



**SPRING 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

## **Letters and Science College Courses**

Do you want to study fields beyond your intended major, to become more intellectually well rounded? Are you looking for a course designed specifically for non-majors? Do you find that the Letters and Science breadth list is a start, but it doesn't give you much direction? How can you tell which breadth courses will meet you at your level and then challenge and motivate you to go deeper? The Deans of the College want to help! They have inspired and supported the faculty to create a new cluster of courses called the Letters and Science College Courses. These courses have been designed to foster the ideals of a liberal arts education at the highest level of excellence. They are taught by some of the most outstanding teachers on the faculty, for students who are eager to take an intellectual risk. If you are interested in exploring a new area of interest at a deeper level than is required or offered by the usual introductory course, we encourage you to check out the College Course website: <http://CollegeCourses.berkeley.edu>.

This document was last updated on January 26, 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.

**Aerospace Studies 24, Section I**  
**Foundations of the United States Air Force (1 unit, LG)**  
**Professor Vincent Lau**  
**Wednesday 5:00-6:00, 174 Barrows Hall, CCN: 57309**

This seminar is designed to introduce cadets to the United States Air Force and Air Force Reserve Officer Training Corps (AFROTC) program. Featured topics include the mission and organization of the Air Force, officership and professionalism, military customs and courtesies, Air Force officer opportunities, and an introduction to communication skills.

The instructor is Captain Vincent Lau, a Communications Officer in the United States Air Force. He received a Bachelors degree in Mathematics from the University of California at Berkeley and a Masters in Computer Information Systems from the University of Phoenix.

**Anthropology 24, Section I**  
**Native Maya and Aztec Literature from the Sixteenth Century (1 unit, P/NP)**  
**Professor Rosemary Joyce**  
**Thursday 2:00-3:00, 225 I College Avenue, Room 101, CCN: 02530**

This course will provide an opportunity for interested students to read poetry, mythology, and history written in native languages by Maya and Aztec authors in the sixteenth century. Using the Roman alphabet introduced by the Spanish, Maya and Aztec scribes recorded their own rich oral tradition, and created new compositions that integrated native texts and oral literature in written form. While some of these texts were recorded for Spanish administrators and missionaries, much was written for indigenous audiences. We will draw on the many excellent modern translations to explore the poetics and literary imagination of the first few generations of Maya and Aztec people living under the new colonial regime.

Rosemary Joyce (PhD University of Illinois, Urbana-Champaign), Professor of Anthropology, joined the Berkeley faculty in 1994. She was previously affiliated with the Department of Anthropology and Peabody Museum at Harvard University. She has conducted archaeological fieldwork in Honduras since 1977, and is currently Co-Director of the Proyecto Arqueológico Valle Inferior del Río Ulúa. Her excavations at Puerto Escondido, Honduras, have produced evidence for settled village life almost 1000 years earlier than previously documented in the region. She is widely known for contributions to the archaeology of gender, sexuality and embodiment, based on visual culture of precolumbian Central America. Her most recent books are "Embodied Lives: Figuring Ancient Egypt and the Classic Maya" (Routledge, 2003) and "The Languages of Archaeology" (Blackwell, 2002). Previous books include "Gender and Power in Prehispanic Mesoamerica" (University of Texas Press, 2001), "Encounters with the Americas" (with Susan A. M. Shumaker, Peabody Museum Press 1995), and "Cerro Palenque: Power and Identity on the Maya Periphery" (University of Texas Press 1991). She is the co-editor of "Mesoamerican Archaeology: Theory and Practice" (with Julia A. Hendon; Blackwell 2004), "Beyond Kinship: Social and Material Reproduction in House Societies" (with Susan D. Gillespie; University of Pennsylvania Press, 2000), "Social Patterns in Pre-Classic Mesoamerica" (with David C. Grove; Dumbarton Oaks 1999), and "Women in Prehistory: North American and Mesoamerica" (with Cheryl Claassen; University of Pennsylvania Press 1997).

**Architecture 24, Section I**

**Rethinking Culture, Body and Design (1 unit, P/NP)**  
**Professor Galen Cranz**  
**Wednesday 4:00-5:00, 104 Wurster Hall, CCN: 03702**

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

Have you ever thought about why you sit on chairs to do things? Why do other cultures sit on the floor or in other ways? In college you will be studying a lot and there may be discomfiting consequences for your body. In this short course we will examine the social history of chairs, what's wrong with them, and what you can do about it. Intellectually, students will learn critical evaluation of their surrounding environments. Practically, students will receive personal attention to design a body-friendly strategy for reading and computing that will get you through university life in one piece. The text is Cranz, *The Chair: Rethinking Culture, Body and Design*. **This seminar is part of the Food for Thought Seminar Series.**

Galen Cranz is a Professor of Architecture, a sociologist by training, and a certified teacher of the Alexander Technique. She brought these three perspectives together in her quietly radical book *The Chair: Rethinking Culture, Body and Design*. She teaches social and cultural approaches to architecture and urban design. Her other research includes parks, sustainability, and housing for the elderly, and her current research is about how taste is used in interior design and other places.

**Architecture 24, Section 2**  
**Sites of Opportunity in the Public Realm (1 unit, P/NP)**  
**Professor Renee Y. Chow**  
**Tuesday 2:00-4:00, 501A Wurster Hall, CCN: 04069**

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

Architects and planners often refer to human settlements as a fabric—a complex weaving of natural and man-made systems. Every fabric has a warp and weft: the warp provides the general character of the fabric and the weft is woven between to interpret and intensify. The public realm is like the warp of a fabric in that it structures our urban and suburban environments through paths, plazas, landmarks, boundaries and the textures of neighborhoods. The weft is the private realm that is informed by and forms the public realm. In both our cities and suburbs, the public realm is shrinking and becoming more separated from the private realm. This seminar will explore this phenomenon, looking at case studies drawn from the U.S. and through field studies in Berkeley and San Francisco. What is happening to our public spaces? Why is this happening? How does this affect us as both residents and visitors of places? We will then turn our attention to discussing ways in which public realm can be reinforced and the actors and resources required to affect change. We will identify continuous and discontinuous experiences in cities, find the interstitial spaces that are emerging in our built fabrics, and seek potential sites to reclaim as part of the public realm. **Students will need their walking shoes for three classes.**

Renee Chow is an Associate Professor of Architecture and teaches undergraduate and graduate design studios as well as classes in design with emphasis on observation, methods and use. Her research focuses on the contemporary suburban condition and on alternatives based upon a view of dwelling as a fabric—as a continuous structure of interrelated spaces in which people reside and through which they move and look. Her publications describe the form of housing in relation to the diverse and temporal nature of dwelling, to ways of building shared environments, and to the production of housing. Renee is Principal of Studio URBIS. The projects of the office include commercial, institutional and residential projects. Her books include *Suburban Space: The Fabric of Dwelling*.

**Architecture 24, Section 3**  
**Berkeley Houses (1 unit, P/NP)**  
**Professor Kathleen James-Chakraborty**  
**Wednesday 2:00-4:00, 360 Wurster Hall, CCN: 04072**

**This seminar will meet for eight weeks: January 19, February 2, February 16, March 2, March 16, March 30, April 13, and April 27, 2005.**

This course will introduce students to the principle characteristics of twentieth-century architecture by looking at Berkeley's rich array of houses. It will consist largely of walking tours, and we will also visit the interiors of several houses. Important architects who practiced in Berkeley whose work we shall consider include Bernard Maybeck, Julia Morgan, John Galen Howard, William Wurster, John Dinwiddie, Donald Olsen, and Stanley Saitowitz. We will also visit the Environmental Design Archives to see the original drawings for many of these buildings, and read excerpts from the oral history project's interviews with them. **This seminar is a series of field trips. Students will gather each week in front of the instructor's office in 360 Wurster Hall.**

Kathleen James-Chakraborty is an Associate Professor in the Department of Architecture. An architectural historian, she has written widely on modern architecture in Germany and the United States.

