



**FALL 2005**

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

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

## **Freshman & Sophomore Seminars at Berkeley**

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

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

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

## **L&S Discovery Courses**

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

This document was last updated on August 29, 2005.

## **FRESHMAN SEMINARS**

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

### **Anthropology 24, Section 1**

#### **The Photograph as Social Document (1 unit, P/NP)**

**Professor Stanley H. Brandes**

**Monday 2:00-3:00, 2224 Piedmont Avenue, Room 15, CCN: 02525**

They say that a photograph is worth a thousand words. Since the invention of photography over a hundred and fifty years ago, images have been used, together with text, to provide documentary evidence. Nonetheless, photographs are open to multiple interpretations and subject to editorial bias on the part of both photographer and viewer. This seminar explores some of the uses and abuses of documentary photography in journalism, social science research, and other visual domains. As part of the course, students must produce a photographic essay, based on the daily life of one willing individual--a person from a field or walk of life unfamiliar to the student photographer. The essay will be developed over the course of the term. Students must also come to class prepared to discuss assigned readings.

Stanley Brandes received his Ph.D. in Anthropology from UC Berkeley, and has been teaching in the UC Berkeley Department of Anthropology since 1974. His research interests include culture and society in Spain and Latin America; cultural dimensions of food and drink; ritual and religion; and visual anthropology, particularly still photography. In addition to his anthropological work, Stanley Brandes is a documentary and landscape photographer and has held several exhibitions in Berkeley and New York.

### **Anthropology 24, Section 2**

#### **The Anthropology of Museums (1 unit, P/NP)**

**Professor Burton Benedict**

**Monday 11:00-12:00, Classroom L20 in Unit 1, CCN: 02527**

**Food for Thought lunch meeting dates, times and locations will be discussed in class. Staff at the front desk in Unit 1 can direct students to Classroom L20 on the first day of classes.**

Depending on what one calls a museum, there are approximately sixteen thousand museums in the United States where, it is estimated, a new one opens every 3.3 days. They are among the most visited sites in the world with about 850 million visits per year in the United States alone. Thus museums and museum-going are major activities in the United States. They constitute a major ingredient in tourism, a principal world industry. In this seminar we will look at museums: what they are, what they offer us, and what we bring to them. There will be special emphasis on anthropology and history museums. In particular we will examine the Phoebe Apperson Hearst Museum on campus and look at its collections. Topics will include a brief history of museums, how they order the world, how they serve as status symbols, how they promote nationalism, methods of display (hands-on or hands-off), museums as entertainment, museums as sales rooms, what objects can explain, museums as education, how they manipulate the viewer, and museums as repositories of the authentic. Students will be asked to pick a single object from the Hearst Museum's objects on display and explain it to the seminar e.g. what's it made of, how is or was it used, how old is it, what does it tell us about the culture from which it came, etc. Students will also be asked to write a label (not to exceed 100 words) for the object. **This seminar is part of the Food for Thought Seminar Series.**

Burton Benedict (A.B. Harvard, Ph.D. London) is Professor Emeritus of Anthropology and Director Emeritus of the Hearst Museum of Anthropology. He has done fieldwork in Boston, London, Mauritius, Seychelles and Malawi. Since his retirement, he has been working as a volunteer at both the Hearst and Oakland museums.

### **Chemical Engineering 24, Section I**

#### **An Introduction to Chemical Engineering: Traditional Careers and New Directions (1 unit, P/NP)**

**Professor David B. Graves**

**Tuesday 3:00-4:00, 72 Evans Hall, CCN: 10403**

This course is intended to be an introduction to chemical engineering, with descriptions of both traditional careers and the variety of new directions being taken in the profession. Traditional areas of employment include process, design and control engineering in the chemical, petroleum, food and pharmaceutical industries. Newer areas include biotechnology and life-science applications, environmental applications, and semiconductor manufacturing. The goal is to provide some context for students who have chosen chemical engineering as a major or who are simply interested in a better understanding of chemical engineering and its evolution as a profession. Basic chemical engineering concepts in physical and mathematical models will be illustrated in a series of case studies.

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

### **Chicano Studies 24, Section I**

#### **Race and Identity: Mexico and the US (1 unit, P/NP)**

**Professor Carlos Munoz Jr.**

**Wednesday 1:00-2:00, 242 Dwinelle Hall, CCN: 13002**

This seminar will focus on the issue of race and identity in the Latino experience in the United States and Mexico.

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.

### **Chinese 24, Section I**

#### **Lectures on Traditional Chinese Art and Literature (1 unit, P/NP)**

**Professor Jeffrey Riegel**

**Monday 11:00-12:00 and Friday 10:00-12:00, two locations - see below, CCN: 20680**

**This seminar will meet for discussion every Monday morning from 11:00 a.m. to 12:00 p.m. in 102A Durant Hall on UC Berkeley's campus. The lectures will take place every Friday morning from 10:00 a.m. to 12:00 p.m. at an auditorium in the California State Building adjacent to the Asian Art Museum in San Francisco's Civic Center Plaza, which is easily accessible by BART.**

During the fall semester 2005, the Asian Art Museum of San Francisco, with the help of Cal's Institute of East Asian Studies and various campus departments and centers, will host a series of extremely distinguished lecturers who will speak on topics related to the history of Chinese art and literature from earliest times through the Tang dynasty (618-906). Lecturers will include highly noted experts from Princeton, Harvard, the University of Chicago, U.C. Berkeley, the Ecole française d'extrême-orient, and

other centers of Chinese studies. The lectures will be introductory in nature and cover such topics as early Chinese ceramics, ceremonial bronze vessels, Daoism, Buddhism, ancient burial practices, the masterpieces of Chinese literature, and other topics important to a basic understanding of traditional Chinese civilization. Students are expected to attend the lectures as well as to participate in a one-hour discussion seminar with Professor Jeffrey Riegel, who is the organizer of the series, to discuss with him the contents of each lecture. There are no required readings for the seminar, but a list of suggested readings will be provided. **This seminar is open to freshmen and sophomores. Enrollment is limited to fifteen students. Students enrolling in this seminar after the first seminar meeting need to contact Professor Jeffrey Riegel (riegel@berkeley.edu) immediately regarding museum tickets, directions, and other details.**

Professor Jeffrey Riegel specializes in ancient Chinese literature and thought. He teaches Asian Studies 10A, "Traditional Asian Culture," Chinese 183, "Lectures on Traditional Chinese Culture," upper-division courses on ancient Chinese prose and poetry, and, along with Professor Leslie Kurke of the Classics Department, he also offers the interdepartmental course "Ancient China and Ancient Greece." Professor Riegel's most recent book is a translation of the Annals of Lü Buwei and he is completing articles and a book that relate to his interests in Chinese literature, archaeology, and philosophy.

**Civil and Environmental Engineering 24, Section 3  
Skyscrapers and the World Trade Center (1 unit, P/NP)  
Professor Abolhassan Astaneh  
Wednesday 11:00-12:00, 72 Evans Hall, CCN: 13903**

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

Professor Astaneh is a member of the faculty in the Department of Civil and Environmental Engineering. His area of specialty is behavior and design of structures to withstand gravity, seismic and blast loads. He has conducted several major research and design projects on long span bridges and tall buildings. He teaches graduate and undergraduate courses in structural engineering. A few days after the September 11th tragedies, armed with a grant from the federal National Science Foundation, he traveled to New York and for several weeks conducted field investigation of the collapsed towers of the World Trade Center. He is currently continuing his studies of the World Trade Center collapse to learn from this tragedy as much as possible. It is hoped that the lessons learned can be applied in the design of other skyscrapers to prevent their catastrophic collapse in the event of future attack and to save lives.

**Civil and Environmental Engineering 24, Section 4  
Energy & Sustainability: Where Do We Go From Here? (1 unit, P/NP)  
Professor Tad W. Patzek  
Wednesday 4:00-5:00, 212 O'Brien Hall, CCN: 13906**

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

In this course I intend to take you on a journey into the future of energy supply to our civilization. In the first part, we will find out what - if anything - can be "sustainable," and if "sustainable development" is

possible at all. I will stress the differences between the earth-crust fuels (coal, crude oil, methane, gas-hydrates, etc.) and the “renewable fuels,” solar, biomass, and wind. Only when I convince you that the fuels from the earth crust afford convenience but no sustainability, and biomass energy is not sustainable, we will move on to photovoltaic cells. In the second part, we will study the inherent strengths and severe limitations of solar energy and its weaker derivatives, hydropower and wind. We will spend some time talking about the forgotten benefits of energy conservation (which is not an energy source!). In the third part, we will put our knowledge together into a report/science paper, and continue to debug our thinking. **This seminar is part of the Food for Thought Seminar Series. Enrollment is limited to fifteen students. If you do not want to be an active participant and contributor to the final report, please look elsewhere, as the class size is limited.**

Tad W. Patzek is Professor of GeoEngineering at the Department of Civil and Environmental Engineering, U. C. Berkeley. Patzek's wife, Joanna, is a physical therapist working with handicapped children. They have three children. Lucas, Sophie and Julie study, respectively, biochemistry/physics, biology/genetics, and biology/environmental science at U.C. Santa Cruz (they did not want to be too close to their Dad). In his life before Berkeley, Patzek was a senior researcher and reservoir engineer at Shell Development in Houston, TX, a postdoc at the Chemical Engineering Department, University of Minnesota, and a doctoral student at the Chemical Engineering Research Center of the Polish Academy of Sciences. He holds MS (1974) and Ph.D. (1980) degrees in Chemical Engineering from the Silesian Technical University, Gliwice, Poland. As a graduate student, Patzek was a Fulbright Fellow in Minnesota. As an undergraduate student, he was a DAAD Fellow at the Nuclear Research Center, Institute of Physical Chemistry, Julich, Germany. Patzek teaches courses in mathematical modeling of flow phenomena in permeable rocks at micro-scale (E240) and macro-scale (E241). He also teaches an introductory course in computing and computer science for engineers and scientists (E77N). Patzek's research combines analytical and numerical modeling of earth flow systems with measurement, parameter estimation and control of these systems. Patzek has also developed a strong interest in global ecology, sustainability, energy supply for humanity, biofuels, and photovoltaics. Currently, he has seven graduate students, and collaborates with Prof. G. I. Barenblatt and Dr. D. B. Silin.

#### **Classics 24, Section 1**

##### **Homer's 'Odyssey'—The Text and the Mythology (1 unit, P/NP)**

**Professor Anthony Bulloch**

**Monday 3:00-4:00, 125 Dwinelle Hall, CCN: 14727**

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

Anthony Bulloch is a Professor of Classics at UC Berkeley. He was a Fellow, Dean and Classics tutor at King's College in Cambridge and has authored books and articles on various authors and texts in the ancient Greek world.

