morally permissible to kill another person. We will consider a variety of situations in which killing has been thought to be morally justified, such as self-defense, the conduct of a just war, the administration of justice (capital punishment), and the alleviation of acute suffering (euthanasia). In considering the permissibility of killing under these various circumstances we will be forced to address fundamental questions about the nature of morality and the value of human life. Readings will be taken from contemporary philosophical discussions (available in a course reader). Students will be expected to attend all seminar meetings and to participate in seminar discussions. In addition, there will be two short papers (1-2 pages).

R. Jay Wallace works in moral philosophy. His interests extend to all parts of the subject (including its history), and to such allied areas as political philosophy, philosophy of law, and philosophy of action. His research has focused on responsibility, moral psychology, and the theory of practical reason. Recently he has written on promising, freedom, rational agency, normativity, contractualism, instrumental reason, and Nietzsche's Genealogy of Morals. He was an undergraduate at Williams College, where he received the B.A. degree in 1979. He did his graduate work at the University of Oxford (B.Phil. 1983) and at Princeton University (Ph.D. 1988). He has taught at Wesleyan University, the University of Pennsylvania, and the Humboldt-Universität zu Berlin, and has held visiting positions at the Universität Bielefeld, in the Research School of Social Sciences at the Australian National University, at the Humboldt-Universität zu Berlin, and at the University of Canterbury in Christchurch (New Zealand). He is currently Chair of the Philosophy Department at Berkeley.

Plant and Microbial Biology 24, Section I

Encounters with Plants: First-hand Experiences with the Culture, Lore, and History of Plants (1 unit, P/NP)

Professor Lewis Feldman

Tuesday 10:00-11:00, 104 Genetics and Plant Biology Building, CCN: 70806

This seminar is meant to provide students the opportunity to explore ways plants have figured into or influenced their lives, both personally and in an historical sense. Examples could include unique cultural uses of plants, perhaps as foods or medicines, or in a ceremonial way. As well, you could use this seminar to explore an aspect of plants in which you may have an interest, and about which you would like to learn more, such as the ways plants figure into art (e.g., Rousseau's Jungle paintings). Plants too have recently been associated with controversial issues, such as genetically engineered foods. We want to use this seminar as a way of expanding our appreciation and understanding of this unique group of organisms. For the first few meetings we will have talks/discussions from individuals whose daily lives involve plants. For the remaining weeks each student will present a thirty-minute "seminar" on a plant topic in which they have an interest. This seminar should be based on readings and could also involve some personal, first-hand experiences with plants.

Lewis Feldman has been teaching about plants at Berkeley for nearly thirty years. He regularly instructs in the plant section of Introductory Biology (Biology 1B). He is a member of the Department of Plant and Microbial Biology where he conducts research on plant development, with a particular interest in understanding how plants are organized, and how patterns are established. He has also studied how plants detect and respond to gravity.

Psychology 24, Section 1

Social Psychological Concepts and Principles in Everyday Life (1 unit, P/NP)

Professor Serena Chen

Monday 3:00-4:00, 2235 Tolman Hall, CCN: 74284

In this seminar, students will discover and learn about basic social psychological concepts and principles and how they apply to their everyday lives. For example, we will talk about how principles of categorization may account for stereotyping, prejudice, and discrimination. Another example is how differences in the domains in which people stake their self-esteem influence their academic and other outcomes. A final example is how differences in people's level of self-esteem have significant consequences for their romantic relationships. **Any first-year student interested in psychology is welcome!**

Dr. Serena Chen is currently an assistant professor in the Psychology Department. She received her Ph.D. from New York University, after which she began a tenure-track position at the University of Michigan. In 2001, Dr. Chen joined the faculty in UC Berkeley's Psychology Department. Dr. Chen's primary research interests focus on the self and identity, close relationships, and social power. More information regarding Dr. Chen's research can be found on her website: <http://socrates.berkeley.edu/~serchen/>

Psychology 24, Section 2

Getting to Know the Berkeley Faculty (1 unit, P/NP)

Professor Christina Maslach

Monday 4:00-6:00, Room L20 in Unit I Residence Hall (first class) and 3138 Tolman Hall, CCN: 74287

This seminar will meet for eight to ten weeks, beginning August 28, 2006 in Room L20 in Unit I Residence Hall (central building, around the corner from the front desk/mailboxes) located at 2650 Durant Avenue. The other meeting dates and future meeting locations will be announced in class. Food for Thought dining arrangements will be discussed in class.

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 is part of the Food for Thought Seminar Series.**

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." For more information regarding Vice Provost Maslach, please visit <http://maslach.socialpsychology.org>.

Slavic Languages and Literatures 24, Section 1
The Brothers Karamazov: Let's Read It Together (1 unit, P/NP)
Professor Hugh McLean
Friday 9:00-11:00, 6115 Dwinelle Hall, CCN: 79841

This seminar is a collective exploration of this great novel, seen both as a work of literary art and as a response to philosophical issues of its time. An oral report is required. **Enrollment is limited to twelve students.**

Hugh McLean is a Professor Emeritus in the Department of Slavic Languages and Literatures. 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.

Spanish 24, Section 6
Talking Funny: Language Variation in Spanish and English Literary Texts (1 unit, LG)
Professor Milton Azevedo
Thursday 1:00-2:00, 255 Dwinelle Hall, CCN: 86193

This seminar analyzes language through the literary representation of regional and social varieties of Spanish and English (as in Mark Twain's *Adventures of Huckleberry Finn* or Guillermo Cabrera Infante's *Tres Tristes Tigres*) and discusses social and cultural implications of language variation. It is taught in English with readings in both English and Spanish. Grades will be based on required participation in class discussions and a final oral presentation on an individual project. The reader will be available at the Copy Central on 2560 Bancroft Avenue. **The ability to read and understand spoken Spanish is essential to follow this course successfully. Please note: this is not a conversation course. Students interested in taking a course focusing on conversation should see the Undergraduate Assistant in the Department of Spanish and Portuguese.**

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

Spanish 24, Section 8
Spanish Cinema in the 90's (1 unit, P/NP)
Professor Jesús Rodríguez-Velasco
Thursday 3:00-4:00, 263 Dwinelle Hall, CCN: 86199