### **Astronomy 24, Section I**

**Black Holes: the Science Behind the Science Fiction (I unit, P/NP)**

**Professor Eliot Quataert**

**Monday 4:00-5:00 , 501 Campbell Hall, CCN: 06886**

Black holes are one of the most remarkable predictions of General Relativity, Albert Einstein's theory of Gravity: so much mass is compressed into such a small volume that nothing, not even light, can escape. Black holes have also captured the public imagination, and are commonly featured in popular culture, from Star Trek to Hollywood movies. In this seminar we will demystify black holes. We will learn what they are and (just as importantly!) what they are not. We will find out how black holes are actually discovered in nature and how they are responsible for some of the most dramatic phenomena observed in the universe. The seminar will center on reading popular-level (but scientifically accurate) books/articles about black holes. **All interested students are welcome. The seminar will be non-technical!**

Eliot Quataert is an Assistant Professor in the Astronomy Department. He works on a variety of problems, including black holes.

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

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

**Professor David B. Graves**

**Thursday 4:00-5:00, 65 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.

### **Chemical Engineering 24, Section 2**

**The Hydrogen Economy: "Bush League" Science? (I unit, P/NP)**

**Professor Jeffrey Reimer**

**Monday 4:00-5:00, 72 Evans Hall, CCN: 10406**

Considerable attention has been focused recently on the development and use of hydrogen as the primary fuel for our energy economy. This attention has its lure: hydrogen as H<sub>2</sub> is a simple chemical, is based on the most abundant element in the Universe, and is readily available as water all over the planet. Generation, transportation, storage, and use of H<sub>2</sub> are fraught with problems, and scientists and engineers around the planet are scoffing at the whole notion. How quickly can we make a hydrogen economy happen? Join this seminar and engage in a series of readings and discussions about our energy budget, the problem with carbon, and the myriad of technical challenges that, according to some, condemn the hydrogen economy to forevermore be a dream of the future.

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

**Chemical Engineering 24, Section 3**  
**What Do Chemical Engineers Do? (1 unit, P/NP)**  
**Professor Arup Chakraborty**  
**Monday 3:00-4:00, 72 Evans Hall, CCN: 10409**

The discipline of chemical engineering has contributed, and continues to contribute, significantly to developing essential products. We will discuss case studies describing how chemical engineers in academia, industry, and government contribute to the development of products and knowledge that improve the human condition.

Arup K. Chakraborty is a Warren and Katharine Schlinger Distinguished Professor, Chair of Chemical Engineering and Professor of Chemistry. His biography, research interests and publications are available on his faculty website at <http://cheme.berkeley.edu/people/faculty/chakraborty/chakraborty.html>.

**Chinese 24, Section I**  
**Early Chinese Thought (1 unit, P/NP)**  
**Professor Jeffrey Riegel**  
**Wednesday 10:00-12:00, 102A Durant Hall, CCN: 20681**

**This seminar will meet for eight weeks, beginning January 26, 2005 and ending March 16, 2005.**

This seminar will explore the early history of Chinese philosophy during its classic period: the late Spring and Autumn and Warring States eras (7th century to 3rd century B.C.E.). We will concentrate on the classic books that represent the major schools of thought. These will include the Analects of Confucius, the utilitarian and pragmatic Mozi, the Daoist Zhuangzi, the Legalist Hanfeizi, and the syncretic Lüshi chunqiu. Each of our two-hour meetings will be devoted to one of these seminal works. We will draw from this and other material in our discussions of the early Chinese conceptions of ethics, sexuality, politics, self-cultivation, desire, and aesthetics. All readings will be English translations (and will be available online at the Blackboard course website.)

Professor Jeffrey Riegel specializes in ancient Chinese literature and thought. He teaches Asian Studies 10A "Traditional Asian 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 Lüshi chunqiu and he is currently completing a translation of the Mozi.

**Civil and Environmental Engineering 24, Section I**  
**Sustainable Energy Sources: Solar, Biomass, and... Conservation (1 unit, P/NP)**  
**Professor Tad W. Patzek**  
**Thursday 2:00-3:00, 31 Evans Hall, CCN: 13903**

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. 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, we will move on to solar energy. In the second part, we will study the inherent strengths and limitations of solar energy and its weaker derivatives: biomass and wind. We will try to arrive at practical scenarios of a widespread use of these energy sources. We will spend some time talking about the forgotten benefits of energy conservation. In the third part, we will put our knowledge together into a joint report/science paper, and continue to debug our thinking.

Tad W. Patzek is a Professor of GeoEngineering at the Department of Civil and Environmental Engineering at UC Berkeley. In his life before Berkeley, Professor Patzek was a senior researcher and reservoir engineer at Shell Development in Houston, Texas; 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 and Ph.D. degrees in Chemical Engineering from the Silesian Technical University, Gliwice, Poland. As a graduate student, Professor 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, Jülich, Germany. He teaches courses in mathematical modeling of flow phenomena in permeable rocks at micro-scale (E240) and macroscale (E241). He also teaches an introductory course in computing and computer science for engineers and scientists (E77N). Professor Patzek's research combines analytical and numerical modeling of earth flow systems with measurement, parameter estimation and control of these systems.

**Classics 24, Section I**  
**Concepts and Practices of Citizenship: Athens, Rome, France, US (1 unit, P/NP)**  
**Professors Kathleen McCarthy and Susan Maslan**  
**Wednesday 3:00-4:00, 262 Dwinelle Hall, CCN: 14727**

The concept of citizenship—the rights and duties it confers, the relationship to the state and other citizens it assumes—has varied widely in different societies. In this seminar, we will try to gain a broader perspective in which to think about contemporary US citizenship by juxtaposing it to the forms of citizenship dominant in three other key societies/periods in Western history: democratic Athens, Rome under the Republic, and Enlightenment/revolutionary France. How did politicians, philosophers, and rebels living in radically different societies and under different historical conditions conceive of citizenship? How did different forms and practices of citizenship create different relations among citizens (and non-citizens) as well as different relations to the state? What did people think they owed their country and what did their country owe them? These have long been central and difficult questions. We will address them through readings in philosophy, literature, political theory, and political speeches and tracts. This course is also listed as French 24, Section I (CCN: 35714).

Kathleen McCarthy is an Associate Professor of Classics and Comparative Literature. Her special interests are Roman literature and culture, and slavery. She published *Slaves, Masters, and the Art of Authority in Plautine Comedy* and has taught seminars on Plautus, Latin love elegy, literature and slavery, the social life of Latin poetry, and survey of Latin literature.

Susan Maslan is an Associate Professor of French. She works on early modern French literary and political history and is currently at work on a book-length project called "The Literary Invention of Human Rights in France, 1640-1795." Recent publications include: *Revolutionary Acts: Theater, Democracy, and the French Revolution* (Forthcoming, Johns Hopkins University Press); "The Antihuman: Man and Citizen before the Declaration of the Rights of Man," (SAQ: South Atlantic Quarterly); "Susannah at her Bath: Surveillance and Revolutionary Drama"

Eighteenth-Century Studies (2001); "La féminité juive et le problème de la représentation dramatique" Papers on 17th Century French Literature (1999); "Resisting Representation: Theater and Democracy in Revolutionary France" Representations (1995).

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

#### **Ancient Greek Myth in the Modern World: Antigone—Terrorist or Freedom Fighter? (1 unit, P/NP)**

**Professor Anthony Bulloch**

**Wednesday 1:00-2:00, 206 Dwinelle Hall, CCN: 14729**

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

What happens when individual and state collide? In this seminar we will study the moral and social issues through the archetypal ancient Greek figure of Antigone. Texts will include Sophocles' Antigone, Anouilh's Antigone, Fugard's The Island and Böll's movie Deutschland im Herbst. No previous experience or knowledge of Greek Mythology or these texts required. **This seminar is part of the Food for Thought Seminar Series.**

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.

### **Earth and Planetary Sciences 24, Section 1**

#### **The Pompeii Files: Geological Disasters in Human History (1 unit, LG)**

**Professor Walter Alvarez**

**Monday 3:00-4:00, 55A McCone Hall, CCN: 19057**

A recent historical novel, Pompeii, describes the volcanic destruction and burial of this Roman city in 79 A.D. Using the novel as a starting point, we will explore the city of Pompeii as a remarkably preserved example of Roman culture, and investigate volcanoes, earthquakes, comet impacts, and other natural hazards that threatened civilization then and still do today. Parental warning: this seminar deals with extreme natural violence. **This seminar is intended for freshmen who have taken, or are concurrently taking, a course in at least one of the following departments: Earth and Planetary Science, Physics, Chemistry, or Mathematics.**

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

### **English 24, Section 1**

#### **Representing Psychiatric Disability (1 unit, P/NP)**

**Professor Susan Schweik and Dr. Aaron Cohen**

**Monday 12:00-1:00, 220 Wheeler Hall, CCN: 28490**

In this seminar, we will view films and read works of fiction that deal with various issues related to psychiatric disability (including questions of the social construction of mental illness, diagnosis, treatment, accommodation, ADA court cases, and the idea of survivorship). Along with your two co-teachers, you will examine these issues from both clinical and humanities perspectives.