#### **Classics 24, Section 2**

##### **Self-help Manuals from the Ancient World (1 unit, P/NP)**

**Professor G.R.F. (John) Ferrari**

**Wednesday 2:00-3:00, 205 Wheeler Hall, CCN: 14730**

Philosophers in the ancient Greek and Roman worlds thought of philosophy not only as an activity of theorizing but also as a way of life; different schools of thought, however, recommended widely different approaches to living one's life, as well as to facing one's death. Epicureans denied that there was an afterlife and perhaps paradoxically found comfort in the knowledge that the world does not care about us; Stoics and Platonists, by contrast, believed that the world was made with us in mind—the Stoics celebrating our capacity to perfect the world, and the Platonists our capacity to leave it behind. The Sceptics, for their part, proposed a way of life grounded in the very fact that we lack grounds for knowing

how to live, and must therefore suspend judgment. Yet in a sense all these philosophers, with the possible exception of the Sceptics, share the goal of freeing themselves and their followers from the fear of death and of a world beyond our control. In this class we will read and discuss brief selections from major representatives of these ancient philosophies, including Epicurus, Lucretius, Epictetus, Cicero, Plato and others. We will also read the four helpful essays that the eighteenth-century philosopher David Hume wrote to encapsulate the approaches to life taken by these different schools. And we will consider what it would be like to live in these different ways. Students may be asked to bring in written questions on the week's reading, or to write a short paragraph about what struck them in the reading; but no term paper will be assigned.

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.

**Classics 24, Section 3**  
**Euripides and Racine (1 unit, P/NP)**  
**Professor Donald Mastronarde**  
**Thursday 3:00-4:00, 125 Dwinelle Hall, CCN: 14732**

The classic seventeenth-century French playwright Jean Racine was well trained in the classical languages and literatures, and two of his most famous plays, *Phedre* and *Andromaque*, are entirely or mainly based on plays by the Greek tragedian Euripides written about 2,100 years earlier. In this seminar we will read in English translation the two ancient models and Racine's adaptations, and discuss their different ways of responding to a tradition and reflecting the cultures in which they arose. **No special background is required, but the course is intended for those who are curious about other cultures and enjoy the challenge of moving outside the assumptions of a twenty-first-century American.**

Professor Mastronarde was educated at Amherst College, Oxford University, and the University of Toronto. He has taught at UC Berkeley since 1973 and served as Chair of the Department of Classics from 1993 to 2000. He is Director of the Center for the Tebtunis Papyri, a new campus research project. He is the author of a widely used textbook for elementary ancient Greek and an associated web site, and has published extensively on the ancient Athenian tragedian Euripides (including commentaries on *Medea* and *Phoenician Women*) and various aspects of ancient drama. For more information visit <http://socrates.berkeley.edu/~pinax>.

**Comparative Literature 24, Section I**  
**Reading and Reciting Great Poems in English (1 unit, P/NP)**  
**Stephen Tollefson**  
**Tuesday 3:00-4:00, 50 Barrows Hall, CCN: 17272**

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

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

### **Education 24, Section I**

#### **Hot Topics in Higher Education (1 unit, LG)**

**Ellen Switkes**

**Wednesday 3:00-5:00, 5527 Tolman Hall, CCN: 23518**

**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 will also be included.

Ellen Switkes is Assistant Vice President of Academic Advancement in the Office of the President, University of California. Her work covers areas of personnel policies for faculty and teaching assistants, graduate student admissions and outreach, and academic collective bargaining, and she was formerly manager of University of California's school improvement programs. Her graduate degree is in Inorganic Chemistry from MIT, and she formerly taught at the University of California, Santa Cruz.

### **Engineering 24, Section I**

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

**Americ Azevedo**

**Monday 1:00-2:00, 121 Wheeler Hall, CCN: 27623**

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 Director of the Collaborative Intelligence Laboratory (CI Lab) at the University of California, Berkeley and also teaches "Spirituality and Leadership" for the Master's Program in Leadership at St. Mary's College of California. He has taught philosophy and religion at San Francisco State University and Dominican University of California; and information systems, leadership, management and finance at Saint Mary's College of California, 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 1**

#### **Children, Families and Disability (1 unit, P/NP)**

**Professor Susan Schweik and Ms. Corbett Joan O'Toole**

**Tuesday 10:00-11:00, 121 Wheeler Hall, CCN: 28087**

This course will explore how disability, gender and race intersect in the lives of people with disabilities across the early lifespan (from birth to age 18), primarily in the United States. The questions we'll address are fundamental disability issues: What is the value of a disabled life? Do children with disabilities belong in the mainstream world of schools and communities? Who, under what circumstances, should make decisions that concern young adults with disabilities? Through the lens of families we will examine important and cutting-edge topics such as prenatal testing, issues concerning disabled babies and disabled parents, mainstreaming, personal assistance services, and playground politics. Class speakers will include disabled teens, parents of disabled children, parents (both biological and adoptive) who chose to have a disabled child, educators, and artists. There will be frequent informal short assignments, many of which will take you outside the classroom into the worlds of children, families and advocates dealing with disability. **This seminar is geared to freshmen who want a small, interactive experience of exploring disability from both nondisabled and disabled perspectives while building an academic base in disability studies.**

Susan Schweik is an Associate Professor of English and Co-coordinator of the Disability Studies Minor at UC Berkeley.

Corbett Joan O'Toole, a long-time, internationally influential disability rights activist, is a writer, a filmmaker and director of the Disabled Women's Alliance, an organization that focuses on networking and advocacy for women with disabilities around the world.

### **English 24, Section 2**

#### **Visual Culture and Autobiography (1 unit, P/NP)**

**Professor Hertha D. Sweet Wong**

**Wednesday 10:00-11:00, 205 Wheeler Hall, CCN: 28090**

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

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

### **English 24, Section 3**

#### **Growing Up Chicano (1 unit, P/NP)**

**Professor Genaro Padilla**

**Wednesday 4:30-5:30, 305 Wheeler Hall, CCN: 28093**

We will read a small group of narratives about growing up Chicano/Latino. I believe that this is a particularly difficult time for all children as they face sexual pressure, violence, discouraging schools. 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 4**

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

**Professor Morton D. Paley**

**Friday 10:00-12:00, 305 Wheeler Hall, CCN: 28095**

**This seminar will meet for eight weeks on the following 2005 Fridays: September 9, September 16, September 23, September 30, October 7, October 14, October 28 and November 14.**

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: "Sense and Sensibility" and "Emma." 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 Note on the Texts 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 the 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. **Any freshman with a lively interest in literature is welcome.**

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 5**

#### **Reading Robert Frost (1 unit, P/NP)**

**Professor Donald A. McQuade**

**Monday 4:00-5:00, 109 Wheeler Hall, CCN: 28846**

In a letter to a publisher friend, Robert Frost offered the following engaging definition of poetry: "A poem starts with a lump in the throat, a homesickness or a lovesickness. It is a reaching out toward expression, an effort to find fulfillment. A complete poem is one where an emotion has found its thought and the thought has found the words. . . . My definition of poetry (if I were forced to give one) would be this: words that have become deeds."

This course will explore the satisfactions and the challenges of reading –carefully and pleasurably–selected poems and essays by Robert Frost, one of America's most widely read and least understood and appreciated poets. He was widely regarded for decades as America's most popular representative of poetry, and Frost deliberately cultivated his public image as a "rustic sage" and a rural wit in his numerous

public readings and in his role as a good will ambassador. Frost was a poet who promoted an aura of bucolic dignity in his work and in his readings, and the surface features of his poems often lull readers into thinking they understand his work. Yet reading Frost's poetry more carefully—to read him, as he says, with our "hearing imagination," listening for "sentence sounds"—reveals a tough-minded and often skeptical attitude towards experience.

Students will be expected to write two short analytical essays (2-3 pages each) or— for those who are venturesome —perhaps a few poems. In addition, regular attendance and participation in class discussions will be required to pass the course.

Donald A. McQuade is Vice Chancellor for University Relations. A member of the English faculty for nineteen years, Professor McQuade has also served as Dean of Undergraduate and Interdisciplinary Studies in the College of Letters & Science, where he was the founding Dean and a member of the faculty of the American Studies program. He has written, edited, and co-edited many books on writing, American literature, American culture, and advertising.

### **English 24, Section 6**

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

**Professor Robert Tracy**

**Monday 3:30-5:30, Room L20 in the Unit 2 Academic Center, CCN: 28849**

**This seminar will meet for eight weeks, beginning September 12, 2005 and ending November 7, 2005. There will be no seminar on Monday, October 17.**

Brian Friel (b. 1928) is the most prominent playwright of the contemporary Irish theater, best known for *Translations* and *Dancing at Lughnasa*. In a series of innovative plays, he has examined some of the stories the Irish tell themselves about their past and present. He uses the theater to examine issues of role-playing, story-telling, and self-delusion, that is, the nature of theatricality. While he explores Ireland's national and personal myths, Friel is saying something about us all and the parts we cast ourselves in when rehearsing our own dramas. This is a seminar, not a lecture course, so I will expect you all to contribute to discussions. Students will also be paired to lead discussions.

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 7**

#### **Reading Walden Carefully (1 unit, P/NP)**

**Professor Mitchell Breitwieser**

**Monday 3:00-4:00, 222 Wheeler Hall, CCN: 28852**

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

Mitchell Breitwieser has taught American literature in the Berkeley English department for twenty-five years.

**Environmental Science, Policy, and Management 24, Section 1**  
**Discussions on Evolutionary Biology (1 unit, P/NP)**  
**Professor Philip Spieth**  
**Wednesday 3:00-4:00, 201 Giannini Hall, CCN: 29157**

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

Philip T. Spieth is an Emeritus Professor in the Department of Environmental Science, Policy, and Management who worked with computer models of evolution and studied genetic variation in natural populations of fungi. He joined the faculty of the former Department of Genetics in 1971 and taught population genetics for thirty years at UC Berkeley in both introductory genetics courses and in courses for advanced undergraduates and graduate students and has been a co-author of a general genetics textbook. He created and has taught Discussions on Evolutionary Biology since the inception of the freshman seminar program in the early 1990's. Currently he works with the National Center for Science Education, a nonprofit organization devoted to the teaching of evolutionary biology in public schools.

**Environmental Science, Policy, and Management 24, Section 2**  
**Issues in Natural Resource Conservation (1 unit, P/NP)**  
**Professor David Wood**  
**Friday 9:00-10:00, 106 Mulford Hall, CCN: 29160**

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

Some of the issues to be dealt with include management and preservation of timberlands; reducing fire risk through logging; management in wilderness areas; endangered species; importation and exportation of logs; the lives of John Muir and Gifford Pinchot; trees and religion; can rain forests be saved?; killer bees; coral reefs—human threat; jobs versus spotted owls; vegetarianism; Muir Woods, past and present; garbage in the United States; biofuels; solar power; airport expansion in the San Francisco Bay Area; the competition for water; 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 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: 30327**

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.