In this seminar we are going to view and analyze several motion pictures produced in Spain during the 1990's (by directors Almodóvar, Cuerva, Bajo Ulloa, Fernando León, among others). Our main question about each of these movies will be this: "How does this film discuss the shift from traditional cultural modes and models to practices associated with modernity during the period now referred to as the Transition—the period between the death of Franco and the blooming of democracy?" As a weekly assignment, the students will be required to watch a movie and think about this question. Films will be available at the libraries, and the instructor encourages the students to create groups to watch them and to talk about them, and bring these discussions into the classroom. **Students will have the option to participate in either Spanish or English. All movies will have English subtitles. Prerequisite: the equivalent of Spanish 4 (AP score of 5 in Spanish or 5 years of Spanish in junior high/high school).**

Jesús D. Rodríguez-Velasco is an Associate Professor of Spanish. His main research interests include medieval literature and theory. He is also interested in photography and music. He was a professor at the École Normale Supérieure, Paris; University of Salamanca, Spain; University of Montpellier, France; University of Paris III, France; and University of Szeged, Hungary. Professor Rodríguez-Velasco has published eight books and almost one hundred articles on his research interests and has published some pictures in magazines and books.

Theater, Dance, and Performance Studies 24, Section I
Documentary Playmaking: School Integration, Little Rock, 1957-58 (1 unit, P/NP)
Professor Dunbar Ogden
Monday 2:00-4:00, 8 Zellerbach Hall, CCN: 88027

This seminar will meet for eight weeks, beginning September 11, 2006 and ending October 30, 2006.

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

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

Theater, Dance, and Performance Studies 24, Section 2
Acting from the Outside In: Training Interculturally (1 unit, LG)
Professor Sudipto Chatterjee
Monday 5:00-7:00, 242 Dwinelle Hall, CCN: 88030

Food for Thought dinner meeting dates and times will be discussed in class.

American theatre during the twentieth century has over-emphasized the Method school of realistic acting, where the actor is taught how to empathize with her/his character and relate the character's experiences with the actor's own personal emotions and experiences. While this has yielded tremendous results, thanks to teachers like Lee Strasberg, Stella Adler, and Sandy Meisner, and has been understandably celebrated for a century, it has also tacitly become the single most popular approach to acting. But in the intercultural theatre scene of the new century, actors are being exposed to various kinds of acting styles and more plays demanding different kinds of performance skills where training in the Method is more than often proving inadequate. This class, using tools from non-Western systems of actor-training, will be an attempt to teach students how to approach a character from the outside and not necessarily by relating it with the actor's psyche from the inside, but rather by getting the actor connected to the world of the character by more external means. In addition to group exercises, students will work on monologues and scenes in different styles of acting through the semester. No textbooks are required. **Some prior acting experience preferred. Enrollment is limited to twelve students. This seminar is part of the Food for Thought Seminar Series.**

Assistant Professor Sudipto Chatterjee earned his Ph.D. at New York University focusing on Asian and Asian-American performance and film, post-colonial performance, and modern and contemporary performance theory. His dissertation on nineteenth-century Bengali Theatre won the Michael Kirby Memorial Prize in 1998. He is the

author of fourteen plays and translations in Bengali and English. In 1999, he was awarded the New York Drama Circle Award of Distinction for translation and direction of Nuraldeen's Lifetime (by Bangladeshi playwright, Syed Shamsul Haq), a bilingual production in Bengali and English. He directed Girish Karnad's Hayavadana and The Playboy of the Western World at Tufts University, as well as Badal Sircar's Bhoma at Massachusetts Institute of Technology. In 2002, he directed Birpurus, his own Bengali adaptation of The Playboy of the Western World, in Kolkata, India. For ten years, he was the Artistic Director of Epic Actors' Workshop and Choir in New York and is also a performer and filmmaker.

Vision Science 24, Section 3
The Human Eye (1 unit, P/NP)
Professor Richard C. Van Sluyters
Friday 2:00-4:00, 394 Minor Hall, CCN: 66403

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

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

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

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

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

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

Dennis M. Levi is the Dean of the School of Optometry at the University of California, Berkeley. He received his initial training in Optometry in South Africa, and did advanced training in London and New York. He received the O.D. and Ph.D in Physiological Optics from the University of Houston, where he became a Professor of Optometry and Physiological Optics, and Associate Dean for Research and Graduate Studies in the College of Optometry. In 1996, he became the Cullen Distinguished Professor of Optometry, a lifetime University Chair. Dr. Levi achieved international prominence as a vision scientist for his research in amblyopia, a major cause of vision loss in children. He has been a recipient of the American Academy of Optometry's Garland Clay and Glenn Fry

awards as well as an honorary doctorate of science from the State University of New York. He has served as Chair of the National Institutes of Health Visual Sciences B Study Section and a member of the institute's special review committee as well as on the editorial boards of a number of scientific journals.

SOPHOMORE SEMINARS

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

American Studies 84, Section I
Neighborhood Globalization (1 unit, LG)
Professor Michel Laguerre
Wednesday 10:00-12:00, 344 Campbell Hall, CCN: 02036

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

This sophomore seminar analyzes and compares the globalization process of urban neighborhoods in the United States (New York and San Francisco) and the European Union (Paris, Berlin and London). It examines the articulation of the local with the global with a focus on the production of neighborhood space, the politics of heritage tourism, the morphology of the residential and business district, the relations of City Hall with the local site, the deployment of transnational diasporic relations, the transformation of local political institutions, and the global anchoring of the wired neighborhood through virtual connectivity. It further discusses the local production of globality and the global production of locality to explain the global identity of the urban neighborhood.

Required Text: Michel S. Laguerre, *Urban Multiculturalism and Globalization in New York City*. New York: Palgrave Macmillan Press, 2003.

Michel S. Laguerre is Professor and Director of the Berkeley Center for Globalization and Information Technology at the University of California, Berkeley. He is the author of several books, including "The Digital City: The American Metropolis and Information Technology" (2005) and "Diaspora, Politics and Globalization" (2006).