Susan Schweik is an Associate Professor of English. Her general research interests include twentieth-century poetry and American poetry. Her special research topics include disability studies, literature and politics, cultural studies, feminist theory, and war literature.



Dr. Aaron Cohen is a Disabilities Specialist with the Disability Studies Program at UC Berkeley and a psychologist who works with Berkeley Mobile Crisis Unit.

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

#### **Pleasure, Politics, and Public Fantasy in Bollywood Cinema (1 unit, P/NP)**

**Professor Priya Joshi**

**Monday 4:00-5:00, 300 Wheeler Hall, CCN: 28493**

**Students will be expected to attend weekly film screenings on Wednesdays 4:00-7:30 p.m. in 300 Wheeler Hall, though they will officially enroll only in the seminar portion of the class that meets on Mondays.**

Every day, over twelve million people go to the movies in India. Seated on planks of wood and on the floor, in air-conditioned movie palaces and open maidans, the world's most avid cinema-goer watches the hundreds of films that roll out of the world's most prolific film industry. Our class will examine the pleasures of this cinema that has often been dismissed for being saccharine, melodramatic, and escapist. We will be watching a cluster of Hindi films made in Bombay (or Bollywood, as it is often called) from the 1950s, 1970s, and 1990s and will spend time in class discussing them. We will pay particular attention during our discussions to the manner in which these films embody public fantasies—those of gender and masculinity, religion and nation, sexuality and the state, family and friends—in an effort to examine how Bombay's blockbusters have dealt with India's preoccupation with its emerging modernity. The film list includes *Awara* (1951), *Shree 420* (1955), *Mother India* (1957), *Pyasa* (1957), *Deewar* (1973), *Sholay* (1975), *Amar, Akbar, Anthony* (1977), *Bombay* (1995), *Dilwale Dulhania le Jayenge* (1995), *Hey Ram* (2000), and *Fiza* (2000). All films are subtitled and no prior experience of India or knowledge of Hindi is required, though it will, of course, be greatly welcomed. Course requirements include regular attendance and participation in discussions and the weekly film screenings. There will be no additional outside-of-class work required, nor any required texts.

Priya Joshi (Ph.D. Columbia, 1995) teaches in the Department of English at UC Berkeley. Joshi's fields of interest include nineteenth- and twentieth-century literature of empire, narrative and postcolonial theory, the sociology of literature, book history, and Bollywood film. She is the author of a prize-winning monograph on the novel and imperialism entitled *In Another Country: Colonialism, Culture, and the English Novel in India*. Professor Joshi is currently working on another book-length project on popular Hindi film and the fabrication of national identities in postcolonial India. The volume is something of a sequel to *In Another Country* in its exploration of popular forms, public cultures, and postcolonial modernities in South Asia.

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

#### **Shakespeare's Sonnets (1 unit, P/NP)**

**Professor Alan Nelson**

**Wednesday 12:00-1:00, 201 Wheeler Hall, CCN: 28496**

Shakespeare's sonnets were published in 1609. Although little is known about how they were first received by the reading public, they have caused delight and puzzlement since their second edition in 1640. Over the course of the semester, we will read all 154 sonnets, at the rate of approximately ten per week. Students will be expected to participate actively in the seminar, and submit a final paper on one or more sonnets of their choice.

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

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

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

**Professor Mitchell Breitwieser**

**Tuesday 2:00-3:00, 225 Wheeler Hall, CCN: 28498**

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  
African Cities and the Environment (1 unit, P/NP)**

**Professor Louise Fortmann**

**Tuesday 9:00-10:30, 103 Mulford Hall, CCN: 30432**

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

We will read newspapers, scholarly articles, and fiction by African authors, and view videos that provide insight into African cities and their interaction with the environment over time.

Louise Fortmann is a rural sociologist who studies gender, poverty, property, and community management of natural resources. She has lived and worked in Botswana, Kenya, Tanzania and Zimbabwe.

**Environmental Science, Policy, and Management 24, Section 2  
Biotechnology: Ethics and Politics (1 unit, P/NP)**

**Professor David Winickoff**

**Wednesday 9:00-10:30, 103 Mulford Hall, CCN: 30433**

**This seminar will meet for ten weeks, beginning Wednesday, January 26, 2005.**

This course focuses on the relationship between biotechnology and society. Do people govern biotechnology, or does biotechnology govern us? What are the roles of market, state, and individual in creating the biotechnological future? What does genetic manipulation, cloning, and genetically modified food mean for concepts of nature and the human? Exploring a diverse array of sources—from Mary Shelley's *Frankenstein* to Supreme Court cases to the front page of the *New York Times*—the course will challenge students to interpret the ethical and political discourse around the biological sciences, and to develop reasoned positions of their own. Students should read Mary Shelly's *Frankenstein*, Norton edition, before the first class meeting.

Professor Winickoff's research centers on the interaction of science, norms, and political structure in the governance of human health and the environment, with a particular focus on biotechnology and the law. He taught at Harvard's Kennedy School of Government before joining the faculty at Berkeley in July 2004. He holds degrees from Harvard Law School, Cambridge University (U.K.), and Yale.

**Environmental Science, Policy, and Management 24, Section 3  
Issues in Natural Resource Conservation (1 unit, P/NP)**

**Professor David Wood**

**Friday 9:00-10:00, 106 Mulford Hall, CCN: 30436**

**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.

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

#### **Concepts and Practices of Citizenship: Athens, Rome, France, US (1 unit, P/NP)**

**Professors Susan Maslan and Kathleen McCarthy**

**Wednesday 3:00-4:00, 262 Dwinelle Hall, CCN: 35714**

The concept of citizenship—the rights and duties it confers, the relationship to the state and other citizens it assumes—has varied widely in different societies. In this seminar, we will try to gain a broader perspective in which to think about contemporary US citizenship by juxtaposing it to the forms of citizenship dominant in three other key societies/periods in Western history: democratic Athens, Rome under the Republic, and Enlightenment/revolutionary France. How did politicians, philosophers, and rebels in radically different societies and living under different historical conditions, conceive of citizenship? How did different forms and practices of citizenship create different relations among citizens (and non-citizens) as well as different relations to the state? What did people think they owed their country and what did their country owe them? These have long been central and difficult questions. We will address them through readings in philosophy, literature, political theory, and political speeches and tracts. This course is also listed as Classics 24, Section I (CCN: 14727).

Susan Maslan is an Associate Professor of French. She works on early modern French literary and political history and is currently at work on a book-length project called "The Literary Invention of Human Rights in France, 1640-1795." Recent publications include: *Revolutionary Acts: Theater, Democracy, and the French Revolution* (Forthcoming, Johns Hopkins University Press); "The Antihuman: Man and Citizen before the Declaration of the Rights of Man," (SAQ: South Atlantic Quarterly); "Susannah at her Bath: Surveillance and Revolutionary Drama" *Eighteenth-Century Studies* (2001); "La fémininité juive et le problème de la représentation dramatique" *Papers on 17th Century French Literature* (1999); "Resisting Representation: Theater and Democracy in Revolutionary France" *Representations* (1995).

Kathleen McCarthy is an Associate Professor of Classics and Comparative Literature. Her special interests are Roman literature and culture, and slavery. She published *Slaves, Masters, and the Art of Authority in Plautine Comedy* and has taught seminars on Plautus, Latin love elegy, literature and slavery, the social life of Latin poetry, and survey of Latin literature.

### **French 24, Section 2**

#### **Sex and the City: Passions and Fortunes in Nineteenth-century Paris (1 unit, P/NP)**

**Professor Debarati Sanyal**

**Wednesday 2:00-3:00, 123 Dwinelle Hall, CCN: 35716**

We will read a selection of short nineteenth-century French classics (in translation) set in Paris, with a focus on how love and desire for people and for things defines the passage into worldliness in the modern city. Themes include idealism and disillusionment, urban spectacle and consumer culture, shopping, fashion, prostitution, flânerie, a woman's place in modern life. We will also discuss aesthetic movements such as orientalism, romanticism, realism, naturalism, and decadence. Works by Balzac, Baudelaire, Zola, Maupassant, Barbey d'Aurevilly, and Villiers de l'Isle Adam will be reviewed.