### **Film Studies 24, Section I**

#### **Contemporary Films of the Frozen North (I unit, P/NP)**

**Professor Linda Rugg**

**Tuesday 2:00-4:00 p.m. and Thursday 2:00-3:30 p.m. , 188 Dwinelle Hall, CCN: 31420**

**This seminar will meet for ten weeks, beginning August 30, 2005 and ending November 3, 2005. The first seminar meeting on Tuesday, August 30 will include an introduction to the seminar and the first screening of a shorter film.**

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 (including the Dogme movement and its infamous leader, Lars von Trier), Finland (as imagined in the surreal world of Aki Kaurismäki), Iceland, Norway, and Sweden. Films to be screened include: *The Man without a Past* (Finland), *Dogville* (Denmark), *Kitchen Stories* (Norway), *Songs from the Second Floor* (Sweden), *Celebration* (Denmark), *101 Reykjavik* (Iceland), *Insomnia* (Norway, later remade in Hollywood), *Together* (Sweden), *Dancer in the Dark* (Denmark), and *Reconstruction* (Denmark). There will be short readings. Requirements: One two-hour film screening on Tuesdays and one one-and-a-half hour class discussion on Thursdays. Active participation in discussions required. **Any student interested in cinema and/or Scandinavian culture is welcome. No prior knowledge required. This seminar is also listed as Scandinavian 24, Section I.**

Linda Haverty Rugg is an Associate Professor in the Scandinavian Department with a faculty affiliation in the Film Studies program. She is the author of *Picturing Ourselves: Photography and Autobiography* (University of Chicago Press, 1997) and is currently at work on a book entitled *The Auteur's Autograph: Cinematic Auteurism and Self-Projection*. She teaches courses on Ingmar Bergman, August Strindberg, and Whiteness in American Culture, among other topics. Her research interests include ecology and culture and race in American culture. For more information regarding Professor Rugg, please visit her faculty website at <http://ls.berkeley.edu/dept/scandinavian/people/rugg.html>.

### **French 24, Section I**

#### **Films of the French New Wave (I unit, P/NP)**

**Professor Nicholas Paige**

**Monday 5:00-7:00 and Tuesday 3:00-4:00 , two locations - see below, CCN: 32317**

**This seminar will meet on Mondays for mandatory screenings in 33 Dwinelle Hall and on Tuesdays for discussion in 175 Dwinelle Hall.**

This seminar will introduce students to a number of representative films of the French New Wave, providing along the way a look both at some of the things these film makers were reacting against, and at some later films in and out of France that the New Wave can be said to have made possible. Some of the points to be explored: France and American popular culture; post-war economic transformations and consumerism; misogyny and feminism; documentary as cultural critique; subversion and pastiche of genre; the ideology of form. All films will be subtitled; some short critical readings will be provided to furnish contextual information and to deepen student engagement with the films. Class will be conducted as a discussion. **No previous knowledge is assumed. Enrolling students must be able to attend scheduled weekly screenings.**

Nicholas Paige has been teaching in the Department of French since 1996. His teaching and research centers on seventeenth- and eighteenth-century literature and culture. He has also published on detective fiction and film. A recent essay on the filmmaker Jean-Luc Godard has appeared in the journal *Representations*.

## **French 24, Section 2**

### **Reading/Writing French Poetry: The Alexandrine (I unit, P/NP)**

**Professor Michael Lucey**

**Friday 2:00-3:00, 125 Dwinelle Hall, CCN: 323 18**

How do you read poetry in French and learn to write it? In this seminar our goal will be to become technically and historically astute readers of a particular form of French verse: the twelve-syllable line called the alexandrine that was at the heart of French poetic practice for many centuries. Written assignments for the seminar will involve composing a limited number of alexandrines of our own. We will be studying one short poetic text each week. Mostly they will be lyric poems, but we will also consider some excerpts of theatrical verse. The majority of our examples will be drawn from the nineteenth century, with a few from the seventeenth century as well. On the practical level, we'll be reading poems aloud, learning the conventions of poetic diction, working on improving our pronunciation and our sense of melody and rhythm. We'll also study how people learned to write alexandrines, what kinds of tools they used (rhyming dictionaries and versification manuals, for example), and how they made distinctions between good alexandrines and bad ones. In a more historical vein, we'll look at cases where poets would intentionally write what some of their contemporaries would consider "bad" alexandrines—maybe to distinguish themselves from a previous generation of poets, maybe to distinguish themselves from a different school of poetry, maybe to bring poetry into a different relation with ordinary spoken language. Once we're familiar with the conventions of the twelve-syllable line and how people worked with them, at the end of the semester we'll use an example or two to study the following question: what would it mean for a nineteenth-century French poet to write a poem with eleven syllables per line? Poets will include Molière, Racine, Hugo, Desbordes-Valmore, Baudelaire, Banville, Rimbaud, Verlaine. All the poems will be available as handouts. **This seminar is open to freshmen and sophomores. It will be conducted in English, although you'll be reading poems aloud in French in class and the eight to twelve lines of poetry you'll be asked to compose and rewrite during the semester will be in French as well. Prerequisites: four years of high school French or the consent of the instructor. If you have any concerns or questions regarding placement, please contact Carol Dolcini in the French Department at [fredept@berkeley.edu](mailto:fredept@berkeley.edu) or (510) 642-2713.**

Michael Lucey is Professor of French and Comparative Literature and Chair of the French Department. He has published a number of books and articles on nineteenth- and twentieth-century French literature. For more information regarding Professor Lucey, please visit his faculty webpage on the French Department's website at [http://french.berkeley.edu/people/people\\_ind.php?id=55](http://french.berkeley.edu/people/people_ind.php?id=55).

## **Geography 24, Section 4**

### **Exploring American Cities (I unit, P/NP)**

**Professor Paul Groth**

**Tuesday 3:30-6:00, 575 McCone Hall, CCN: 37006**

**This seminar will meet for the first eight weeks of the semester, beginning Tuesday, August 30, 2005, and ending October 18, 2005.**

The visual and spatial artifacts of cities—their buildings, lots, streets, signs, front yards, even graffiti—provide very 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. Course requirements include brief readings and participating in on-site discussions (or classroom discussions in the event of heavy rain). **Enrollment is limited to fifteen students.**

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**  
**Crusades and Holy War (1 unit, P/NP)**  
**Professor Niklaus Largier**  
**Monday 3:00-4:00, 140 Barrows Hall, CCN: 37475**

In recent years, the metaphors of 'crusade' and 'holy war' have played a major role in political rhetoric. During the seminar, we will discuss the historical background and the ideology of the medieval Christian crusades, as well as the ways in which the crusades have been perceived in the Muslim world. This will lead to questions and discussions about the use of the rhetoric of 'crusade' and 'holy war' nowadays.

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

Niklaus Largier teaches in the German Department. He specializes in Medieval literature and the history of religious concepts. For more information regarding Professor Largier, please visit his faculty website at <http://german.berkeley.edu/people/showprofile.php?id=9>.

**German 24, Section 3**  
**Language and Identity (1 unit, P/NP)**  
**Professor Claire Kramsch**  
**Tuesday 3:00-4:00, 125 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 three 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), Eva Hoffman's *Lost in Translation* (Pole writing in English) and Alice Kaplan's *French Lessons*. We will also read selections from such bilingual authors as J.P. Sartre, N. Sarraute, Shirley Geok-lin Lim, A. Kilito, Nancy Huston and Christine Brooke-Rose, 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 Foreign Language Acquisition in the German Department and in the School of Education. She is, in addition, Director of the Berkeley Language Center, a research and development unit for all foreign language teachers on campus. She teaches courses in foreign language pedagogy, discourse analysis, second language acquisition and foreign language literacy. Professor Kramsch is currently working on a cultural theory of foreign language and literature study.

**History 24, Section 1**  
**The Creation, Operation, and Dismantling of Apartheid in South Africa (1 unit, P/NP)**  
**Professor Tabitha Kanogo**  
**Tuesday 10:00-12:00, 2303 Dwinelle Hall, CCN: 39010**

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

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*, which will be published in November 2004. Her current research project is broadly entitled "Endangered Childhood in Kenya: A Historical Perspective."

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

#### **The Civil Rights and Black Power Movements (1 unit, LG)**

**Professor Waldo E. Martin**

**Wednesday 2:00-4:00, 2303 Dwinelle Hall, CCN: 39013**

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

This course will examine the origins, development, and consequences of the Civil Rights Movement in the United States. Our discussions will build upon a selection of short readings, documentary films, musical texts, and visual artifacts. Our major intellectual preoccupation will be analyzing historical and cultural representations of this watershed moment.

Waldo E. Martin, Jr. teaches courses in African American History, American Cultural History, and the United States in the nineteenth and twentieth centuries. He is author of *The Mind of Frederick Douglass* and *Brown v. Board of Education: A Brief History with Documents*. He co-edited, with Dr. Patricia Sullivan, *Civil Rights in the United States: An Encyclopedia*.

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

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

**Professor David Wright**

**Wednesday 2:00-4:00, 308B Doe Library, CCN: 05442**

**Attendance at the first seminar meeting is necessary. This seminar will end on Wednesday, November 16, 2005 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.

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

#### **Imagined Orphans: Missing Parents in Children's Fiction (1 unit, P/NP)**

**Professor Elizabeth Honig**

**Friday 9:00-10:00, 308B Doe Library, CCN: 05444**

From the days of Huck Finn, Pollyanna, and Mary Lennox up to Harry Potter, the central figures in children's literature have an improbably high chance of being orphans. Some are true orphans at the book's beginning, while in other cases the absence of one or both parents is a mystery whose resolution drives the book's plot. This seminar will explore parentlessness as a fantasy and a device in the writing of fiction for children from the late nineteenth century through the twentieth century. It will consider how the orphan represents an adult ideal of essential childhood in some novels, how it allows for a narrative of self-fashioning in others, and how it generally gives its reader a model for imagining eventual independence from the family. Rather than assuming that we have moved from the fantasies of Pollyanna to a more gritty realism of some orphan tales today, this course posits that all children's novels reflect their era's notions about normative childhood and about the psychology of children. We will remain aware of the tenuous relationship between these fictional constructs and actual narratives and conditions of children without parents. Seminar requirements include reading a children's novel each week, class participation, and a short comparative essay.

Elizabeth Honig is an Associate Professor in History of Art, specializing in the arts of Northern Europe from 1500-1700. Her most recent project concerns Jan Brueghel's artistic relationship to his famous but dead father Pieter Bruegel. She started reading fiction at the twelve-year-old level when she was seven and is still doing so today. Recently she has become involved with issues concerning the international transracial adoption of older children.

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

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

**Professor Ilan Adler**

**Tuesday 4:00-5:00, 103 Moffitt Library, 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.

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

#### **Animal 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. **Registration for this seminar is by instructor approval only. Obtain required instructor approval by going to the first class meeting and securing a class entry code from the instructor.**

Professor Caldwell received his Ph.D. in Zoology from the University of Iowa and has been a member of the Berkeley faculty, teaching animal behavior, since 1970. His research interests are in the areas of insect migration and the functions of communication and aggression in marine crustaceans and octopuses.

### **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.

Professor Kevin Padian's research focuses on various aspects of macroevolution and paleobiology, particularly of vertebrates. He is mainly interested in the origins of major adaptations, or how "great ideas" in evolution get started. He works mostly on the origins of flight, on the Triassic Jurassic time boundary, when dinosaurs and other animals took over the terrestrial faunas, on fossil footprints, on the history of evolution and paleontology, and on the influence of Darwin and his work on the Victorian novel.