Anthropology 84, Section I
Universal Knowledge: Disciplines, Universities and Museums (1 unit, P/NP)
Professor Rosemary Joyce
Tuesday 2:00-3:00, 225I College Avenue in Room 101, CCN: 02446

The disciplines that form universities today have distinct histories, some—like anthropology—relatively short. This seminar explores institutions that preceded and gave rise to the modern university, with special attention to the role object collections played in the formation of closely related disciplines (such as archaeology, ethnography, and art history) and institutions (including laboratories, museums, and universities). We will examine what research is in the modern university, who does it, and how anthropological research differs from that of other disciplines. We will explore how new technologies are affecting research and what might be the future of object-based research rooted in anthropology. This seminar will require leading discussion on at least one article, and participating in weekly discussions. Some class sessions will involve meeting at campus museums and touring them together. The required text for this seminar is Glenys Patterson's *The University from Ancient Greece to the Twentieth Century*. **This seminar is for students who wonder how the institution that they are now part of came to be, and how it might change in the future. Students interested in exploring anthropology, especially museum anthropology, are encouraged to consider it, but the course as a whole is less about anthropology and more about disciplines.**

Rosemary Joyce (PhD University of Illinois, Urbana-Champaign), Professor and Chair of Anthropology, joined the Berkeley faculty in 1994. She was awarded the Distinguished Teaching Award of the Division of Social Sciences at Berkeley in 2005, and with Margaret Conkey and Ruth Tringham previously won Berkeley's Educational Initiative Award. In 2006, she was given a Faculty Award for Outstanding Mentorship of GSIs. She has been a fellow in residence at Radcliffe's Bunting Institute, the UC Humanities Research Institute, and the Center for Advanced

Study in the Behavioral Sciences. In 2003 she was the Distinguished Lecturer of the Archeology Division of the American Anthropological Association. Rosemary Joyce has conducted archaeological fieldwork in Honduras since 1977, and is currently Co-Director of the Proyecto Arqueológico Valle Inferior del Río Ulúa. She is widely known for contributions to the archaeology of gender, sexuality and embodiment, based on visual culture of precolumbian Central America. A former museum director and curator at Harvard University and UC Berkeley, she is also a contributor to contemporary debate about archaeological ethics and politics. Her most recent book is *Embodied Lives: Figuring Ancient Egypt and the Classic Maya* (with Lynn Meskell; Routledge, 2003). For more information regarding Professor Joyce, please visit her faculty web page at <http://anthropology.berkeley.edu/joyce.html>.

Chemistry 84, Section I

Bio-nanotechnology in Science and Society: Facts, Fears, and Fantasies (1 unit, P/NP)

Professor Jay Groves

Monday 1:00-2:00, 105 Latimer Hall, CCN: 11356

Bio-nanotechnology has emerged as a new branch of the nanotechnology craze. What is this new field of science, and is it really a field? Even scientists widely disagree. In this seminar, we will discuss various theme areas that can be fit into the definitions of bio-nanotechnology. The underlying scientific themes will be discussed at a basic level. We will also explore the perception of bio-nanotechnology within the broader society as well as taking a careful look at what can be expected and what really is fantasy for the foreseeable future. **The course is designed for students with an interest in science and technology, both at the level of becoming researchers themselves and as interested citizens who will inevitably be affected by science and technology developments.**

Professor Groves received a B.S. in Physics and Chemistry from Tufts University (1992) and his Ph.D. in Biophysics from Stanford University (1998). After leaving Stanford, he spent a year as a Visiting Scholar at Academia Sinica in Taipei, Taiwan. He then took a position as Division Director's Fellow at Lawrence Berkeley National Labs, and later joined the UC Berkeley Chemistry Department faculty in 2001. His work at the interface of chemical biology and nanotechnology has been recognized by a number of awards including the Merrill Lynch Innovation Grants Entrepreneurship Prize for invention and commercialization of the MembraneChip™, Burroughs Wellcome Career Award in the Biomedical Sciences, Searle Scholar's Award, Beckman Young Investigator's Award, and NSF CAREER Award. He was also elected to the MIT Technology Review Top 100 Innovators in 2003. Professor Groves founded a company working in the bio-nanotechnology space in 2000, and continues to hold an active seat on the Board of Directors.

English 84, Section I

High Culture, Low Culture: The Coen Brothers and the Arts (2 units, P/NP)

Professor Julia Bader

Thursday 2:00-5:00, 300 Wheeler Hall, CCN: 28158

The course will focus on films of the Coen Brothers and other contemporary directors (Lynch, Kieslovski, Wong Kar-Wai) and the stories of Lakiri in order to observe how cinematic/literary representations function. We will make use of UAM exhibits, Cal Performance shows, and PFA films to amplify our experience of the cultural context.

Book List: J. Lahiri: *Interpreter of Maladies*; W. Helsby: *Understanding Representation*

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

English 84, Section 2

Socrates as Cultural Icon (2 units, P/NP)

Professor John Coolidge

Tuesday 2:00-4:00, 205 Wheeler Hall, CCN: 28810

Socrates has often been compared to Jesus, an enigmatic yet somehow unmistakable figure who left nothing in writing yet decisively influenced the mind of his own and later ages. We will read the principal contemporary representations of Socrates—Aristophanes' comic send-up in "Clouds" and the Platonic dialogues purporting to tell the story of Socrates' trial and death—attempting to discern the historical Socrates and trace the construction of the Icon. Students will be asked to keep a journal assessing the relevance of issues which the trial and death of Socrates bring into focus to ones involved in our contemporary "culture wars," e.g. generational conflict, freedom of speech, elitism, science and religion, "know thyself," the aims of education, authority, male chauvinism, virtue, "intellectual curiosity," academic freedom, family, civil disobedience, "spin," the body, self-esteem, anomie, patriarchy, individualism, relativism, etc. You will be asked to team up, in consultation with the instructor, for panel presentations on these or other such topics of your choosing during the last four meetings (November 14, 21, 28, December 5). The assigned texts are *Four Texts on Socrates*, tr. Thomas G. West and Grace Starry West (Cornell, revised ed., 1998) and *Plato's Phaedo*, ed. Eva Brann et al. (Focus, 1998). This seminar may be used to satisfy the Arts and Literature or Philosophy and Values requirement in Letters and Science.

John S. Coolidge, Emeritus Professor of English and amateur classicist, has previously taught lower-division seminars on Plato's Republic and on Augustine's Confessions. His areas of scholarly interest include the Bible and biblical interpretation, Shakespeare, Milton, Marvell, Fielding, and the English Puritans.