Professor Sanyal's teaching and research interests include nineteenth- and twentieth-century French literature; theories of modernism and modernity; questions of trauma, testimony, literary form and commitment; Holocaust studies; and Baudelaire studies. She has completed a manuscript titled *The Violence of Modernity: Irony and Politics After Baudelaire*, and is currently working on a project called *Dangerous Intersections: Crisis and Complicity in Postwar France*.

### **German 24, Section I**

#### **Friedrich Nietzsche's *On the Genealogy of Morals* (1 unit, P/NP)**

**Professor Robert Holub**

**Tuesday 4:00-5:00, 289 Dwinelle Hall, CCN: 37484**

Where does morality come from? Or, more specifically, where does the morality associated with the Judeo-Christian heritage come from? What is the origin of our notions of "good" and "evil"? What is the relationship between punishment and guilt? How do we account for conscience and bad conscience? What are ascetic values and how do they manifest themselves in modern society? These questions are the driving force behind Friedrich Nietzsche's *On the Genealogy of Morals*. Written in 1887 as a clarification and supplement to his previous book, *Beyond Good and Evil* (1886), the *Genealogy* consists of three essays with closely related themes. In contrast to most of Nietzsche's writings, which consist of aphorisms, the *Genealogy* contains a cohesive argument that carries over many pages. We will be reading and discussing this seminal work of Nietzschean philosophy in one-hour sessions, focusing on both Nietzsche's meaning and the plausibility of his arguments. Students will be expected to read the assigned passages carefully and to contribute to discussions; there may be occasional additional assignments. A grade of pass (P) will be given to all students who participate regularly in the course and who demonstrate adequate preparation and grasp of the material. There will be one, short final written assignment due at the end of the seminar.

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

### **History 24, Section I**

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

**Professor Tabitha Kanogo**

**Tuesday 10:00-12:00, 123 Dwinelle Hall, CCN: 39088**

**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**

#### **Latin American Popular Culture through Historical Eyes (1 unit, P/NP)**

**Professor Linda Lewin**

**Wednesday 2:00-4:00, 2303 Dwinelle Hall, CCN: 39091**

**This seminar will meet for eight weeks, beginning January 19, 2005 and ending March 9, 2005.**

Focusing mostly on the nineteenth and twentieth centuries, this seminar will investigate the history underlying a number of examples of popular culture in Latin America that are drawn mostly from Mexico, Cuba, Argentina, and Brazil: corridos (poetry), rhumba and tango (dance and song), "sacred and profane" festivals (the Day of the Dead and Carnival), TV novelas, woodcuts, and desafios (poetic duels). We will learn to appreciate that popular culture is not fixed, but evolves over time, offering a unique window for studying the broader sweep of national history. Readings devoted to the above examples will be articles and book chapters, but we will also listen to music, see films and slides, and read short poetic texts in English translations in class, for a firsthand experience of what Latin American popular culture really means.

Professor Lewin received her Ph.D. in history from Columbia University and has taught Latin American history at UC Berkeley since 1982. She is currently writing a book about two famous nineteenth-century popular poets in the backlands of the Brazilian Northeast. She has published on family history, inheritance law, banditry, and family-based politics in Brazil. She also teaches History 141B and History 143, as well as graduate seminars on Brazil and Latin American popular culture.

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

**Truth through Editing: Movies as Documents in American History, 1920-1945 (1 unit, LG)**

**Professor Samuel Haber**

**Wednesday 2:00-5:00, 174 Barrows Hall, CCN: 39094**

**This seminar will meet the entire semester. For seven sessions the seminar will meet from 2:00-5:00 p.m. to view and discuss seven movies. During the alternate eight weeks, the seminar will meet from 2:00-3:00 p.m. The movie schedule will be available in class.**

We will be studying the history of this country covering a period of twenty-five years. During this time America entered into and responded to three drastically different eras—those of prosperity, depression, and war. Movies of this period provide invaluable evidence of what it was like to be alive during this time. They have great advantages and great shortcomings as historical documents. We will examine both. What are the benefits and dangers of visual images and verbal images? Can a movie adequately cope with a complex historical event? In what sense can a movie tell the truth? These are some of the questions that we shall try to answer. The seminar will view and discuss seven of the most popular and profitable movies of the era 1920-1945. There will be a background reader that every student must purchase and study closely. At the end of the semester, each student will submit a ten-page critical summary paper tying the course together in his/her own way. No additional reading is necessary for this paper, only additional thinking. **All freshmen are encouraged to enroll in this seminar; however, the enrollment will be limited to fifteen students. A few students may be admitted from the wait list, with the permission of the instructor, at the first and second meeting of class to replace enrollees who decide to go elsewhere.**

Samuel Haber is an Emeritus Professor of History at UC Berkeley. He is now writing a book on American culture during the years 1920-1945.

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

**Classic Movies as Visual Art (1 unit, P/NP)**

**Professor David Wright**

**Wednesday 2:00-6:00, 425 Doe Library, CCN: 05551**

**This seminar will meet only during the first twelve weeks of the semester.**

This seminar will devote twelve Wednesday afternoons to looking thoughtfully at Classic Movies, treating them as visual art, analyzing particularly the camera work and editing, also the staging and lighting, always seeking to understand how these aspects contribute to the total expressive effect of the movie. Each week one movie will be analyzed closely and students will write a one-page report on a specific aspect of it. Usually extracts of another

movie or shorts will also be shown, to expand students' knowledge of the medium. The movies analyzed will range from *The Last Man* (Germany 1924) to *Bicycle Thieves* (Italy 1949), all of them general release movies widely seen in their time. The movies will be projected on a large screen, normally from DVD, allowing us easily to go back to specific episodes for detailed analysis and discussion. No reading expected; there will be no other written work. This seminar is for ordinary moviegoers, not for advanced theorists of "Film."

David H. Wright has been a dedicated photographer since childhood; his scholarly research and teaching on art in Rome and Late Antiquity still depend on his photography. He remembers fondly the movies he saw in the 1940s, including what were already recognized as Classics, and feels that the era before television deserves special attention.

**Integrative Biology 24, Section 1**  
**The Darwinian Revolution (1 unit, LG)**  
**Professor Brent Mishler**  
**Thursday 10:00-11:00, 5053 Valley Life Sciences Building, CCN: 43003**

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

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

**Integrative Biology 24, Section 2**  
**Animal Navigation: Which Way Is Home? (1 unit, LG)**  
**Professor Roy Caldwell**  
**Monday 2:00-3:00, 5192 Valley Life Sciences Building, CCN: 43006**

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 3**

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

**Professor Kevin Padian**

**Wednesday 12:00-1:00, 5192 Valley Life Sciences Building, CCN: 43009**

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.

### **Journalism 24, Section 2**

#### **The Newspaper in American Life: Exploring The New York Times (1 unit, LG)**

**Professor Neil Henry**

**Wednesday 11:00-12:00, BI North Gate Hall, CCN: 48006**

The New York Times, the "Gray Lady" of American journalism, is widely considered the nation's preeminent newspaper of record. This seminar examines the Times throughout the term, introducing students to the history and role of newspapers in a free society and to ways of reading and following current events and editorial judgments with a critical eye. Students must subscribe to the Times during the semester. Daily reading of the newspaper is required. Grading will be determined by occasional news quizzes and participation in classroom discussions. **Enrollment is limited to twelve students.**

Neil Henry, an Associate Professor in the Graduate School of Journalism, spent fifteen years as a staff writer for the Washington Post, earning many awards as a national and investigative reporter and a foreign correspondent based in Africa. He is the author of a racial history entitled Pearl's Secret (2001, University of California Press), and is currently at work on Carnival House, a book about fraud in the American press.

### **Linguistics 24, Section 1**

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

**Professor Sam Mchombo**

**Wednesday 3:00-4:00, 263 Dwinelle Hall, CCN: 52164**

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**

**Wednesday 11:00-12:00, 205 Wheeler Hall, CCN: 52165**

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.