### **Integrative Biology 24, Section 3**

#### **The Stone Age (1 unit, LG)**

**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.

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

#### **Integrative Biology 24, Section 4**

**The Day After Tomorrow: Separating Science Fiction from Science Facts (1 unit, P/NP)**

**Professor Anthony Barnosky**

**Monday 11:00-1:00, 5192 Valley Life Sciences Building, CCN: 43011**

**This seminar will meet for eight two-hour sessions. The first meeting will be on August 29, 2005; the remainder will be scheduled on Mondays convenient to students and faculty.**

The issue of global warming is politically charged and has widespread scientific and economic implications. We will view the recent Hollywood movie "The Day After Tomorrow" and use that as a springboard to identify what is scientifically validated about global warming, some of the ramifications of global climate change, and the problems encountered in bringing sound science to policy makers and the public. Each student will be expected to choose one issue highlighted in the movie, learn about its scientific validity and portrayal to the public using such sources such as journal publications, government policy documents, and news reports, and then present his or her findings to the rest of the class. **This seminar is for students who want to be exposed to a broad spectrum of ecological issues, and learn how science can impact (or be over-ridden by) political decisions.**

Anthony Barnosky is a Professor of Integrative Biology, Curator in the Museum of Paleontology, and Research Paleocologist in the Museum of Vertebrate Zoology. His research focuses on using the paleontological record to understand the effects of environmental changes on ecosystems.

#### **Integrative Biology 24, Section 5**

**What is Biodiversity? (1 unit, LG)**

**Professor David Ackerly**

**Tuesday 2:00-3:00, 4110 Valley Life Sciences Building, CCN: 44200**

**Food for Thought dining dates, times and locations will be discussed in class.**

The crisis of biodiversity is a frequent topic in the news, as climate change and human population growth impinge upon the natural world. But what is biodiversity? In this seminar, we will discuss biological diversity from multiple perspectives, including evolution, ecology, genetics and both traditional and contemporary human cultures. With this background, we look at three critical questions: How does biodiversity influence the functioning of natural ecosystems? How does biodiversity contribute to human welfare? And what are the costs and tradeoffs involved in biodiversity conservation? **This seminar is part of the Food for Thought Seminar Series. Professor Ackerly is interested in sharing an occasional meal with his seminar students. The details of the Food for Thought component of the seminar will be worked out in class.**

Professor Ackerly joined the faculty at UC Berkeley in 2005. His research focuses on evolution and distribution of physiological diversity in plants, combining ecological and evolutionary approaches. He has worked in temperate and tropical forests of New England, Japan, Brazil and Mexico, and currently focuses his research on the flora of California. For more information regarding Professor Ackerly, please visit his faculty website at <http://ib.berkeley.edu/faculty/ackerlyd.html>.

#### **Journalism 24, Section 1**

**Initiative Madness - Blogging The Special Election (1 unit, LG)**

**Susan Rasky**

**Tuesday 2:00-4:00, B1 North Gate, CCN: 48003**

**This seminar meets weekly for two-hour sessions for eight weeks, beginning the week of September 12, 2005 and ending the week of November 7, 2005.**

This seminar is designed to familiarize students with the major California and national political media and to survey current political topics. With California's Special Election as a backdrop, we will follow the coverage of Governor Schwarzenegger's campaign for his pet initiatives and the coverage of some of the more controversial measures also on the ballot. Students will be expected to post weekly commentaries to our class blog. **This seminar has become an informal training ground for students who go on to write for and edit the Berkeley Political Review. I would like to continue that tradition. Please check this web page again for additional scheduling details.**

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

**Linguistics 24, Section I**  
**Language and Politics in Southern Africa (1 unit, P/NP)**  
**Professor Sam Mchombo**  
**Wednesday 1:00-2:00, 104 Dwinelle Hall, CCN: 52166**

This seminar will focus on political developments in Southern Africa and the use of language in fostering national identity and attaining cultural emancipation. We will look at case studies representative of the dynamics of the region. The topics covered will include a brief history of the peoples of Southern Africa; family structure, kinship systems and traditional political institutions; cultural practices and religious beliefs; the impact of contact with western culture and civilization on language issues and political organization; language and its role in fostering national identity in post-independence Africa; models of national language policy in multi-ethnic societies; and language use in the politics of democratic transition. Since the course is a seminar, students will be expected to participate actively in the class. There will be a course reader. There will be no examinations. Grades will be based on one 500-word paper and class participation.

Sam Mchombo is an Associate Professor in the Department of Linguistics, which he joined in 1988. He received his B.A. from the University of Malawi and Ph.D. from the University of London. He pioneered and taught courses in Linguistics and African Language Structure in what is now the Department of African Languages and Linguistics in the University of Malawi. From 1985-1988 he was a member of the Linguistics faculty at San Jose State University, teaching courses on general linguistics, syntax, and semantics. His research focuses on grammatical theory and African linguistic structure. Recently, he has also focused on aspects of African politics, delivering talks at the World Affairs Council on emergent democracies, as well as human rights in Africa. His publications include *Theoretical Aspects of Bantu Grammar* and "Democratization in Malawi: Its Roots and Prospects," 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*. His book manuscript called *The Syntax of Chichewa* is to be published by Cambridge University Press. In Spring 2003, he was appointed Distinguished African Scholar by the Institute for African Development at Cornell University.

## **Linguistics 24, Section 2**

### **Language Myths (1 unit, P/NP)**

**Professor Larry Hyman**

**Tuesday 10:00-11:00, 2030 Valley Life Sciences Building, CCN: 52168**

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

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

## **Mass Communications 24, Section I**

### **The Disappearance of Information (1 unit, LG)**

**Professor Thomas Leonard**

**Monday 3:30-5:00, 247 Evans Hall, CCN: 53235**

Each week this semester we will review a different cry of alarm about the loss of some part of our cultural heritage or modern research findings because a library failed to preserve this information. We will ask: Is this true? Does this matter? What, if anything, should be done? We will spend other sessions looking at records of the past that have been saved, thanks to extraordinary efforts in a Berkeley library, and we will again ask, So what? Berkeley librarians and archivists will participate in this seminar and in some cases they will lead tours of their collections. Reading will include *Fahrenheit 451* by Ray Bradbury. **Enrollment is limited to ten students.**

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

## **Materials Science and Engineering 24, Section I**

### **Materials in Music (1 unit, P/NP)**

**Professor Ronald Gronsky**

**Monday 2:00-4:00, 348 Hearst Memorial Mining Building, CCN: 53402**

**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 Gronsby 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? (1 unit, P/NP)**

**Professor Jenny Harrison**

**Friday 3:00-4:00, 89I Evans Hall, CCN: 54630**

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 (1 unit, P/NP)**

**Professor Benson Tongue**

**Wednesday 12:00-1:00, 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.

### **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.

**Mechanical Engineering 24, Section 3**  
**Mobile Energy Storage (1 unit, P/NP)**  
**Professor Van P. Carey**  
**Friday 1:00-2:00, 3106 Etcheverry Hall, CCN: 56008**

This seminar will explore a variety of issues associated with design of mobile energy storage systems (efficiency, environmental impact, safety, size, etc.). The seminar will also aim to span a variety of applications, including energy storage for transportation vehicles, spacecraft, and power systems for personal electronics. In addition to technical issues, the historical context for different storage technologies will also be examined. **Enrollment in this seminar is limited to fifteen students and is open to freshmen and sophomores.**

Van P. Carey is a Professor in the Mechanical Engineering Department at the University of California, Berkeley. He received his Ph.D. in Mechanical Engineering from the State University of New York at Buffalo in 1981. His research interests include molecular dynamics simulation of microscale thermophysics and transport, thermophysics of phase-change processes, energy efficiency of information processing, and computer aided thermal design. He has authored or co-authored more than 135 technical publications, including two advanced textbooks: *Liquid-Vapor Phase Change Phenomena* (Taylor and Francis, 1992) and *Statistical Thermodynamics and Microscale Thermophysics* (Cambridge Univ. Press, 1999). Professor Carey is or has been an editor for several journals including the *ASME Journal of Heat Transfer and Microscale Thermophysical Engineering*. He is a Fellow of ASME and AAAS. In 2004 he was named the recipient of the James Harry Potter Gold Medal from the American Society of Mechanical Engineers. This award recognizes eminent achievement or distinguished service in the science of thermodynamics in mechanical engineering.

**Molecular and Cell Biology 90B, Section I**  
**Changing Perspectives in Biology and Medicine (1 unit, P/NP)**  
**Professor Richard Strohman**  
**Tuesday 1:00-2:00, 20 Wheeler, CCN: 57810**

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 have been 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 the 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, 116 Haviland Hall, CCN: 57811**

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.

Randy Schekman is a Professor of Molecular and Cell Biology and an Investigator of the Howard Hughes Medical Institute. For further information, please visit the following websites:  
<http://mcb.berkeley.edu/faculty/CDB/schekmanr.html>,  
<http://mcb.berkeley.edu/labs/schekman/>, and  
<http://www.hhmi.org/research/investigators/schekman.html>.

**Molecular and Cell Biology 90B, Section 3**  
**Living Longer, Growing Younger (1 unit, P/NP)**  
**Professor Paola Timiras**  
**Thursday 2:00-3:00, 2 Evans Hall, CCN: 57813**

The remarkable increase in human lifespan in this and the previous century is one of the greatest human achievements: in the US, lifespan has extended from 47 years in 1900 to 77 years in 2004. The lengthening of the human lifespan in the US and worldwide is attributed to multiple factors: improved economy, better education, and biomedical and technological advances. In this seminar, the major topics to be covered will be the causes and consequences of this increase in human lifespan. Emphasis will be on the roles of education and biomedical advances in maintaining good health throughout life.

Professor Timiras has been teaching at UC Berkeley for about fifty years. Her lab is currently investigating the effects of growth factors on cells of the nervous system and their role in neurogenesis. She has published several articles and books, the latest being the third edition of *"The Physiological Basis of Aging and Geriatrics."* She earned her MD from the University of Rome, Italy and PhD from the University of Montreal, Canada.

**Molecular and Cell Biology 90E, Section 1**  
**Consciousness: One of the Last and Deepest Unsolved Biological Problems (1 unit, P/NP)**  
**Professor Gunther Stent**  
**Monday 2:00-3:00, 2032 Valley Life Sciences Building, CCN: 57820**

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



Gunther Stent is a Professor Emeritus of Neurobiology in the Department of Molecular and Cell Biology. He has been a member of the UC Berkeley faculty since 1952. His teaching and research have concerned both molecular genetics and neurobiology, as well as the history and philosophy of science. He is a member of the US National Academy of Science, the American Academy of Arts and Sciences, and the American Philosophical Society.

**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: September 1, 8, 15, 22, 29 and October 6, 2005.**

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)**  
**Professors Sally Fairfax and Stephen Welter**  
**Thursday 5:00-6:00, Classroom A in Foothill I, CCN: 61306**

**After the formal sessions, professors 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 instructor(s).**

Sally K. Fairfax is Professor of Natural Resources Law and Policy in ESPM. She has a master's degree in political philosophy from New York University and a master's degree in forestry and a Ph.D. in political science from Duke University in Durham, North Carolina. Professor Fairfax is a student of land and resource conservation, focusing primarily on law and administration. Her most recent book, *Buying Nature*, undertaken with four colleagues, is an analysis of land acquisition policy, including land trusts, and is forthcoming from MIT press. She is presently working with her lab on an analysis of alternative foods in the San Francisco Bay Area. Fairfax is a certified dive master and an avid photographer, specializing in underwater macro work. She is also a maker of stained glass, block prints and occasional fairly dreadful watercolors.