Film Studies 84, Section I

From Real to Reel: The History and Development of Documentary Film (2 units, LG)

Mr. Gary Handman

Monday 10:00-12:00 and Wednesday 10:00-11:00 , 226 Dwinelle Hall, CCN: 31598

This seminar will meet on Mondays from 10:00-12:00 to screen films and on Wednesdays from 10:00-11:00 for discussion.

This seminar will investigate the modes, styles, and uses of documentary film that have developed over the past 120 years, from the earliest cinematic efforts to record "actuality" to present day deconstructions, appropriations, and parodies of traditional documentary forms and conventions. The focus of the course will largely be on American and European documentary traditions. Through screenings of representative works, and class discussions and online discussions, we will investigate how and why various historical periods have given rise to particular documentary forms and documentary agendas. We will consider the persistence and/or changing nature of documentary film conventions and strategies. The seminar will consider how the "voice" of the filmmaker is represented in his/her films. We will also explore the various ways in which documentary filmmakers use evidence and argument to tell a story, to persuade or incite audiences, or to put forward a particular view of the world. Throughout the seminar, we will consider a number of significant issues and controversies surrounding the production and consumption of documentary films, including the relationships and differences between fiction and non-fiction film; problems related to claims of representing "truth" and "reality"; the issue of documentary objectivity; the ethics of representing others; and the relationships between filmmaker, film subject, and film audience. **Students willing to view films critically and to actively and creatively engage in discourse about them are encouraged to take this seminar. This seminar does not fulfill the Film Studies documentary requirement.**

Gary P. Handman received his Master of Library and Information Studies in 1976 from the University of California, Berkeley. Since 1984, he has served as Director of the Media Resources Center, Moffitt Library, University of California, Berkeley, one of the largest curated video collections in a US academic library. From 1985 to 1993, he regularly taught the course in media librarianship in the UC Berkeley School of Library and Information Studies, and he continues to speak and lecture widely on the topics related to media in libraries. In Spring 2005 he taught Film 28A (Introduction to Documentary) in the UC Berkeley Film Studies Department. In Spring 1997 he taught Film 24, a freshman seminar dealing with the representation of technology in the movies. He lectures regularly in various courses on film and film research topics. Mr. Handman has written extensively in the field of video librarianship, including a regular video column in *American Libraries*. He is a member of the board of advisors of

the New York Film and Video Festival and of MediaRights.org; he is a founding member of the American Library Association Video Round Table, and was the first elected chair of the group.

Mass Communications 84, Section I
The Disappearance of Information (1 unit, LG)
Professor Thomas Leonard
Monday 3:30-5:00, 247 Evans Hall, CCN: 53317

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

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

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

Your reflections on these matters will be the only written assignment: a paper of about eight pages. It can be in the form of a journal, tracking your reactions each week. Or, you may sum up what seems most important at the end of the semester. Either way, you will be sure to give concrete examples from the material we covered. This writing is due Monday, December 11, 2006 (one week after the last class).

Assigned reading: Library: An Unquiet History by Matthew Battles

Enrollment is limited to ten students.

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

Molecular and Cell Biology 84D, Section I
Viruses and Cancer (1 unit, P/NP)
Professor P. Robert Beatty and Dr. Scott Balsitis
Thursday 3:00-4:00, 2062 Valley Life Sciences Building, CCN: 57817

Food for Thought dining arrangements will be discussed in class.

This seminar will discuss the basic concepts related to viruses that are associated with cancer. The various diseases caused by these oncogenic viruses will be discussed along with immune protection and drug treatment. We will discuss many different viruses including Kaposi's sarcoma herpesvirus, Epstein-Barr virus, human papillomavirus, hepatitis B virus, and hepatitis C virus. In addition, we will discuss the issues for prevention of viral infections and cancers with vaccines. **The intended audience would be students who are interested in science and most specifically immune responses to viruses and immune regulation of cancer. A science background is not required but helpful. Students should not be afraid of reading articles discussing or reviewing current science research. Students interested in intellectual discourse are encouraged. This seminar is part of the Food for Thought Seminar Series.**

Professor Beatty is an infectious disease immunologist who has worked on Chlamydia, Epstein-Barr virus, Leishmania, and dengue virus over the last fifteen years. His research has focussed on T cell immunology and cytokine signaling. He teaches immunology classes at Cal in the Department of Molecular and Cell Biology.

Dr. Balsitis is a virologist who has studied avian influenza, human papillomavirus, and dengue virus. His work on human papillomavirus focused on the molecular mechanisms by which HPV promotes the formation of cervical cancer. He currently studies immunopathogenesis of Dengue Hemorrhagic Fever in the Harris lab in the School of Public Health.

Natural Resources 84, Section I
Global Environment Theme House Sophomore Seminar (1 unit, P/NP)
Professor John Battles
Thursday 5:00-6:00, Classroom A in Foothill I, CCN: 61309

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

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

John Battles is an Associate Professor of Ecosystems Sciences in the Department of Environmental Science, Policy and Management. He received his PhD in Forest Community Ecology from Cornell University. His research addresses how and why forests change, specifically, the non-equilibrium determinants of forest composition, structure and function.

Peace and Conflict Studies 84, Section I
Why Are We Here? Great Writing on the Meaning of Life (2 units, P/NP)
Professor Michael Nagler
Tuesday 2:00-4:00, 2062 Valley Life Sciences Building, CCN: 66744

We would seem to be the only animal that ponders the purpose of its being here on this earth, and arguably must do so. The question has often gone underground—as it has in this superficial culture of industrialism—but it has never gone away. In this seminar we will try to craft our own responses to this question, to come up with strategies for grappling with if not answering it, using the stimulus of selections of great writings from widely varied times and places and our mutual discussions around those seminal texts. Each student will have the opportunity to do a presentation on any aspect of this question that interests her or him, and will hand in a written exercise at the end that may or may not be based on that presentation. **The only real requirement for a beneficial experience in this seminar is a real concern with the question. The student should be restless with and suspicious of the superficiality and reductionism, the materialism and cynicism that have taken hold of post-modern humanity, and be willing to entertain a hope that something more meaningful may be in store for us. Naturally, good reading and writing skills will be helpful, and the patience to think through arguments open-mindedly but critically. No particular academic discipline suggests itself as needed for this universally human form of inquiry; rather, we should try to bring to it a willingness to ask big questions and listen to the way others have tried to answer them.**

Professor Nagler taught Classics and Comparative Literature at Berkeley from 1966-1991, and on taking early retirement in that year joined the Peace and Conflict Studies program he had co-founded some years before. He

is the author, most recently, of the award-winning *The Search for a Nonviolent Future and Our Spiritual Crisis*. He speaks on subjects related to peace and nonviolence around the world. He also teaches "Meditation" and "Theory and Practice of Nonviolence" in PACS.