### **Materials Science and Engineering 24, Section 3**

#### **Materials and Weapons of War through History (1 unit, P/NP)**

**Professor J. W. Morris Jr.**

**Friday 3:00-4:00, 348 Hearst Mining Building, CCN: 53403**

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

Professor Morris has been a member of the Berkeley faculty since 1971, and was Program Leader for the Advanced Metals Program at the Lawrence Berkeley Laboratory for almost twenty years. He has taught the introductory course Material Science and Engineering 45 for most of that period, and is a recipient of the University's Distinguished Teaching Award.

### **Mathematics 24, Section 1**

#### **What is Happening in Math and Science? (1 unit, P/NP)**

**Professor Jenny Harrison**



**Friday 3:00-4:00, 891 Evans Hall, CCN: 54570**

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.

**Mathematics 24, Section 2  
History of Mathematics (1 unit, P/NP)  
Professor Hung-Hsi Wu  
Wednesday 2:00-3:30, 961 Evans Hall, CCN: 54573**

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

The mathematics you learn is the work of many cultures and people. Knowing a little about these cultures and who these people are enhances your appreciation of the mathematics, much the same way that knowing a little bit about Henry Miller makes you better understand *Death of a Salesman*. The mathematical level of the seminar will be mostly kept to the level of high school mathematics, but a few new concepts will be introduced as well. Starting with the work of the Babylonians around 1800 B.C., the course will trace the development of mathematics through Euclid, Archimedes, Apollonius, and the Alexandrians at the time of the fall of the Roman Empire. During the Dark Ages, the mathematical torch was carried by the Hindus, Arabs and the Chinese. Then came Fibonacci, Cardan, Descartes and Fermat. The seminar will close with a brief discussion of Newton and Leibniz.

Hung-Hsi Wu is Professor of Mathematics and has taught at Berkeley since 1965. He works in differential geometry and in recent years has been mostly interested in school mathematics education and the history of mathematics.

**Mechanical Engineering 24, Section I  
Art and Science on Wheels (1 unit, P/NP)  
Professor Benson Tongue  
Wednesday 12:00-1:00, 6153 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.

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*.

**Molecular and Cell Biology 90D, Section I  
HIV: The Virus, the Disease, and the Politics (1 unit, P/NP)  
Professor Mark Schlissel  
Wednesday 2:00-3:00, 2030 Valley Life Sciences Building, CCN: 57874**

The Acquired Immune Deficiency Syndrome (AIDS) first appeared in humans in the late 1970s and during the 1980s it spread throughout the world. It is now amongst the principal causes of disability and death in many countries. Biologists and physicians collaborated to rapidly identify the causative agent, the Human Immunodeficiency Virus (HIV), and to develop a diagnostic test. Drugs have been developed which have changed AIDS into a chronic disease in developed (wealthy) countries while it remains a lethal illness in many less fortunate parts of the globe. This freshman seminar will review the biology of the HIV virus and the mechanisms by which it causes AIDS. We will then consider the evolution of treatment of this disease and future prospects for improved treatment and preventive measures including vaccines. Finally, we will discuss the social and political aspects of this unique, modern epidemic.

Dr. Schlissel received his undergraduate degree from Princeton University and was trained in both clinical medicine and basic biology at Johns Hopkins University School of Medicine (M.D. & Ph.D.). He did a post-doctoral fellowship at the Whitehead Institute at MIT in the lab of the Nobelist David Baltimore. Dr. Schlissel was a professor at Hopkins Medical School from 1991-1999 before joining the faculty at Berkeley in 1999 where he is now Professor and Vice-Chair. Dr. Schlissel's lab studies the regulation of lymphocyte development, gene regulation and V(D)J recombination. He teaches undergraduate and graduate courses in basic immunology.

### **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 2:00-4:00, 2032 Valley Life Sciences Building, CCN: 57877**

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.

### **Molecular and Cell Biology 90E, Section 2**

#### **Brain Science in Contemporary Fiction (1 unit, P/NP)**

**Professor Walter Freeman**

**Wednesday 12:00-2:00, 2032 Valley Life Sciences Building, CCN: 57880**

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

This seminar will offer you the opportunity to learn some brain science and its history. You will also read works of modern fiction that involve interpretations of the nature of mind as it relates to brain, and meet to discuss your findings and views. Fiction writers often tell us more about who we are and where we are going than do philosophers and neuroscientists. Some of the writers are scientists or clinicians who use fiction to by-pass the constraints of scientific journals. Others are people like yourselves, who read what scientists have written and then extrapolate from their own experience. We invite you to envision your own future. Keep a record and you'll be able to compare your thoughts now with your thinking when you graduate.

Walter J Freeman studied electronics in the Navy in World War II, physics and mathematics at M.I.T., English and philosophy at the University of Chicago, medicine at Yale University (M.D. cum laude 1954), internal medicine at

Johns Hopkins, and neurophysiology at UCLA. He has taught brain science in the University of California at Berkeley since 1959, where he is Professor of the Graduate School.

### **Natural Resources 24, Section I**

#### **Dean's Day Out (I unit, P/NP)**

**Professor Lynn Huntsinger**

**Friday 4:00-5:00, 260 Mulford Hall, CCN: 61303**

**This seminar meets three times: Friday, January 30, 2005 from 4:00 to 5:00 p.m. for an organizational hour in 260 Mulford Hall; Friday, February 25, 2005 from 4:00 to 5:00 p.m. for trip planning in 260 Mulford Hall; and Saturday, February 26, 2005 from 7:00 a.m. to 10:00 p.m. for the field trip to begin at West Circle on campus.**

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

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

### **Natural Resources 24, Section 4**

#### **Global Environment House Freshman Seminar (I unit, P/NP)**

**Professors Peter Berck and Allen Goldstein**

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

**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).**

Peter Berck is Professor of Agricultural and Resource Economics. He received a BA in Economics and Mathematics from Berkeley in 1971 and a Ph. D. in economics from the Massachusetts Institute of Technology in 1976. He joined the Berkeley faculty in 1976 and has been here ever since. His research interests include the economics of forests, fisheries, and agriculture and the costs of environmental regulations. He is one of the founders of Global Environment House, a residential theme program here at Berkeley.

Allen Goldstein is an Associate Professor of Biogeochemistry in the Department of Environmental Science, Policy and Management, a core member of the Berkeley Atmospheric Science Center, and a faculty chemist at Lawrence Berkeley National Laboratory. He received an B.S. in Chemistry and a B.A. in Politics from UC Santa Cruz, and a Ph.D. in Chemistry from Harvard University. His research addresses the interface between natural and anthropogenic influences on regional and global atmospheric composition and chemistry. He initiated development of the Global Environment House residential theme program and currently serves as the program chair. Professor Goldstein will be organizing the field trips for this course.

**Naval Science 24, Section I**

**Asymmetric Conflict: Ethics of Guerilla Warfare and Terrorism (1 unit, LG)**

**Professor David Buckey**

**MW 1:00-2:00, 155 Hearst Gym, CCN: 57615**

**This seminar will meet for eight weeks, beginning January 19, 2005 and ending March 16, 2005.**

What is the nature of war? What constitutes just or unjust war? Who are legitimate combatants? How do terrorists and freedom fighters differ? In this seminar, we will trace the origins and review the practices of asymmetric armed conflict, guerrilla warfare and terrorism; examine the political roles of combatants and civilian populations in asymmetric warfare; and analyze the theoretical and practical considerations of asymmetric conflict. **The kind of students we had in mind when this course was designed are students who are interested in a career in the military, specifically the Navy. Enrollment in this seminar is by instructor approval only. To obtain approval and a course entry code, contact Professor David Buckey at [dbuckey@military.berkeley.edu](mailto:dbuckey@military.berkeley.edu).**

Captain David L. Buckey is from Sacramento, California and graduated from California State University, Chico. He was commissioned through Aviation Officers Candidate School in May 1981 and was designated a Naval Flight Officer in September 1982. Captain Buckey holds a master's degree in National Security Affairs from the Naval Postgraduate School in Monterey, California. Captain Buckey has had many challenging assignments throughout his Naval career. He has flown several fixed-wing aircraft including the EC-130Q and E6A/B Tacamo aircraft. Captain Buckey has served aboard the U.S.S. Theodore Roosevelt (CVN 71), U.S.S. John C. Stennis (CVN 74), U.S.S. Peleliu (LHA 5), and U.S.S. Tarawa (LHA 1). Captain Buckey has participated in numerous exercises including Operation Southern Watch and most recently Operation Iraqi Freedom as the Task Force Air Officer for the largest deployment of amphibious based air power ever assembled.