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.

**Near Eastern Studies 24, Section 1**  
**Islam and Imaginative Literature: The Making of a Problematic Relation (1 unit, LG)**  
**Professor Muhammad Siddiq**  
**Thursday 1:00-2:00, 180 Barrows Hall, CCN: 61439**

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

Professor Muhammad Siddiq is trained in Comparative Literature with special expertise in Arabic, Hebrew, and English. He is currently working on a major project dealing with the relation of authenticity to representation in Arabic fiction.

**Near Eastern Studies 24, Section 2**  
**Exploring the Archaeology of Ancient Egypt in the Hearst Museum (1 unit, LG)**  
**Professor Carol Redmount**  
**Tuesday 1:00-2:00, 108 Wheeler Hall (first class) and Exhibit Gallery in Hearst Museum, CCN: 61442**

**The first seminar meeting will be held in 108 Wheeler Hall. Future seminar meeting locations will be announced in the first class.**

The Hearst Museum has one of the most important collections of ancient Egyptian artifacts in the United States and the best west of Chicago. Most of the almost 19,000 ancient Egyptian objects in the museum came from excavations undertaken in the early 1900s by George Reisner, with funding provided by Phoebe Apperson Hearst. Only a very tiny fraction of this collection is ever 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.

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.

**Nuclear Engineering 24, Section I**  
**Ethics and the Impact of Technology on Society (I unit, P/NP)**  
**Professor William Kastenberg**  
**Monday 3:00-4:00, 332 Giannini Hall, CCN: 64003**

Because of the rapidly changing nature of technology, new and complex ethical issues are emerging that bring into question the ability of society to address and, ideally, resolve them. New issues are arising in such areas as biotechnology, information technology, nanotechnology and nuclear technology, and range from protecting the health and welfare of the public and the environment, to patenting living organisms and labeling products containing genetically modified organisms, to concerns regarding the alteration of the ecology of life. This seminar focuses on the nature of these emerging technical issues, their ethical, legal, and social ramifications, and what individuals and our society value in relation to these issues. We will examine what philosophy, religion and art, and natural and social science have to say about these issues.

William E. Kastenberg is currently the Daniel M. Tellep Distinguished Professor of Engineering. He has taught courses on risk assessment, risk management, nuclear reactor analysis, nuclear reactor safety, toxic waste control, energy and the environment, and applied mathematics. More recently, he has focused on ethical issues concerning the development of new technologies. Professor Kastenberg has won a distinguished teaching award from the American Society for Engineering Education. For more information regarding Professor Kastenberg, please visit his faculty website at <http://www.nuc.berkeley.edu/people/faculty/kastenberg.htm>.

**Nuclear Engineering 24, Section 2**  
**The Scientists of the Manhattan Project, their Contributions to President Eisenhower's Atoms for Peace Initiative and their Lasting Legacy to Nuclear Power in the Twenty-first Century (I unit, P/NP)**  
**Professor Brian D. Wirth**  
**Tuesday 11:00-12:00, 55 Evans Hall, CCN: 64006**

The discovery of the neutron in 1932 by James Chadwick, the 1932 experiment by John Cockroft and Ernest Walton that confirmed Albert Einstein's postulate from the theory of relativity about the equivalence between mass and energy ( $E=mc^2$ ), and the subsequent discovery of fission in 1938 revolutionized atomic and nuclear physics. During World War II, the United States established the Manhattan Project, which brought together many of the world's preeminent scientists and engineers under the leadership of J. Robert Oppenheimer with the goal of building a new and more explosive weapon based on these discoveries. The world entered the nuclear age with the explosion of the atomic bomb at Trinity, N.M. on July 16, 1945 and less than a decade later, U.S. President Dwight D. Eisenhower provided his vision for the peaceful use of atomic energy in a speech to the United Nations on December 8, 1953 entitled 'Atoms for Peace.' This course will cover the history of the scientists and engineers who participated in the Manhattan Project and their contributions to nuclear science and technology, within the context of President Eisenhower's 1953 address and nuclear power in the twenty-first century. Students in the course will be expected to perform a research report on an individual scientist or engineer from the Manhattan project and his/her contributions to nuclear energy.

Brian D. Wirth received a B.S. in nuclear engineering from the Georgia Institute of Technology in 1992 and a Ph.D. in mechanical engineering from the University of California, Santa Barbara in 1998, where he was a Department of Energy Nuclear Engineering Graduate Fellow. In 2002 he joined the faculty at University of California, Berkeley as an Assistant Professor of Nuclear Engineering following several years in the computational materials science group at Lawrence Livermore National Laboratory. His research interests include multiscale modeling and experiments to develop improved understanding and models of microstructure-property relationships and microstructural evolution during processing and service in hostile environments, with an emphasis on irradiation effects.

**Nutritional Sciences and Toxicology 24, Section 2**  
**Toxics in Daily Life (1 unit, P/NP)**  
**Professor John Casida**  
**Wednesday 3:00-4:00, 138 Morgan Hall, CCN: 64596**

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

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

**Nutritional Sciences and Toxicology 24, Section 3**  
**Nutrition in the News (1 unit, P/NP)**  
**Lecturer and Director of Dietetics Program Nancy Hudson**  
**Thursday 11:00-12:00, 138 Morgan Hall, CCN: 64599**

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

Nancy Hudson's career as a nutrition educator spans more than thirty years, during which she has taught medical, nursing, allied health and other students at both the undergraduate and graduate levels. She finds teaching to be especially rewarding when working with individuals planning to become Registered Dietitians. In addition to teaching, she has directed the undergraduate program in dietetics at the University of California at Berkeley since 1992. This program is ranked eighth in the country (The Gourman Report, 1998). In related practice, Ms. Hudson has worked in dietetics management and clinical nutrition, and volunteered as the resident dietitian for a summer camp for children with diabetes. She received the College of Natural Resources Distinguished Teaching Award in 1998. The second edition of her book, Management Practice in Dietetics, is due to be published in July, 2005.

**Philosophy 24, Section 1**  
**Hume's "Dialogues Concerning Natural Religion" (1 unit, P/NP)**  
**Professor Daniel Warren**  
**Wednesday 1:00-2:30, 234 Moses Hall, CCN: 67165**

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

We will read and discuss this important work by the British philosopher, David Hume(1711-1776), which critically considers some of the most common arguments for the existence of God. **Enrollment is by instructor approval only. Students will need to email the instructor at [dmwarren@berkeley.edu](mailto:dmwarren@berkeley.edu) to request permission to enroll in this seminar.**

Professor Warren has taught courses on Kant, Leibniz, logic, the philosophy of time, philosophical writing, medical ethics and other topics. His written work focuses on the philosophy of Immanuel Kant.

**Physics 24, Section 1**  
**How Things Work (1 unit, P/NP)**  
**Professor Leroy Kerth**  
**Wednesday 4:00-5:00, 597 Evans Hall, CCN: 69867**

**This seminar will meet for eleven weeks, beginning with an organizational meeting on September 7, 2005 and ending on November 16, 2005. Food for Thought dinner meeting dates, times and locations will be announced on September 7.**

This seminar is for non-techies who wonder how things work, things like microwave ovens, how airplanes fly, how music is stored on a CD, atomic bombs, global positioning systems, sewing machines, etc. The members of the class will determine the specific topics of study at an organizational meeting on the first day of class. Students will be given reading, make observations or perform simple experiments in preparation for each discussion. Students will learn about sources of information where the non-expert can find out about the devices we use and/or hear about every day. Students will gain sufficient qualitative knowledge of the underlying science to give the student insight to other applications. **This seminar is part of the Food for Thought Seminar Series. The seminar will be followed by more discussion over dinner. Any student who is not heading for a science or engineering major interested in how our modern society's technical stuff works is encouraged to take this seminar.**

Professor Emeritus Leroy Kerth earned his B.A. and Ph.D. in Physics from UC Berkeley. He has been a member of the Lawrence Berkeley National Laboratory since 1950 and a Professor of Physics at UC Berkeley since 1961. Professor Kerth is a Fellow of the American Physical Society and received The Berkeley Citation in 1993. His research is in experimental particle physics. Over the past 50 years, Professor Kerth has had considerable experience with many different applications of technology while inventing instrumentation for his research. He has dabbled in many hobbies, including photography, woodworking, metalworking, electronics, flying, and racecar preparation, construction and instrumentation. In addition, since childhood he has had an insatiable desire to understand how things work.

**Physics 24, Section 2**  
**The Big Bang Universe (1 unit, P/NP)**  
**Professor Adrian Lee**  
**Monday 11:00-12:00, 508-20 Evans Hall, CCN: 69870**

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

Speakers working at the intersection of astronomy, cosmology, and particle physics will discuss the current model of the Universe, which appears to be a strange cocktail of Dark Matter and Dark Energy with a just a small amount of normal matter. **This seminar is part of the Food for Thought Seminar Series.**

Professor Adrian Lee is an experimental Cosmologist working on observations of the 3K Cosmic Microwave Background (CMB). CMB experiments are done at exotic places like the south pole, Chile, and with robotic telescopes at 100,000 feet. More information regarding Professor Lee is available at <http://physics.berkeley.edu/people/directory.php?id=8>.

**Psychology 24, Section 2**  
**Getting to Know the UCB Faculty (1 unit, P/NP)**  
**Professor Christina Maslach**  
**Monday 4:00-5:30, 2235 Tolman Hall, CCN: 74390**

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

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.

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."

### **Scandinavian 24, Section I**

#### **Contemporary Films of the Frozen North (1 unit, P/NP)**

**Professor Linda Rugg**

**Tuesday 2:00-4:00 p.m. and Thursday 2:00-3:30 p.m. , 188 Dwinelle Hall, CCN: 78946**

**This seminar will meet for ten weeks, beginning August 30, 2005 and ending November 3, 2005. The first seminar meeting on Tuesday, August 30 will include an introduction to the seminar and the first screening of a shorter film.**

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 (including the Dogme movement and its infamous leader, Lars von Trier), Finland (as imagined in the surreal world of Aki Kaurismäki), Iceland, Norway, and Sweden. Films to be screened include: *The Man without a Past* (Finland), *Dogville* (Denmark), *Kitchen Stories* (Norway), *Songs from the Second Floor* (Sweden), *Celebration* (Denmark), *101 Reykjavik* (Iceland), *Insomnia* (Norway, later remade in Hollywood), *Together* (Sweden), *Dancer in the Dark* (Denmark), and *Reconstruction* (Denmark). There will be short readings. Requirements: One two-hour film screening on Tuesdays and one one-and-a-half hour class discussion on Thursdays. Active participation in discussions required. **Any student interested in cinema and/or Scandinavian culture is welcome. No prior knowledge required. This seminar is also listed as Film 24, Section I.**

Linda Haverty Rugg is an Associate Professor in the Scandinavian Department with a faculty affiliation in the Film Studies program. She is the author of *Picturing Ourselves: Photography and Autobiography* (University of Chicago Press, 1997) and is currently at work on a book entitled *The Auteur's Autograph: Cinematic Auteurism and Self-Projection*. She teaches courses on Ingmar Bergman, August Strindberg, and Whiteness in American Culture, among other topics. Her research interests include ecology and culture and race in American culture. For more information regarding Professor Rugg, please visit her faculty website at <http://ls.berkeley.edu/dept/scandinavian/people/rugg.html>.