FRESHMAN AND SOPHOMORE SEMINARS

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

Classics 39D

Utopia, Dystopia (4 units, LG)

Professor G.R.F. Ferrari

MWF 9:00-10:00, 109 Wheeler Hall, CCN: 14730

Utopian literature constructs imaginary societies from scratch. The purpose of that fresh start is usually idealistic: to redefine society on the basis of virtue, or to make its institutions more rational than those found in actual societies. Some think such idealism politically dangerous, because liable to open the way to excessive social control, even dictatorship. This is a canonical theme of dystopian literature. In this course we will examine the classical beginnings of utopian literature, in Plato's Republic, and in his Timaeus and Critias (which tell the story of the lost world of Atlantis), as well as in some plays of Aristophanes. We will also consider later developments, in Thomas More's Utopia (which gave the genre its name), and in such works as William Morris' News from Nowhere, and Ursula Le Guin's The Dispossessed. Towards the end of the semester the seminar participants will be divided into groups, each of which will be asked to devise its own utopia on a particular theme, for oral presentation in class. **Requirements: Regular attendance and participation in class; one four-page paper on the ancient material; one group presentation; final exam (quiz-type questions on the post-classical material).** This seminar may be used to satisfy the Arts and Literature or Philosophy and Values requirement in Letters and Science.

John Ferrari is a specialist in ancient philosophy who taught in the Philosophy Department at Yale before joining the Classics Department at UC Berkeley. He has written two books on Plato and several articles on topics in ancient philosophy and ancient Greek culture.

Comparative Literature 41A

The Arts of Epic (4 units, LG)

Ms. Stephanie Green

MWF 10:00-11:00, 121 Wheeler Hall, CCN: 17290

In "The Arts of Epic" we shall study the purposeful crafting and re-crafting of stories from ancient tragedy into epic and finally into epic's derivatives (and mockeries) for the literary founding of cultural narratives, moral and ethical frameworks, and personal, artistic fame. We shall pay particular attention to techniques of allusion, paraphrase, representation, and re-contextualization within literary recollection and invention. Throughout the course we shall study examples of the visual and performing arts inspired by epic to consider the virtues and limitations of non-literary aesthetic forms in conveying epic's weighty themes. **Course requirements: Daily readings, participation in class discussion, three essays, a midterm, and a final examination.** This seminar may be used to satisfy the Arts and Literature requirement in Letters and Science.

Stephanie Green is a graduate student instructor in the Department of Comparative Literature at UC Berkeley.

Comparative Literature 41C, Section I

The City and the Novel (4 units, LG)

Ms. Anne Dwyer

TuTh 9:30-11:00, 20 Wheeler Hall, CCN: 17287

As has been often noted, the rise of the modern metropolis and the ascendancy of the novel go hand in hand. But what is the nature of their relationship? Does the novel merely "represent" the city? Or do novels and other urban texts actually shape the metropolis and our experience of it? We will read five novels about four cities, starting with Balzac and the age of Realism in France and ending with Döblin's "modern epic" Berlin Alexanderplatz. In between we will trace the "myth of St. Petersburg" from Alexander Pushkin to Andrei Bely via Gogol and Dostoevsky. We will also read Mrs. Dalloway, Virginia Woolf's masterpiece set in post-war London. Alongside each novel we will read a number of shorter literary and non-literary texts. Two Weimar films will accompany Döblin's cinematic novel. As we consider the broad question of the relationship between urban life and novelistic form, a number of related questions will enter our field of vision: Is the city a setting? An actor? A language? A myth? What kinds of plots do cities engender and why? Why does crime play such a large role in the urban novel? What kinds of exchange (of money, people, words, texts) go on? How does gender work? How do these novels represent social, ethnic, and linguistic difference? What should we make of the intertextual relationships that exist between these city texts? How do these novels define, critique, and embrace modernity?

We will read the following novels: Honoré de Balzac, Old Goriot (1834), Fyodor Dostoevsky, Crime and Punishment (1865-66), Andrei Bely, Petersburg (1916 and 1922), Virginia Woolf, Mrs. Dalloway (1925), Alfred Döblin, Berlin Alexanderplatz (1928). This seminar may be used to satisfy the Arts and Literature requirement in Letters and Science.

Anne Dwyer is a graduate student instructor in the Department of Comparative Literature at UC Berkeley.

Computer Science 39J

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

Professor Brian Barsky

Friday 12:00-2:00, 405 Soda Hall, CCN: 26244

On the first day of instructions please meet Prof. Barsky at 12:10 at the Foothill Dining Common at the long table in the main dining room near the windows at the opposite end of the room from where the food is dispensed. At 1:10 class will meet in 405 Soda Hall. Additional Food for Thought dining arrangements will be discussed in class.

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

faculty may decline to enroll students in a class who cannot be present at all scheduled activities. This seminar is part of the Food for Thought Seminar Series.

Brian Barsky received his Ph.D. from the University of Utah in Computer Science and joined the UC Berkeley faculty in 1981. His research interests are CAD/CAM, computer-aided geometric design and modeling, computer graphics, geometric modeling, visualization in scientific computing, and computer-aided cornea modeling and visualization.

Earth and Planetary Science 39A
Geological Influences in California Society Today (2 units, LG)
Professors Harold Helgeson and Chi-Yuen Wang
MW 4:00-5:00, 145 McCone Hall, CCN: 19009

Field trip dates TBA. For additional field trip and meeting schedule details and updates, visit website TBA.