**Near Eastern Studies 24, Section I**

**Exploring the Archaeology of Ancient Egypt in the Hearst Museum (1 unit, LG)**

**Professor Carol Redmount**

**Tuesday 1:00-2:00, Exhibit Gallery in Hearst Museum and 180 Barrows Hall, CCN: 61406**

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 individual objects from the collection. Classes will be held in 180 Barrows Hall and in the Exhibit Gallery in the Hearst Museum where students will both learn to use various resources of the museum and have the opportunity to work with ancient objects. The first class meeting will be held in the Exhibit Gallery in the Hearst Museum.

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 site in Middle Egypt. She began her archaeological fieldwork the summer of her freshman year in college and hasn't stopped excavating since. She first worked in Egypt in 1978 and lived in Cairo for three years in the mid-1980s. She also has taken part in archaeological research in Cyprus, Israel, Jordan, Tunisia, and the United States.

**Near Eastern Studies 24, Section 2**

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

**Professor Muhammad Siddiq**

**Thursday 1:00-2:00, 129 Barrows Hall, CCN: 61409**

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.

**Nutritional Sciences and Toxicology 24, Section I**  
**The Science and Culture of American Food Practices (1 unit, P/NP)**  
**Professor George Chang**  
**Thursday 11:00-12:00, 138 Morgan Hall, CCN: 64599**

Why did your grandmother rub cornstarch with her finger before dumping it into a hot wok? Or throw pasta against a wall? Or dry peppers in the autumn sun? Or salt food so heavily that you could hardly eat it? The questions address some of the food practices of cultures that make up America. This semester you will explore food preparation in various American sub-cultures. Your references will be books, newspapers, the internet, and best of all, parents and grandparents. As we go on, you will notice that each culture's food practices can be rationalized by the chemistry and microbiology of the foods themselves, in other words, by science, flavored with a dash of economics and a generous serving of tradition.

Professor George 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. But his most exciting assignment was to serve on The Chancellor's Commission to Study the University's Responses to a Diversified Student Body.

**Physics 24, Section I**  
**Physics and Politics of Nuclear Weapons, 1939-2004 (1 unit, P/NP)**  
**Professor Joel Moore**  
**Friday 2:00-3:00, 395 LeConte Hall, CCN: 69847**

This seminar looks at the basic science and history of nuclear weapons since 1939. We start with the letter of Einstein to Roosevelt in 1939 and continue up to proliferation issues in the present day. Students will gain a basic knowledge of the types of nuclear weapons and their military and environmental effects, as well as the political pressures that led to their development and proliferation. Reading assignments include *The Making of the Atomic Bomb* (Rhodes) and sections of *India's Nuclear Bomb* (Perkovich).

Assistant Professor Joel E. Moore was educated at Princeton and M.I.T. and held positions at Bell Labs and UC Santa Barbara before coming to UC Berkeley. His research interests are in theoretical physics of condensed matter. Awards include Hertz, Compton, and Hellman fellowships, an NSF Career award, and a US Fulbright grant for research in India.

**Physics 24, Section 2**  
**On Temperature, Heat, and the Pursuit of the Cold (1 unit, P/NP)**  
**Professor Dan Stamper-Kurn**  
**Monday 11:00-12:00, 430 Birge Hall, CCN: 69849**

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

This seminar will examine the concept of temperature, in particular low temperature, from an historic, scientific, and experimental perspective. Reading assignments will come from a variety of sources, such as Shactman's "Absolute Zero and the Conquest of Cold," and Chang's "Inventing Temperature," among others. Toward the end of the seminar, we will make contact with modern advances in low-temperature physics and visit research laboratories at Berkeley where cutting-edge research is taking place. Please consult the course website for updates. **This seminar is part of the Food for Thought Seminar Series.**

Dr. Stamper-Kurn is a UC Berkeley graduate who went on to doctoral studies at MIT under Professor Wolfgang Ketterle. There, he led groundbreaking research on Bose-Einstein condensates, including studies of dynamic processes, the demonstration of an optical trap for Bose-Einstein condensates, experiments on spinor Bose-Einstein condensates, and studies of light scattering. Following postdoctoral work on cavity quantum electrodynamics at Caltech, Dr. Stamper-Kurn returned to UC Berkeley where he is pursuing the creation of novel mesoscopic and macroscopic quantum systems using ultra-cold atoms. Professor Stamper-Kurn's work has been recognized by NSF, JSEP, Sloan, Hellman and Packard Fellowships, the New Focus Student Award, the APS-DAMOP Outstanding Thesis Award, an NSF CAREER award, and by the Presidential Early Career Award in Science and Engineering.

**Political Science 24, Section I  
Issues in American Constitutional Law (1 unit, LG)  
Professor Robert Kagan  
MW 11:00-12:00, 775A Barrows Hall, CCN: 72183**

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

For each session, students will write a short paper about and discuss a chapter from Michael Dorf, ed., *Constitutional Law Stories* (2004), a recent book in which well-known law professors each tell the story of a significant U.S. Supreme Court case. Each chapter describes the disputants and origins of the underlying dispute; the social, political and legal context; the legal arguments on both sides in the lower courts and the U.S. Supreme Court; the Supreme Court's decision and reasoning; and the consequences of the decision for the country as a whole as well as for the parties to the case. The stories told include those of the famous abortion case *Roe v. Wade* (1973), the case challenging the constitutionality of internment of Japanese-ancestry residents during World War II, and *Baker v. Carr*, in which the Court sought to increase the fairness of the electoral process. The stories range over time from *Marbury v. Madison* (1803), in which Chief Justice Marshall asserted the Court's authority to rule acts of Congress unconstitutional, to the case of *Jones v. Clinton* (1997), in which the Court held that even a sitting president could be subjected to a civil lawsuit—and which led to Congress's effort to impeach the president for evasive testimony in Ms. Jones's sexual harassment suit. Through debating the morally and politically compelling issues in these cases, students will learn a good deal about American history and government, the fundamental constitutional restraints on power, and the relevance of political philosophy to judicial decision-making.

Professor Robert Kagan received his LL.B. from Columbia Law School in 1962 and his Ph.D. in Sociology from Yale University in 1974. His research interests comprise comparative legal institutions, courts and litigation, and regulatory politics and enforcement. Professor Kagan teaches courses on legal institutions and Constitutional law.

His books include *Going By the Book: The Problem of Regulatory Unreasonableness* (co-authored, Transaction Books, reprinted 2002), *Adversarial Legalism: The American Way of Law* (Harvard University Press, 2001), *Regulatory Encounters: Multinational Corporations and American Adversarial Legalism* (University of California Press, 2000); and *Regulatory Justice: Implementing a Wage-Price Freeze* (Russell Sage Foundation, 1978). He is currently completing a cross-national study of regulation, corporate environmental management, and pollution levels in the pulp and paper industry, and is conducting a separate study of deterrence in environmental regulation.

**Psychology 24, Section I**

### **The Relationship between Body and Behavior (1 unit, P/NP)**

**Professor Karen K. De Valois**

**Wednesday 1:00-2:00, G75 Tolman Hall, CCN: 74684**

In this seminar, some of the great themes underlying the study of the relationship between the body and behavior, both now and in the past, will be explored. The specific ideas chosen for study will depend in part upon student interest. Examples of such fundamental ideas include the following: behavioral mechanisms and responses are similar across species; the world we perceive (at even the most elementary levels of seeing and hearing) is not the world as it exists externally; who I am (psychologically) is fundamentally determined by my genes; the state and health of the body can be profoundly affected by “psychological” factors; many of the profound “mental” illnesses are really physiological in origin. These ideas will be examined through both popular and scientific writings. Groups of students will be expected to study and help lead the discussions on each topic. Grades will be based upon class participation and presentations. No examinations will be given.

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

### **Psychology 24, Section 2**

**Conformity, Dissent and Creativity (1 unit, P/NP)**

**Professor Charlan Nemeth**

**Wednesday 11:00-12:00, 3112 Tolman Hall, CCN: 74687**

In this seminar we will cover some classic readings on social influence and on creativity and will concentrate on good decision-making and creativity.