### **Sociology 24, Section I**

#### **Life Course and the Transition to College (1 unit, P/NP)**

**Professor Thomas Gold**

**Friday 11:00-12:00, Room L20 in Unit 2 Academic Center , CCN: 81689**

**Food for Thought meeting dates, times and locations will be discussed in class. Unit 2 is located at 2650 Haste Avenue between College and Bowditch. Room L20 is**

**located in Unit 2's central complex downstairs area. Unit 2's front desk staff can direct you to the room if needed.**

Life course is an approach in Sociology that systematically links the biography of the individual with the larger social, political, cultural and economic context in which the individual lives. This seminar first looks at the concept of life-course and how we link biography and history. We will reflect on the life course trajectories of class members to see what we share and where we differ, and why. The bulk of the term will address specific issues in adjusting to the environment at Cal. We will learn about the changes the campus itself has experienced. We will have visitors from different campus units charged with assisting new students who will reflect on how student cohorts have changed. Students will keep journals of their own experiences set against the changing contexts of their life course. **This seminar is intended for first-semester freshmen and is part of the Food for Thought Seminar Series.**

Professor Thomas Gold specializes in studying the societies of the Pacific Rim, primarily mainland China, Taiwan and Hong Kong. He has lived in Asia for many years and travels there regularly for research and conferences. He studies the life course, private business and democratic change in those societies. At Cal he teaches Introductory Sociology as well as courses on development, culture, and China.

**Spanish 24, Section 1**  
**Spanish Cinema in the 90's (1 unit, P/NP)**  
**Professor Jesús Rodríguez-Velasco**  
**Monday 1:00-2:00, 203 Wheeler Hall, CCN: 86190**

In this seminar we are going to view and analyze several motion pictures produced in Spain during the 1990's (by directors Almodóvar, Cuesta, 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.

**Spanish 24, Section 2**  
**Talking Funny: Language Variation in Spanish and English Literary Texts (1 unit, LG)**  
**Professor Milton Azevedo**  
**Thursday 2:00-3:00, 289 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 CopyCentral on 2560 Bancroft Avenue.

Professor Milton Azevedo (M.A. 1971, Ph.D. 1973, Cornell University) has been at UC Berkeley since 1976 and works on applications of linguistics to the analysis of literary texts.

### **Spanish 24, Section 3**

#### **Baseball Spanish (1 unit, P/NP)**

**Professor Ignacio Navarrete**

**Tuesday and Thursday 10:00-11:00, two locations - see below, CCN: 86195**

**This seminar will meet the first eight weeks of the semester. It will meet in 125 Dwinelle Hall on Tuesdays and 33 Dwinelle Hall on Thursdays.**

Writing in Spanish about baseball retains the colorful character that English-language sports writing used to have. When examined closely, it can also teach us a good deal about certain linguistic processes, particularly translation and metaphor formation. In this seminar we will read (over the internet) and then discuss Spanish-language baseball coverage, and try our hands at writing some short pieces ourselves. We'll also talk about the role of baseball in the Spanish-speaking world. **Prerequisite: enough Spanish to read a newspaper.**

Professor Ignacio Navarrete was born in Cuba, grew up in New York, and has taught at UC Berkeley since 1987. His area of specialization is fifteenth- and sixteenth-century Spanish literature, and he has taught *La Celestina* and *Don Quijote* in a variety of undergraduate and graduate courses.

### **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: 88033**

**This seminar will meet for eight weeks, beginning August 29, 2005 and ending October 31, 2005.**

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**

### **Comic Acting (1 unit, P/NP)**

**Professor Mel Gordon**

**Tuesday 5:30-7:30 and one Saturday at a time to be arranged , two locations - see below, CCN: 88035**

**This seminar will meet on the following Tuesdays: August 30, September 27, October 4, and October 11 from 5:30-7:30 p.m. in 413 Zellerbach Hall. The final class presentation will be on Saturday, October 15; the Saturday times and location will be announced in the first seminar meeting.**

This is an academic and practical seminar in the techniques of Comic Acting that were pioneered by Commedia dell'arte performers. The origins of modern physical comedy can be traced back to Renaissance Italy, where teams of professional actors improvised slapstick routines called Lazzi. These amusing acts were often vulgar and were inserted into playscripts, independent of plot development. They were said to guarantee laughs and were passed down from generation to generation. Replicas of Lazzi can be seen in the silent films of Charlie Chaplin and Buster Keaton, Thirties' Hollywood troupes, like the Marx Brothers, and in low-grade contemporary comedies. Workshops in Physical Comedy will be conducted by the instructor, the Dell'arte Players, and members of the prestigious Teatro Piccolo. Readings and one paper are required.

Professor Mel Gordon is the author of fourteen books on acting, theatre, and popular culture. He has worked on Broadway and in Hollywood as a writer, director, and historical consultant.

## **Undergraduate and Interdisciplinary Studies 24, Section 1**

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

**Professor George Chang**

**Thursday 5:30-6:30, Room L20 in the Unit 2 Academic Center, CCN: 89023**

**Food for Thought dinner meeting dates and times will be discussed in class. Unit 2 is located at 2650 Haste Avenue between College and Bowditch. Room L20 is located in Unit 2's central complex downstairs area. 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 2005, "The Freshman Experience" will be held in the Unit 2 Academic Center. It will be an experiment 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 dinner 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.

**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 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**

#### **Neighborhood Globalization (1 unit, LG)**

**Professor Michel Laguerre**

**Wednesday 9:30-11:30, 119 Moses, CCN: 02023**

**This class will meet for 8 weeks, beginning August 31.**

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.

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).

### **Astronomy 84, Section I**

#### **The Restless Universe (1 unit, P/NP)**

**Professor Jonathan Arons**

**Monday 3:00-4:00, 501 Campbell Hall, CCN: 06917**

The Universe began in fire, 14 billion years ago. It will end in ice, self-repelled by mysterious "dark energy." In between, dark and ordinary matter collapsed into galaxies; galaxies cannibalized each other; giant black holes formed and merged in galaxies' centers, powering spectacular intergalactic jets; ordinary matter in galaxies collapsed into stars; stars exploded, spewing out the elements from which we are made; neutron stars and black holes, the collapsed remnants of the stars that made the heavier elements, create their own spectacular displays through accelerating ultra-high energy charged particles; gas in galaxies collapses to form stars; gas and dust around newly formed stars collapses to form planets; and rocky fragments left over from planet formation bombard newly formed planets, affecting the conditions for life to form. We will investigate and discuss some of these varied responses of matter to the force of gravity, through readings and study projects. The choice of topics will somewhat reflect the interests of the class. Some background in physics (Physics 7A) will be needed, and previous or concurrent exposure to astrophysics (Astronomy 7A and/or 7B) will be helpful. **Please e-mail a couple of paragraphs on your background, why you want to take the class and any preferences you may have on the topics to be covered to the professor (arons@astro.berkeley.edu) before the first day of class.**

I am a professor of theoretical astrophysics and plasma physics in the Astronomy Department and the Physics Department at UC Berkeley. I am also a member of the Theoretical Astrophysics Center. Aside from my professional life as a teacher and researcher in Astrophysics and Plasma Physics, I am deeply involved with playing the 'cello, primarily in chamber music groups.

I was born in Philadelphia, Pennsylvania on August 16, 1943, and lived there for 18 years; I received my B.A. in Physics from Williams College in 1965 and my Ph. D. in Astronomy from Harvard University in 1970. I was a postdoctoral Fellow at the Princeton University Observatory and the Institute for Advanced Study for two years before coming to Berkeley in 1972.

I am fascinated by the physics of compact astrophysical objects, especially neutron stars. I am intrigued by the bizarre behavior of fully ionized plasmas, which mix long-range electromagnetic forces with kinetic particle behavior. I merge these interests by studying the magnetospheres of neutron stars and their interactions with their environs, and their role in the acceleration of the highest energy cosmic rays. I also have interests in the magnetized accretion disks around black holes, whose physics has similarities to that of the outflows from rotation powered pulsars. In a new adventure, I am studying the interactions between stellar magnetic fields and the recently discovered planets around nearby solar type stars.

#### **English 84**

**High Culture, Low Culture: The Coen Brothers and the Arts (1 unit, P/NP)**

**Professor Julia Bader**

**Monday 2:00-5:00, 203 Wheeler, CCN: 28201**

Using film, fiction and cultural events, the course will focus on the work of the Coen brothers and the stories of J. Lahiri to discuss the representation of sexuality, domesticity, and violence.

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.

#### **Mathematics 84**

**Graphs and Probability (1 unit, P/NP)**

**Professor Nicolai Reshetikhin**

**Tuesday 1:00-3:00, 939 Evans, CCN: 54884**

**This class will meet for the first 8 weeks of the semester**

This will be an introduction to graph theory and its application in the theory of Brownian motion on graphs. Some elementary knowledge of probability theory and of linear algebra is advisable. The first half of the seminar will be in a lecture format. Then in the second half we will focus on specific problems and applications. At the end each participant will give a talk on his or her favorite subject.

Some information about Professor Reshetikhin's research, teaching and scientific interests can be found on <http://www.math.berkeley.edu/~reshetik>

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

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

**Professors J. Keith Gilles and Stephen Welter**

**Thursday 5:00-6:00, 1 Foothill, CCN: 61309**

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. **Course enrollment restricted to Global Environmental Theme House participants. Obtain CEC from instructor(s).**

Keith Gilliss is a Professor in the Division of Society & Environment in ESPM. His research interests are in the application of economics and systems analysis to forest resource management problems. Within this broad area, he has worked on issues including econometric forecasting for forest industries, international trade in forest products, analysis of resource-dependent local economies, forestry development, harvest scheduling models, and wildland fire protection planning.

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.

### **Peace and Conflict Studies 84**

#### **Why Are We Here? Great Writing on the Meaning of Life (2 units, P/NP)**

**Professor Michael Nagler**

**Tuesday 2:00-3:30, 54 Barrows, CCN: 66739**

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 of 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 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 *Is There No Other Way: the Search for a Nonviolent Future* and frequently speaks on 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.

### **Comparative Literature 39G**

#### **Systems of Belief: The Ephemeral Body (4 units, LG)**

**Maria Kotzamanidou**

**TuTh 2:00-3:30, 254 Dwinelle, CCN: 17275**

How did Greeks think of the human body and its ephemeral nature? Did they conceive of its corporeal reality the same way Western tradition does, in terms of the antinomies of body and soul, spiritual and material? Using literary and cultural texts, criticism and film, this seminar will examine specific attitudes toward the fragility and transitory nature of the human body in ancient Greek literature and culture and some of their survivals and transformations in modern Greek folk culture and literature. This seminar may be used to satisfy the Philosophy and Values requirement in Letters and Science.