The theme of this course is the influence of geology in California society. As a freshman seminar, the class involves close personal interaction between students and senior faculty. For the interaction to work, it is essential that all enrolled students be prepared for the learning experience and to become engaged as active participants. Toward this end, the field trips are preceded by two or three one-hour lectures and two or three video presentations. Students are expected to attend one logistical meeting for the section of the field trip they are attending. Each student goes on only one field trip: Group 1 or 2. Each group will take one continuous four-day trip to visit geological and historical localities in various parts of California. Topics emphasized on the trips vary: societal impacts of dams, the Gold Rush, resource conservation, the geology of Yosemite as a national park, water resource issues, volcanic and seismic hazards, and glacial geology. Three nights will be spent camping out. Accordingly, each student will need to bring appropriate gear including a sleeping bag and a tent or make arrangements to share space in a tent. More details on equipment to bring and preparations to make will be supplied at the logistical meetings. **Enrollment is limited to ~65 freshman students with a wait-list of ~10. The class will be split into two field-trip groups of a size small enough to ensure an interactive seminar experience. This course is restricted to freshmen only. Any questions about this course should be directed to the coordinator, Professor Harold Helgeson.**

Harold C. Helgeson is a Professor of Geochemistry. For decades, he has taught and conducted research in theoretical geochemistry, thermodynamics, chemical petrology, solution chemistry, phase equilibria, kinetics, organic and biogeochemistry, and mass transfer in geochemical processes. For more information regarding Professor Helgeson, please visit his faculty page on the Earth and Planetary Science website.

Chi Wang is a Professor of Geophysics in the Department of Earth and Planetary Science. His research interest includes earthquakes, faults, mountains and fluids in the earth's crust. For more information regarding Professor Wang, please visit his faculty page on the Earth and Planetary Science website.

Engineering 39E
Engineering and Project-Based Learning (2 units, P/NP)
Professor George Johnson and Dr. George Gagnon
Friday 2:00-4:00, 310 Hearst Mining Building, CCN: 27656

Students will also spend two hours per week in a K-12 classroom and one to two hours per week in preparation/discussion with teachers at dates and times to be arranged during the seminar meeting.

This seminar will explore the development and use of engineering-based projects in K-12 science and math education. Project-based learning is a systematic teaching method that engages students in learning knowledge and skills through an extended inquiry process structured around complex, authentic

questions and carefully designed products and tasks. It is an increasingly popular mode of instruction that takes advantage of students' inherent drive to learn and their capability to do significant work. Students in this seminar will study the basis for this instructional approach, examine the structure of well designed projects, and work in groups to create projects that they will take into local K-12 classrooms. The goal is for the students in the seminar to use current engineering topics as the basis for developing grade-appropriate hands-on learning modules for the local schools. As the semester progresses, students will also spend two hours per week in a K-12 classroom and one to two hours per week in preparation/discussion with teachers at dates and times to be arranged during the seminar meeting. This seminar is an introduction to a new program for undergraduates called "California Teach", which is described at <http://www.universityofcalifornia.edu/academics/1000teachers/>. It is one of a series of courses currently under development that will prepare undergraduate students in the sciences, mathematics, and engineering for careers in teaching at the K-12 level, while supporting their regular programs for the bachelor's degree in these subjects. **Students enrolling in this seminar should be interested in pre-college math and science education, and be willing to spend time in local classrooms during the course of the semester.**

George Johnson is a Professor in Mechanical Engineering and currently serves as Associate Dean for Special Programs in the College of Engineering. He received his B.S. degree in 1973 from Virginia Tech, his M.S. degree in 1975 from the University of Virginia, and his Ph.D. in 1979 from Stanford. He has been on the faculty in Mechanical Engineering at UC Berkeley since 1979. Professor Johnson is Principal Investigator for an NSF GK-12 program that is developing hands-on learning modules in support of middle school education; and is co-PI for the Berkeley component of California Teach, a new program aimed at increasing the number of students who enter the fields of math and science teaching at the pre-college level. His research is in the broad area of solid mechanics, with an emphasis on materials characterization. Much of his work focuses on understanding the macroscopic mechanical behavior of materials in terms of the underlying microstructure (grain size, shape, orientation, defect distribution, etc.). Materials of interest include metals, ceramics, electronic materials and wood.

Dr. George W. Gagnon is Director of Cal Pre-Engineering Partnerships (PEP). He received his B.S. Ed. in Elementary Education with an emphasis in math and science in 1969, his M.A. Ed. in Elementary Education with an emphasis in reading and writing in 1970, and his Ed.D. in Teacher Education with an emphasis in learning and communications in 1978, from the New School and Center of Teaching and Learning at the University of North Dakota. He has been an elementary and middle school teacher, school principal, teacher educator, and classroom coach for 30 years. His research is on diagnostic assessment, teacher professional development, and constructivist learning. George and his wife Michelle Collay have published three books on learning circles and learning design. For more information regarding Dr. Gagnon and PEP, visit <http://www.coe.berkeley.edu/cues/pep>.

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, 2326 Tolman Hall, CCN: 01218

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

Professor David Zilberman received his Ph.D. from UC Berkeley in 1979. His research interests include the effects of agricultural policies on the structure of agriculture, the economics of technological change, and the design of regional environmental policies. His current work targets water and pesticide problems.

He was recently elected a Fellow of the American Agricultural Economics Association, and he has been published in many of the economics journals.

Film Studies 39B

Films of the Frozen North: Introduction to Scandinavian Cinema (2 units, P/NP)

Professor Linda Rugg

Monday 12:00-1:00 and Friday 11:00-2:00 , Location - See below., CCN: 31447

This seminar will meet the first ten weeks of the semester, beginning August 28 through November 3, 2006. This seminar will meet on Mondays for discussion in 226 Dwinelle Hall and on Fridays for film screening in 226 Dwinelle Hall.

The Scandinavians have been important and productive participants in the global film industry from the silent era through Bergman, and today some of Europe's most provocative films are made by Scandinavians. Scandinavian films are characterized by a striking use of light and color, intense engagement with ideas surrounding sexuality, politics, and spirituality, and an inquiry into how cinema performs as a narrative art. Come learn about the culture of Scandinavia as exposed in the films of Denmark, Finland, Iceland, Norway, and Sweden. This course will introduce students to a brief overview of Scandinavian cinema in ten weeks, focusing in the latter weeks on the most recent offerings from directors such as Lars von Trier and Aki Kaurismaki. Course requirements: two hours of screening and one hour of discussion per week. This seminar is also offered as Scandinavian 39B (CCN: 78732). This seminar may be used to satisfy the Arts and Literature requirement in Letters and Science.