Professor Charlan Nemeth specializes in small group processes and in creativity. Her Ph.D. is from Cornell University. She has had visiting professor appointments in Bristol, Mannheim, Trento, Sydney and Paris, and has given invited lectures at business schools and universities in Europe and the United States on the issue of innovation.

### **Psychology 24, Section 3**

**Cultural Assumptions of American Thought (1 unit, P/NP)**

**Professor Kaiping Peng**

**Thursday 10:00-11:00, 3140 Tolman Hall, CCN: 74688**

This course is about cultural assumptions of American thought systems. Psychologists have studied American minds more than those of any other cultural group on earth and often assumed the American psyche to be representative of universal human minds. However, such assumptions need to be critically reviewed. The limitations and shortcomings of the American psyche need to be explored in cross-cultural contexts. This seminar will offer the students a particular kind of insight into the cultural assumptions of American minds—their characteristic biases, modes of thinking and perceiving, values, and beliefs—that they are unlikely to find elsewhere. It will do this by contrasting their cultural assumptions with those from other cultures, primarily but not exclusively those of Asians and ethnic minority groups in the United States. Its theoretical foundations lie in the burgeoning field of cultural psychology, which looks at how culture influences the basic functioning of our minds. This seminar will be useful for all students seeking to understand themselves better, whether to help find their way in other cultures, to navigate a growing multicultural society, to negotiate the vagaries of an international market, or for just plain psychological insight. And it will be useful for those who want to make sense of the way Americans think and act, something increasingly important in a global economy as the US establishes itself in foreign markets and tensions increase among different cultures and civilizations.

Kaiping Peng is Associate Professor of Psychology at UC Berkeley. He received his B.S. from Beijing University, People's Republic of China, in 1994 and his M.S. and Ph.D. from the University of Michigan, Ann Arbor. His research interests are social and cultural psychology, including human reasoning, inference, and cross-cultural understanding.

**Psychology 24, Section 4**  
**Human Motivation, Learning and Development (1 unit, P/NP)**  
**Professor Martin Covington**  
**Day TBA Time TBA, Location TBA, CCN: 74611**

**The day, time, and location of the seminar will be announced at the first class meeting of Psychology I.**

This seminar introduces freshmen to the field of human motivation, learning and development, especially as related to schools. Students read and discuss relevant research articles, learn about various research methodologies, and interview fellow students about questions arising from the discussions, such as identifying those factors that enhance or inhibit the will to learn and the reasons people feel failure. **This seminar is open only to students taking Professor Covington's Psychology I (CCN: 74603) during Spring 2005. Registration for this seminar is by instructor approval only. To obtain the instructor's approval, you must come to the first class meeting of Psychology I.**

Professor Martin Covington is Presidential Chair in Undergraduate Education at Berkeley and specializes in research on problem solving, thinking and achievement motivation. He is a recipient of the Berkeley Distinguished Teaching Award and the California Phi Beta Kappa Award for Outstanding Teaching. His hobbies include magic, flying, photography, and painting.

**Rhetoric 24, Section I**  
**Seeking Justice in the Aftermath of Genocide (1 unit, LG)**  
**Professor David Cohen**  
**Thursday 9:30-11:00, 7415 Dwinelle Hall, CCN: 77865**

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

In this seminar, we will look at a variety of national and international legal responses to threats to genocide and other forms of mass murder. We will examine the creation of judicial mechanisms in Rwanda, Sierra Leone, Indonesia, and East Timor to provide accountability for these massive human rights violations. We will consider whether these tribunals fulfill their stated goals in achieving justice for the victims and their families in the aftermath of atrocity.

David Cohen earned his Ph.D. at Cambridge University and his J.D. at UCLA. He has also studied at Occidental College in Los Angeles and the University of Bonn in Germany. A specialist in legal history and philosophy, classics, and the law of war crimes and human rights, he frequently teaches courses in the Rhetoric 160 series. He has published books and articles on Greek social and legal history, on the use of anthropology and social theory in historical scholarship, and on war crimes trials from World War II to today. His publications include *Intended to Fail: Trials before the Jakarta Ad Hoc Human Rights Court*.

**Spanish 24, Section I**  
**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 2**

#### **Tales of Passage and Initiation in Medieval Spain (1 unit, P/NP)**

**Professor Jesús Rodríguez-Velasco**

**Tuesday 12:00-1:00, 123 Dwinelle Hall, CCN: 86196**

In this class, we are going to read a selection of medieval Spanish narratives about personal initiation. We will examine heroes, who initially do not know themselves as such, but who discover their heroism through their travels and amazing adventures. We will try to understand what kind of heroes they are and how they come to realize their own heroism. We will discuss the particulars of the trips they are undertaking and the trials that they endure. We will try to understand how our concept, both moral and political, of heroism has or has not changed and, more importantly, we will focus on enjoying such narratives. Full participation of the students is required.

**Students will have the option to participate in either Spanish or English. 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 seven books and almost one hundred articles on his research interests and has published some pictures in magazines and books.

### **Theater, Dance, and Performance Studies 24, Section I**

#### **Berkeley Little Theater (1 unit, P/NP)**

**Professor Albert H. Bowker**

**Tuesday 3:00-4:00, 246 Dwinelle Hall, CCN: 88027**

**Students must be flexible and attend the theater on nights tickets are available, often Thursday or Sunday.**

The vibrant world of little theater—from the polished elegance of professional repertory theaters to groups performing in rooms behind stores—gives an insight into the nature of theater and our response to it that cannot be derived from the large traveling shows or major theaters in big cities. We will explore this world right here in Berkeley. Students will attend a set of theater performances presented by the Department of Theater, Dance, and Performance Studies, Berkeley Repertory Theater, Aurora and other groups including the Shotgun Players and Central Works. We will attend the theater every other week and will have a discussion of the play with a theater representative directly after each performance. Tickets will be provided.

Albert Bowker is Professor of Statistics and Chancellor Emeritus. He is a theater fan and has been a habitual member of the audience.

### **Undergraduate Business Administration 24, Section I**

#### **Economic Development of Modern China (1 unit, P/NP)**

**Professor Richard H. Holton**

**Wednesday 10:00-11:00, C250 Cheit Hall, CCN: 08460**

This seminar will encourage the participants to explore the principal features of China's economic development over recent decades. An oral presentation addressing a problem area of particular interest to the individual student will be required.

Professor Richard Holton joined the UC Berkeley faculty in 1957. He holds a BSc. from Miami University in Ohio, an M.A. from Ohio State University, and a Ph.D. in economics from Harvard. His research and teaching are focused on marketing and economic development, antitrust publicity and international management. President John F. Kennedy appointed Professor Holton Assistant Secretary for Economic Affairs in the U.S. Department of Commerce in 1962 and he returned to UC Berkeley in 1965. Professor Holton was a member of the founding faculty, and later dean, of the National Center for Management Development at Dalian, PRC. He has returned frequently to China since then. Professor Holton was Dean of the Business School at UC Berkeley from 1967-75.

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

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

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

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

## **SOPHOMORE SEMINARS**

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

**American Studies 84, Section I**  
**The Internet and Society (1 unit, LG)**  
**Professor Michel Laguerre**  
**Wednesday 10:00-12:00, 115 Barrows, CCN: 02026**

**This class will meet the first eight weeks**

The transformation of various sectors of society brought by the advent of information technology and the virtual mode of communication that the Internet makes possible provide the frame of reference for the study of the nature of these changes and their implications for daily life in the contemporary American metropolis. In this sophomore seminar we will focus on actual information technology practices in the Silicon Valley/San Francisco metropolitan area, documenting and explaining how those practices are remolding social relations, global interaction and workplace environments.

Michel S. Laguerre is Professor and Director of the Berkeley Center for Globalization and Information Technology at the University of California, Berkeley. His essays have appeared in California Management Review, Journal of Developmental Entrepreneurship, Millennium: Journal of International Studies, The Harvard Encyclopedia of American Ethnic Groups and Information, Communication and Society. He was a visiting professor at Harvard in 1991-92, and in the Program in Science, Technology, and Society at MIT in 2001-2002.