Maria Kotzamanidou received her Ph.D. in Comparative Literature from the University of California, Berkeley. Her areas of specialization in languages and literatures are: Ancient, Medieval and Modern Greek, Spanish and French. She directs the Modern Greek Program in Comparative Literature.

### **Earth and Planetary Science 39A, Section I**

#### **Geological Influences in California Society Today (2 units, LG)**

**Professors Richard Allen, Mark Richards and Harold Helgeson**

**MW 4:00-5:00, 3106 Etcheverry Hall, CCN: 19006**

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.**

Richard Allen is an Assistant Professor in the Department of Earth and Planetary Science. He is a seismologist interested in natural disasters whose research includes the determination and interpretation of earth structure using synthesized seismological techniques, the development of an earthquake alarm system (ElarmS), and assessment of natural hazard mitigation strategies in the US. He has also conducted research into verification of the comprehensive test ban treaty. For more information regarding Professor Allen, visit his faculty website at <http://www.seismo.berkeley.edu/~rallen>.

Mark Richards is a Professor in the Department of Earth and Planetary Science, and currently Dean of Physical Sciences. His research is focused on understanding the dynamics of planetary interiors, especially Earth, Venus, Mars, and the Moon. His research group carries out large-scale computational simulations, performs laboratory fluid dynamics experiments, and synthesizes a wide variety of information on interior dynamics, including the gravity field, seismology, geochemistry, planetary imaging, and field investigations. Professor Richards also enjoys exploring Earth's surface by climbing, skiing, and white-water rafting whenever possible. For more information regarding Professor Richards, please visit his faculty web page on the Earth and Planetary Science website at <http://eps.berkeley.edu/>.

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 at <http://eps.berkeley.edu/>.

**Environmental Economics and Policy 39A**  
**Critical Choices in the Use of Natural Resources (2 units, P/NP)**  
**Professor David Zilberman**  
**Wednesday 12:00-2:00, 2032 Valley Life Science Building, 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.

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.

**Geography 39E, Section I**  
**American Empire (2 units, LG)**  
**Professor Michael Watts**  
**Tuesday 12:00-2:00, 575 McCone Hall (Glacken Seminar Room), CCN: 36483**

In the wake of the attacks of September 11th 2001, the US has assumed an explicitly imperial role in the world, seen most dramatically in the occupation of Iraq. How do we explain the United States' shift from the exercise of its global power through forms of consent to its current phase in which it acts unilaterally and through the exercise of force? Is this shift a measure of strength or weakness? Is it sustainable and at what cost? What sort of imperial project is contemporary American empire and what is its relation to the rise of a particular sort of post-1970 US-dominated political economy (so-called neoliberalism)? What sorts of opposition does American empire confront (and generate), and why is political Islam such a powerful anti-systemic (that is an anti-imperialist) force at this political moment? These are the sorts of questions that will be explored in a seminar devoted to what one might call 'spectacular power in a new age of war.' Key readings—taken from a wide range of US and non-US political and theoretical opinion—will be read and debated each week. Students should come prepared to read carefully, think critically, express their opinions (unashamedly), and occasionally put 'pen to paper.'

**Enrollment is limited to twelve freshmen only.**

Professor Michael Watts has taught at Berkeley for twenty-five years, and has served as the Director of the Institute of International Studies (1994-2004) and is currently the Centre of African Studies, and Chair

of Development Studies. He has an interest in the political economy of development with an interest in West Africa, India, and Vietnam in particular. Professor Watts has published on famine, rural development, the oil industry, Islam and most recently a book on the events of September 11 and thereafter. He is the recipient of several teaching awards, including recently a Guggenheim Fellowship. Professor Watts is married with two children and lives in San Francisco.

### **History 39F**

#### **Classics in American History (4 units, LG)**

**Professor Richard Abrams**

**Tuesday 2:00-5:00, 210 Dwinelle, CCN: 39037**

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

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

### **History 39J**

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

**Professor Susanna Barrows**

**Wednesday 10:00-12:00, 190 Barrows, CCN: 39040**

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 and Social and Behavioral Sciences requirements 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 39K**  
**Medicine in American Society Since 1880 (4 units, LG)**  
**Professor John Lesch**  
**Wednesday 2:00-4:00, 204 Dwinelle, CCN: 39043**

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

Professor Lesch has a long-standing interest in the history of the life sciences and medicine. His publications include works on eighteenth- and nineteenth-century science and medicine, and he is now completing a book on the history of the sulfa drugs, the first medicines effective in the treatment of bacterial infections in humans.

**History 39L, Section 1**  
**Crops, Food, and the History of the Americas (4 units, LG)**  
**Professor Jon Gjerde**  
**Thursday 10:00-12:00, 225 Dwinelle, CCN: 39046**

The premise of this seminar is that the production of food crops has shaped our history and reflected our past in amazing, and often underappreciated, ways. Toward that end, this course will view how changing crops have influenced historical development and the lives of countless humans and how the creation of food from those crops reflects our culture. The course will consist of three parts. First, we will read a series of books that illustrate the role of crops in the historical development of the Americas and Europe. Next we will explore the history of specific crops ranging from sugar to the potato and view how they changed society. Finally, we will view how food has been reflected in our society ranging from ethnic cuisine to fast food. Students will be required to write two essays and will be asked to participate actively in seminar discussion.

Jon Gjerde is a professor in the Department of History. His focus of research is early American history, with particular emphasis on the nineteenth century and the results of the massive immigration to the United States at midcentury.

**History 39M, Section 2**  
**The Mongols and Their Legacy (4 units, LG)**  
**Professor Leslie Peirce**  
**Wednesday 2:00-4:00, 332 Giannini Hall, CCN: 39051**

It is well known that the armies of Ghengis Khan swept across Asia into Europe and the Middle East, creating havoc, destruction, and death. What is less commonly known is that the Mongols created a vast Eurasian empire that facilitated cultural, technological, and ideological exchange among the civilizations they ruled over, especially between China and Iran. In this course, we will explore the nature of the Mongol accomplishment and the persistence of the Mongol legacy long after the empire's collapse. We will also be interested in the range of writings about the Mongols by their contemporaries (including Marco Polo and other European diplomats and merchants), which ran the gamut from demonization to admiration. Films and other visual materials will also play an important role in the class. **Enrollment is limited to fifteen students.**

Professor Peirce teaches in both the History and Near Eastern Studies departments. She is presently writing a book on the premodern Ottoman empire and its peoples that is intended for a general readership. Her interest in the Middle East came from her experience as a Peace Corps volunteer in southeastern Turkey.

**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: 05457**

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, 26 August, and Wednesday, 31 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.**

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)**  
**Director Helen E. Diggs**  
**Thursday 2:00-4:00, 4110 Valley Life Sciences Building, CCN: 43015**

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.

Dr. Helen E. Diggs 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 zoonotic diseases and occupational health.

**Italian Studies 39B**  
**Controversy & Shock in Italian Movies (3 units, LG)**  
**Professor Gavriel Moses**  
**Wednesday 9:00-12:00, 633 I Dwinelle, CCN: 47363**

**The films for this course will be screened on Tuesdays, 5:00-7:00 in I42 Dwinelle**

The focus of this seminar will be a study of Italian Cinema, and its role as the major cultural vehicle through which Italians as a community articulate, debate and (yes) quarrel about the major issues that affect their lives. In this country you may lose a friend over your opinion about a film: in Italy you may lose your job! Since its inception as one of the world's leading film industries, Italian cinema has had an intense interaction with the Italian general public. Far more than just a form of entertainment, cinema in Italy has always been, and remains today, an exchange that reaches beyond escapism and glamour. Thus much can be learned about Italian culture by looking at films Italians hated as well as at the ones they loved. Spectators outside Italy have, over the years, experienced Italian films as pleasant, entertaining, at times innovative and challenging, but on the whole as less than controversial or shocking. In part this is because Italian films exported abroad are but a narrow and selective sampling of what is available in Italy. Italians of all classes and backgrounds, on the other hand, have engaged with the full range of Italian cinema in a spirit of controversy and with reactions of shock that tell us a lot about the lesser known aspects of Italian culture. This course will provide a balanced choice of films (some well known, others almost unknown in this country) meant to be more representative of the Italian experience of movie going.

Professor Moses, whose interests range from early modern Italian Culture to contemporary Film and Literature, teaches in the Italian Studies Department and the Program in Film Studies, in which he also teaches film making. His book on film and the novel, *The Nickel Was for the Movies*, was published by UC Press. He is at work on a new one entitled *The Bible as Cultural Object in Cinema*.

**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: 48017**

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.

### **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 course will be offered from August 30th to September 29th. There are also two evening sessions which will be added towards the end of the class period.**

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 seminar may be used to satisfy the International Studies and Social and Behavioral Sciences requirements in Letters and Science. This course is also listed as South and Southeast Asian Studies 39C (CCN: 83112).

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

### **Physics 39, Section I**

#### **The Meaning Of It All (1.5 units, P/NP)**

**Professor Lawrence Hall**

**Friday 11:00-12:00, 430 Birge, CCN: 70702**

Why are we here? Is there a purpose to life, or is it an accident of physics and chemistry? By reading book excerpts, we will explore a variety of ideas put forward by scientists on such questions: from Bertrand Russell's "Why I am not a Christian" to Polkinghorne's "Belief in God in an Age of Science"; from Dawkin's "Selfish Gene" to Penrose's "Shadows of the Mind - a Search for the Missing Science of Consciousness"; and from Davies' "Search for the Origin and Meaning of Life" to Feynman on "The Meaning of it All." Please see <http://flavor.berkeley.edu/39.html> for more information.

Educated at Oxford and Harvard, Lawrence Hall is a theoretical physicist working on elementary particles and early universe cosmology. He thinks about such questions as: What are the symmetries of nature that underlie the laws of physics? What causes the universe to expand? How can we calculate how much stuff is in the universe?

**Political Science 39A**  
**Truths, Lies, and Politics (2 units, LG)**  
**Professor Norman Jacobson**  
**Wednesday 2:00-4:00, 791 Barrows, CCN: 71867**

To help us get started thinking about what—philosophically, ethically, and politically—will be at stake for us in the seminar:

- A. "By a lie a man throws away and as it were, annihilates his dignity as a man." - Immanuel Kant;  
"Circumstances and life are such that we must all sometimes tell a lie: just as we wear trousers because we don't choose that everybody shall see our nakedness." - D. H. Lawrence;
- B. "...there is no absurdity, however strange it may sound, in that saying of the ancient Father 'I would not tell a willful lie to save the souls of the whole world'." - John Wesley;  
"What harm would it do, if a man told a good strong lie for the sake of the good and for the Christian church...a lie out of necessity, a useful lie, a helpful lie, such lies would not be against God, he would accept them." - Martin Luther;
- C. "While the people retain their virtue, and vigilance, no administration, by any extreme of wickedness or folly, can very seriously injure [them]." - Abraham Lincoln;  
"The great masses of the people...will more easily fall victims to a big lie than to a small one." - Adolf Hitler.