Linda Haverty Rugg is an Associate Professor in the Scandinavian Department and affiliated with the Film Program. She has written a book on photography and autobiography and is currently writing its "sequel" on film and autobiography. Other special interests include ecology and culture and the construction of whiteness in representations of race.

History 39D

Two Empires: China and Rome (4 units, LG)

Professor David G. Johnson

Monday 2:00-4:00, 321 Haviland Hall, CCN: 39245

The goal of this seminar is to increase our understanding of classical Chinese civilization by systematically comparing the early Chinese empire—the great Han and T'ang dynasties—with the Roman Republic and Empire. This approach is expected to throw new light on the civilization of Rome as well, and hence on our understanding of one of the most important formative influences of European culture. We will focus on topics such as law (and to a lesser extent the institutions of central government); rhetoric and the public life of the ruling elite; engineering and public works generally; the writing of history; poetry; and philosophy. The first several weeks will be devoted to general background reading. Most of the following weeks will focus on specific Chinese and Latin texts in translation. No previous acquaintance with Chinese or Roman history is necessary. **Enrollment is limited to fifteen students. Students who are interested in this course are encouraged to review the syllabus before enrolling.** This seminar may be used to satisfy the Historical Studies or Social and Behavioral Sciences requirement in Letters and Science.

David Johnson is Professor of Chinese History and has been at UC Berkeley since 1984. Before that he taught in the Department of East Asian Languages and Cultures at Columbia University for nearly ten years, where he frequently taught Columbia College's core curriculum course on Chinese and Japanese great books. He has published on medieval Chinese history and literature, traditional Chinese popular culture, and early Chinese historical writing, among other subjects. He has twice co-directed NEH Summer Seminars for College Teachers on "Law, State, and Individual in Ancient Greece, Rome, and China," most recently in July 2003.

History 39J

Culture and Society in the First World War (4 units, LG)

Professor Susanna Barrows

Thursday 12:00-2:00, 2303 Dwinelle, CCN: 39246

The course will explore the Great War of 1914-1918 through the prisms of historical analysis, fiction, poetry, music, and film. We will read accounts of trench warfare, the mobilization of soldiers, the impact of the war on the "home front," the nature of propaganda, the shifting relationships between men and women, and the diverse meanings of commemoration after the armistice. Readings will include such fictional works as *All Quiet on the Western Front*, *Under Fire*, and *A Very Long Engagement*; films, including *Gallipoli*, *J'Accuse*, and *Life and Nothing But*; as well as historical monographs and articles. Students will be asked to write two essays, to participate in each week's discussion, and to attend all films. This seminar may be used to satisfy the Historical Studies or Social and Behavioral Sciences requirement in Letters and Science.

Susanna Barrows is a professor of history who specializes in French culture, society, and politics in the nineteenth and twentieth centuries. She is the author of "Distorting Mirrors" and the editor, along with Robin Room of "Drinking: Behavior and Belief in Modern History".

History 39Q

Manners and Mind in the Early Republic (4 units, LG)

Visiting Lecturer Marshall Foletta

Wednesday 12:00-2:00, 107 Mulford Hall, CCN: 39253

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

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

History of Art 39A

Photography as a Fine Art (4 units, LG)

Professor David H. Wright

Friday 1:30-4:30, 308B Doe Library, CCN: not available

This seminar combines taking photographs with studying the work of the great masters. It is based on a critical study and discussion of the work of selected photographers from about 1860 to 1940, from Carleton Watkins to Walker Evans, with nine assignments to try making photographs in their styles. The course is designed for students experienced in practical photography, including darkroom work in black and white. After those assignments there will be a term paper on a topic developed by each student individually, with the instructor's help. No examination. **Registration for this course is by instructor approval only. Enrollment is limited to eight students. An interview is required between Friday, 25 August, and Wednesday, 30 August. Further**

information and an interview sign-up sheet will be posted at that time by the instructor's office, 423 Doe Library. To qualify, students must have darkroom experience and bring samples of their black-and-white photography to the interview. This seminar may be used to satisfy the Arts and Literature requirement in Letters and Science.

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

Integrative Biology 39C
The Field of Veterinary Medicine (2 units, P/NP)
Dr. Helen E. Diggs and Dr. Gregory B. Timmel
Thursday 2:00-4:00, 4110 Valley Life Sciences Building, CCN: 43015

Filed trip arrangements to be discussed in class.

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

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

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

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

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

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

Native American Studies 90, Section I
Myth, Memory, and History: Understanding Native America (4 units, LG)
Visiting Lecturer Diane Pearson
MWF 11:00-12:00, 182 Dwinelle Hall, CCN: 61124

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

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

Optometry 39B
The Developing World: Profound Challenges, Needs, and Opportunities—An Example Applied to Eye Care in India (2 units, P/NP)
Professor Jay Enoch
TuTh 2:30-4:00, 394 Minor Hall, CCN: 65503

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

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

presentations and written materials on related issues of personal interest. This course is also listed as South and Southeast Asian Studies 39C (CCN: 83112). This seminar may be used to satisfy the International Studies or Social and Behavioral Sciences requirement in Letters and Science.

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

Plant and Microbial Biology 39A, Section I
Environmental Microbiology (3 units, LG)
Professor Steven Lindow
MWF 1:00-2:00, 24 Warren Hall, CCN: 70809

Microorganisms surround us and play major roles in everyday life. This course will provide a broad overview of those microorganisms that humans encounter knowingly or unknowingly every day. Emphasis will be on the importance of microbes to daily life. The usefulness of microbes in food and alcoholic beverage production, cleanup of toxic wastes, recovery of oil from below the ground, in making agriculture possible, and many other beneficial applications will be explored. The importance of microbes in processes important to the survival of the world ecosystem, such as their role in global warming, will also be addressed. Harmful microbes such as those that cause food poisoning and human and plant diseases will also be discussed. The role of microbes in biotechnology and careers in the biotechnology industry will also be explored. Lectures will be interspersed with video presentations, short field trips, laboratory demonstrations, and class readings and student discussions. This seminar may be used to satisfy the Biological Sciences requirement in Letters and Science.

Steven E. Lindow is a Professor in the Plant and Microbial Biology Department. He earned his B.S. in Botany from Oregon State University in 1973 and his Ph.D. in Plant Pathology from the University of Wisconsin, Madison in 1977. His area of study is in molecular and ecological studies of plant-associated bacteria.

Psychology 39E, Section I
The Psychology of Art (2 units, LG)
Professor Art Shimamura
Monday 10:00-12:00, 3105 Tolman Hall, CCN: 74290

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. This seminar may be used to satisfy the Arts and Literature requirement in Letters and Science.

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 I and courses in cognitive psychology.

Public Health 39F, Section I
Eating and Health Disorders (2 units, P/NP)
Professor Zak Sabry
Wednesday 2:00-4:00, 106 Mulford Hall, CCN: 75706

Food for Thought dinner meeting dates and times will be discussed in class.

The relationships between eating and health reflect biological, environmental and behavioral issues. This course addresses the many factors associated with eating disorders such as anorexia, bulimia and gluttony, and their impact on health. **This course is designed to appeal to students with a breadth and variety of interests. This seminar is part of the Food for Thought Seminar Series.** This seminar may be used to satisfy the Biological Sciences requirement in Letters and Science.

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 health programs covers both national and international perspectives.

Rhetoric 39F

Getting Inside the Text: Close Reading and the Art of Rhetoric (2 units, LG)

Professor Daniel F. Melia

Wednesday 10:00 - 12:00, 7415 Dwinelle Hall, CCN: 77860

Food for Thought lunch meeting dates, times and locations will be discussed in class.

The ultimate textual analysis would involve offering explanation(s) for every word used. While it is usually not an effective use of time to do an analysis that close, understanding complex, thickly constructed and layered texts often requires very close attention to verbal texture. This is an anti-speed-reading course that will concentrate on some of the essential practical tools of rhetorical interpretation. We will look extremely closely at some interesting literary works, as well as analyzing some non-literary pieces. Readings will include Thomas Pynchon's *The Crying of Lot 49*, William Faulkner's *As I Lay Dying*, and Jonathan Swift's *A Modest Proposal*. **Students who want to learn rhetorical strategies from the "ground up", by looking closely at the wording and structure of several books are encouraged to enroll. Enrollment is limited to sixteen students. It is a course in anti-speed reading. This seminar is part of the Food for Thought Seminar Series.** This seminar may be used to satisfy the Arts and Literature requirement in Letters and Science.

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 39G

War, Torture, and Criminal Responsibility in International Law (1.5 units, LG)

Professor David Cohen

Thursday 10:00- 12:00, 7415 Dwinelle Hall, CCN: 77862

The seminar will examine the prohibition of torture under international law, with particular reference to the contexts of war, armed conflict, and terrorism. We will begin by examining post-World War II trials in which torture and other forms of mistreatment of prisoners were prosecuted, and then turn to the development of international law in this area through the Geneva Conventions, The Torture Convention, and the case law of contemporary international criminal tribunals. We will then consider the application of this body of law to the US treatment of prisoners in Guantanamo, Iraq, and Afghanistan, as well as in the context of the use of so-called "rendition" (the use of third-party states to carry out proxy interrogations involving torture and other forms of mistreatment). This seminar may be used to satisfy the Philosophy and Values, International Studies or Social and Behavioral Sciences requirement in Letters and Science.

David Cohen is the Director of the Berkeley War Crimes Studies Center. The Center engages in research programs on war crimes and human rights trials from World War II to today. The Center also

monitors trials and conducts judicial training programs for war crimes and human rights tribunals in Sierra Leone, Rwanda, East Timor, Cambodia, and Indonesia.

Scandinavian 39B

Films of the Frozen North: Introduction to Scandinavian Cinema (2 units, P/NP)

Professor Linda Rugg

Monday 12:00-1:00 and Friday 11:00-2:00 , Location - See below, CCN: 78732

This seminar will meet the first ten weeks of the semester, beginning August 28 through November 3, 2006. This seminar will meet on Mondays for discussion in 226 Dwinelle Hall and on Fridays for film screening in 226 Dwinelle Hall.

The Scandinavians have been important and productive participants in the global film industry from the silent era through Bergman, and today some of Europe's most provocative films are made by Scandinavians. Scandinavian films are characterized by a striking use of light and color, intense engagement with ideas surrounding sexuality, politics, and spirituality, and an inquiry into how cinema performs as a narrative art. Come learn about the culture of Scandinavia as exposed in the films of Denmark, Finland, Iceland, Norway, and Sweden. This course will introduce students to a brief overview of Scandinavian cinema in ten weeks, focusing in the latter weeks on the most recent offerings from directors such as Lars von Trier and Aki Kaurismaki. Course requirements: two hours of screening and one hour of discussion per week. This seminar is also offered as Film Studies 39B (CCN: 31447). **This course is now open for enrollment.** This seminar may be used to satisfy the Arts and Literature requirement in Letters and Science.

Linda Haverty Rugg is an Associate Professor in the Scandinavian Department and affiliated with the Film Program. She has written a book on photography and autobiography and is currently writing its "sequel" on film and autobiography. Other special interests include ecology and culture and the construction of whiteness in representations of race.

Social Welfare 39A

Social Problems Through Literature (2 units, P/NP)

Professor Henry Miller

Wednesday 10:00-12:00, 201 Haviland Hall, CCN: 80703

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 such as Dostoyevsky, Steinbeck, and Kafka. This term the seminar will focus primarily on the very serious problem of crime and penology. **Enrollment is limited to twenty freshman.** This seminar may be used to satisfy the Arts and Literature requirement in Letters and Science.

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 Enoch

TuTh 2:30-4:00, 394 Minor Hall, CCN: 83112

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

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

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

South and Southeast Asian Studies 39G

“Think Gender” in Indian Short Stories (2 units, LG)

Lecturer Kausalya Hart

Friday 8:00-10:00, 205 Dwinelle Hall, CCN: 83115

In this seminar, students will read fifteen short stories from various languages of India translated into English. The stories will describe the relationships between men and women and how the society looks at the roles of men and women in Indian culture. The students will be expected to read the stories and to discuss and critique them in class. They will also be expected to write two five-page research papers. This seminar may be used to satisfy the Arts and Literature or Social and Behavioral Sciences requirement in Letters and Science.

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