Our theme will be the compatibility of Truth and Politics in three historical periods:

- I. The Ancient World;
  - II. The Renaissance;
  - III. Contemporary Life.
- I. Plato, *Apology and Crito* (in one volume), and *The Republic* (selections); Dostoyevsky, "The Legend of the Grand Inquisitor," in *The Brothers Karamazov*;
- II. Machiavelli, *The Prince and Mandragola*; More, *Utopia* (Book I); Shakespeare, *Richard III*;
- III. Orwell, 1984 Hannah Arendt, "Lying in Politics," in *Crises of the Republic* Albert Camus, *The Stranger*; Milan Kundera, *The Book of Laughter and Forgetting*.

This seminar may be used to satisfy the Social and Behavioral Sciences and Philosophy and Values requirements in Letters and Science.

Norman Jacobson is a Professor of Political Science, Emeritus, UC Berkeley. He taught in the department from 1951-1989. He has been a Consulting Professor at Stanford University from 1995 to the present. He was named California Professor of the Year in 1988. Professor Jacobson earned his Ph.D. from the University of Wisconsin in 1951. His areas of interest include political theory, the history of ideas (European and American), and literature and politics. His current teaching includes American Political Theory, Modern European Theory, Innocence and Politics, and Truth and Politics. He has published on European and American Thought, Renaissance to the present, including Machiavelli, Hobbes, Rousseau, Dostoyevsky, Orwell, Camus, Paine, Thoreau, and Lincoln, and co-produced both film and theater.

His most recent publications are "Escape from Alienation," *Representations*, Fall, 2003; and "'Damn Your Eyes!'," *Thoreau on (Male) Friendship in America*, in D. Batthory and M. Schwartz, Eds., *Friends and Citizens* (2001).

**Political Science 39B**  
**Problems in East Asian Politics (2 units, P/NP)**  
**Professor Lowell Dittmer**  
**Monday 5:00-7:00, Room B4, Unit III, CCN: 71868**

This seminar is designed to introduce beginning students to some of the leading problems in Asia. We begin with a broad survey that attempts to generalize about some of the basic political and cultural characteristics of this vast and diverse subcontinent. We then attempt to focus on one basic problem and three empirical cases. The basic problem is that of the frustration of national identity despite bitter, long-standing struggle to resolve the issue. The three cases are those of China vis-a-vis Taiwan, North/South Korea, and the Indo-Pakistani standoff over Kashmir. These three situations not only are cases of

unresolved national identity crisis but also have become consistent regional sources of tension that threaten to trigger a crisis (perhaps nuclear) involving many other countries, perhaps including our own. As this is a seminar rather than a large lecture class, grades will be based on class discussions of presentations plus several short papers rather than the passive absorption of lectures and regurgitation in exams. Course meetings will be chronologically divided into segments to discuss each of a series of issue areas. Students will sort themselves into teams to organize presentations on each issue area, each student being expected to participate in at least one of these teams. The team will assign (by e-mail) specific readings to the rest of the class for each week's discussion. Aside from participation in these team presentations, each student will be required in the course of the semester to write four brief (three-to-four-page) essays: one on the Korean problem, one on the China-Taiwan problem, one on the Kashmir problem, and finally an essay comparing these three problem cases and their possible solutions. There will also be occasional guest lectures and films illustrating course topics. **If this course was taken previously as PS 24, it may not be taken again for credit.** This seminar may be used to satisfy the International Studies and Social and Behavioral Sciences requirements in Letters and Science.

Professor Dittmer received his Ph.D. from The University of Chicago in 1971. His scholarly expertise is the study of contemporary China. He teaches courses on contemporary China, Northeast Asia, and the Pacific Rim. His current research interests include a study of the impact of reform on Chinese Communist authority, a survey of patterns of informal politics in East Asia, and a project on the China-Taiwan-US triangle in the context of East Asian regional politics. Professor Dittmer's recently published books and monographs include *Sino-Soviet Normalization and Its International Implications* (University of Washington Press, 1992), *China's Quest for National Identity* (with Samuel Kim, Cornell University Press, 1993), *China Under Modernization* (Westview Press, 1994), and *South Asia's Nuclear Crisis* (M.E. Sharpe, 2005).

**Political Science 41, Section I**  
**U.S. Politics (4 units, LG)**  
**Professor Nelson Polsby**  
**Monday 10:00-12:00, 119 Moses Hall, CCN: 71874**

This seminar is a basic introduction to American Politics with emphasis on what is on top of the news. Topics to be discussed include the organization of Congress, implications for Supreme Court appointments and Congressional-Presidential relations especially. **Enrollment is limited to freshmen only.** This seminar may be used to satisfy the Historical Studies and Social and Behavioral Sciences requirements in Letters and Science.

Nelson W. Polsby is Heller Professor of Political Science at the University of California, Berkeley where he has taught American politics and government since 1967. He was educated at Johns Hopkins (B.A.) and Brown and Yale (M.A., Ph.D.), and has taught at Wisconsin and Wesleyan as well as at Harvard, Columbia, Yale, the London School of Economics, Oxford and Stanford on a visiting basis. From 1988-99 he was Director of the Institute of Governmental Studies at Berkeley. He is currently a Vice President of the Political Studies Association of the United Kingdom and is a member of the Academic Advisory Board of the American Enterprise Institute of Washington, D.C. He served on the Yale University Council, 1978-2000 (President, 1986-1993). He has held Guggenheim Fellowships twice, fellowships at the Center for Advanced Study in the Behavioral Sciences twice, and a Brookings Fellowship, among other honors, and is a member of the Council on Foreign Relations and a Fellow of the American Academy of Arts and Sciences, the American Association for the Advancement of Science, and the National Academy of Public Administration. He holds the Wilbur Cross Medal and the Yale Medal of Yale University, an Honorary Litt.D. from the University of Liverpool, an M.A. from Oxford University, and a Docteur Honoris Causa from the Ecole Normale Supérieure de Cachan. Professor Polsby is editor of the *Annual Review of Political Science*, political science editor of *The International Encyclopedia of the Social and Behavioral Sciences*, a former managing editor of the *American Political Science Review*, and currently serves on the editorial boards of five scholarly journals. His books include *How Congress Evolves* (2004), *Presidential Elections* (with Aaron Wildavsky, 11th ed., 2004), *Congress and the Presidency* (4th ed., 1986), *Political Innovation in America* (1984), *Consequences of Party Reform* (1983), *Community Power and Political*

Theory (2nd ed., 1980), Political Promises (1974), British Government and its Discontents (with Geoffrey Smith, 1981), New Federalist Papers (with Alan Brinkley and Kathleen Sullivan, 1997), and as editor, with Gary R. Orren, Media and Momentum (1987), with R.L. Peabody, New Perspectives on the U.S. House of Representatives (4th ed., 1992), and, with Fred I. Greenstein, the eight volume Handbook of Political Science (1975) among other works.

### **Public Health 39E**

#### **The Medical Detectives (2 units, P/NP)**

**Professor Arthur Reingold**

**Monday 10:00-12:00, 2304 Tolman, CCN: 75844**

Have you read newspaper stories about SARS or the bird flu in Hong Kong or Ebola virus in Africa or the fast food restaurant hamburgers that gave hundreds of people E. coli 0157 food poisoning in the Pacific Northwest? Have you wondered who investigated these public health problems and how they did it? In this course, you will learn who these medical detectives are and the ins and outs of how they solve these real-life mysteries.

Professor Arthur Reingold is a licensed physician who has devoted the past twenty years to studying infectious diseases and how to prevent them. He worked at the Federal Centers for Disease Control and Prevention in Atlanta for eight years before joining the faculty at UC Berkeley and UCSF in 1987. He has been involved in investigations of Legionnaires' Disease, toxic shock syndrome, epidemic meningitis in Africa and Nepal, and numerous other infectious diseases in the United States and in various countries in Latin America, Africa, and Asia.

### **Public Health 39F, Section I**

#### **Eating and Health Disorders (2 units, P/NP)**

**Professor Zak Sabry**

**Wednesday 2:00-4:00, 104 GPB, CCN: 75845**

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.**

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 12:00-2:00, 7415 Dwinelle, CCN: 77866**

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*. 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](http://rhetoric.berkeley.edu/faculty_bios/daniel_melia.html)

**Slavic Languages and Literatures 39J**  
**Love Among the Russians (2 units, P/NP)**  
**Professor Hugh McLean**  
**MW 2:00-3:00, 259 Dwinelle, CCN: 79845**

This seminar will be devoted to study and discussion of treatments of the love theme by a series of great Russian writers: Pushkin, Gogol, Turgenev, Dostoevsky, Tolstoy, and Chekhov. Readings will be mostly short stories, not long novels. There will be one term paper and no exam. All readings and discussion will be in English, although students who know Russian are encouraged to read in the original.

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

**Social Welfare 39A**  
**Social Problems Through Literature (2 units, P/NP)**  
**Professor Henry Miller**  
**Wednesday 10:00-12:00, 4 Haviland, 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 like Dostoyevsky, Steinbeck, and Kafka. This term the seminar will focus primarily on the very serious problem of crime and penology.

**Enrollment is restricted to freshmen only.**

Professor Henry Miller has taught on the UC Berkeley campus since 1962. His research interests have included the problems of disaffected youth, substance abuse, homelessness, and vagrancy. He has written extensively in those fields. His latest book is *On the Fringe: The Dispossessed in America*.

**Social Welfare 39B, Section 2**  
**Propaganda in the Helping Professions (2 units, P/NP)**  
**Professor Eileen Gambrill**  
**Wednesday 10:00-12:00, 201 Haviland Hall, CCN: 80708**

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

This seminar is for students who are interested in learning about the varieties and consequences of propaganda in the helping professions. Propaganda is defined à la Ellul (1965) as encouraging beliefs and actions with the least thought possible. Propaganda, and its reflections in fads and pseudo-science in the helping professions such as social work, psychiatry and psychology, has become so pronounced that there



are now backlashes against it. For example some medical schools offer courses designed to help students to resist the influence of propaganda pitches by pharmaceutical companies. The course will include a brief historical overview of propaganda. Students will have an opportunity to apply class content regarding propaganda to current controversies to the helping professions. **This seminar is part of the Food for Thought Seminar Series. Enrollment is limited to twenty students.**

Eileen Gambrill is the Hutto Patterson Professor of Child and Family studies in the School of Social Welfare. Her areas of interests include professional decision making, professional education, and ethical issues in the helping professions. Recent books include *Critical Thinking in Clinical Practice* (in press) second edition (Wiley), and *Controversial Issues in Social Work Ethics, Values and Obligations* (Sage). She is a licensed psychologist in the state of California.

### **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 course will be offered from August 30th to September 29th. There are also two evening sessions which will be added towards the end of the class period.**

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 seminar may be used to satisfy the International Studies and Social and Behavioral Sciences requirements in Letters and Science. This course is also listed as Optometry 39B (CCN: 65503).

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

### **South and Southeast Asian Studies 39G**

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

**Lecturer Kausalya Hart**

**Friday 8:00-10:00, 242 Dwinelle, 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 requirement in Letters and Science.

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