**Bioengineering 84**  
**Why Engineers Love the Engineering of the Eye (1 unit, P/NP)**  
**Professor Theodore Cohn**  
**Wednesday 4:00-5:00, 458 Evans, CCN: 07308**

The eye is perhaps one of the most exquisite examples of engineering in the human body. Consider these features: the fastest muscles for movement, the richest network to supply metabolic needs, optical properties that would make a microscopist envious, the ability to 'see' a single photon (just one!), information processing cleverness and efficiency that computers can only begin to emulate, and mysterious mechanical, materials and electrical properties worthy of a detective thriller. Then consider these opportunities for next-generation discovery: why measure driver's acuity if it doesn't correlate with crashes or driving skill? How can we tell early enough if a blinding disease has just begun? What molecular manipulations can bring blind photoreceptors back to normal function? How do we signal needed emergency information through the eye in the most rapid and attention-getting way? Students will hear what experts say about some of these matters and will read about and report on facets of the eye of most interest to them. This course is also listed as Optometry 84 (CCN: 65508).

Theodore Cohn has researched the magic of the eye and vision for nearly forty years. His background is in bioengineering and vision science.

**Earth and Planetary Science 84, Section I**  
**Catastrophes and Gradual Change in Earth History (1 unit, LG)**  
**Professor Walter Alvarez**  
**Monday 4:30-5:30, 55 McCone Hall, CCN: 19294**

What kind of history has the Earth had? Calm and quiet? Or violent and catastrophic? Darwin believed in calm and quiet, in his theory of evolution, and that view dominated thinking about Earth history until 1980. But in the last twenty years we have understood that occasional catastrophes punctuate Earth history--most notably the impact of a giant comet or asteroid that killed off the dinosaurs. In this seminar, we will read about and discuss the history of geological thought bearing on the question of whether Earth history has been gradual, violent, directional or cyclical, with special emphasis on the impact that killed the dinosaurs. **Students taking this seminar are expected to have taken at least one course in one or more of the following departments: Earth and Planetary Science, Physics, Chemistry, Mathematics.**

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

**English 84, Section I**  
**High Culture, Low Culture (1 unit, P/NP)**  
**Professor Julia Bader**  
**Monday 2:00-5:00, B56 Hildebrand, CCN: 28586**

Using neo-noir films, the short stories of Raymond Carver and cultural events, the course will analyze issues of representation, narration, and modernism. **This course is designed for students thinking about majoring in English or Film.**

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.

**Environmental Sciences 84**  
**Issues in Campus Sustainability: What Does the Term "Green Building" Mean? (1 unit, LG)**  
**Professor William Berry**  
**Wednesday 4:00-5:00, 55A McCone, CCN: 33724**

Current Regents' policy indicates that new campus buildings should be "green." We will talk about composting toilets, sod and plant roofs, photovoltaics and other methods for energy uses and uses of "grey" water in green building planning. **Students working on local environmental issues and those considering joining a student environmental issue group are encouraged to join the discussion to share their experiences.**

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

**Ethnic Studies 84**  
**Theories of Ethnicity and "Race" (1 unit, P/NP)**  
**Professor Mario Barrera**  
**Tuesday 1:00-2:00, 129 Barrows, CCN: 34150**

Everyone talks about "race," but hardly anyone can define it. Perhaps there is no such thing, and we should be talking about ethnicity instead. This seminar will examine some of the leading approaches to analyzing "race" and ethnicity from social science and historical perspectives. **This course is intended for students who are interested in social science theory.**

Mario Barrera is Professor Emeritus in the Department of Ethnic Studies. He has taught courses on comparative ethnic relations, ethnic politics, and minority film. He is also a documentary filmmaker.

#### **French 84**

**When Sexual Identity and Love Don't Match: Marguerite Duras and Yann Andrea (1 unit, P/NP)**

**Professor Michael Lucey**

**Thursday 2:00-3:00, 204 Dwinelle, CCN: 35719**

What happens when you fall in love with and find yourself desiring someone whom, according to the rules of sexual identity, you shouldn't desire? This is one of the questions posed by the relationship between the renowned twentieth-century French writer Marguerite Duras and the gay man who was the companion of her later years. Their relationship became the subject of a number of books they both wrote, partly for each other, but partly for everyone. We will read three of these short books (all by Duras, because those by her partner, Yann Andréa, are not available in English): "Blue Eyes, Black Hair," "The Malady of Death," and "Yann Andréa Steiner." We'll also review other documents of their relationship, and try to understand how they thought about it and why they lived so much of it in the public eye. Students who read French will be encouraged to read the texts in the original, and to explore some of Yann Andréa's side of the story. **This course might be especially suitable for people thinking about majoring or minoring in French (although no reading knowledge of French is required for the seminar), or for people interested in pursuing the LGBT Studies minor program or gender studies more generally, for people interested in contemporary literature or in women's writing, or for people just interested in thinking about the difficulties of human relationships.**

Michael Lucey is Professor of French and Comparative Literature and Director of the Center for the Study of Sexual Culture. He specializes in French literature and culture of the 19th- and 20th-centuries and also teaches social and literary theory, sexuality studies, 19th- and 20th-century British literature and culture, and 20th-century American literature and culture. His most recently published book, "The Misfit of the Family: Balzac and the Social Forms of Sexuality," discusses the complex place sexuality holds in Balzac's understanding of the social world, and its relation to history, economics, law, and the family. He has just completed the first volume of a new project, "Never Say 'I': The First Person and Same-Sex Sexuality in Early Twentieth-Century French Literature," which traces the development of a variety of complicated strategies for saying "I" within literary texts by authors such as Colette, Gide, and Proust. He is also the author of "Gide's Bent: Sexuality, Politics, and Writing," and the translator of Didier Eribon's "Insult and the Making of the Gay Self."

#### **Integrative Biology 84**

**Jane Goodall Meets Edward Tolman: How Animals Behave at Berkeley (1 unit, P/NP)**

**Professors Eileen Lacey and Lucia Jacobs**

**Tuesday 3:00-5:00, G75 Tolman, CCN: 43059**

The goal of this seminar is to introduce sophomores to the wealth of behavioral research on animals conducted at Berkeley. Starting with perspectives from faculty who founded the program here, the seminar will be a series of talks and discussions with faculty, in an intimate seminar setting. Each speaker will discuss his or her research and explain the role of undergraduates in his or her research programme. Professors Jacobs and Lacey will then moderate a second hour of discussion of the concepts and principles illustrated by this line of research. Students interested in behavior will get a unique introduction to research at Berkeley, learning both what is going on and how they could become involved personally. After the weekly presentations, students will write a brief synopsis of the presentation and discussion. **This course is for students planning to major in a department that supports behavioral research, including Psychology, Integrative Biology, ESPM and Cognitive Science.** This course is also listed as Psychology 84 (CCN: 74689).

Eileen Lacey's research program explores the evolution of behavioral diversity among vertebrates, with emphasis on studies of mammals. Specifically, by combining field studies of behavior, ecology, and demography with molecular genetic analyses of kinship and population structure, she seeks to identify the causes and consequences

of variation in mammalian social behavior. Although she is broadly interested in social behavior and sponsors students working on a variety of vertebrate taxa, her current research focuses on studies of subterranean rodents from Argentina and Chile.

Lucia Jacobs's research program explores how animals (including humans) navigate in the world. She is particularly interested in the evolution of cognition, specifically spatial memory and spatial navigation, and the evolution of the hippocampus, an important underlying neural substrate. Studying squirrels, kangaroo rats and other rodents, she measures spatial learning and hippocampal structure in different species, to understand the adaptive significance of their cognitive abilities. The first step is often a field study of spatial memory and spatial navigation under natural conditions. These studies lead to laboratory studies of spatial learning, memory and hippocampal structure.

#### **Natural Resources 84**

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

**Professors Allen Goldstein and Kate O'Neill**

**Thursday 5:00-6:00, Foothill Classroom A, CCN: 61315**

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).**

Allen Goldstein is an Associate Professor of Biogeochemistry in the Department of Environmental Science, Policy and Management, a core member of the Berkeley Atmospheric Science Center, and a faculty chemist at Lawrence Berkeley National Laboratory. He received a B.S. in Chemistry and a B.A. in Politics from UC Santa Cruz, and a Ph.D. in Chemistry from Harvard University. His research addresses the interface between natural and anthropogenic influences on regional and global atmospheric composition and chemistry. He initiated development of the Global Environment House residential theme program and currently serves as the program chair. Professor Goldstein will be organizing the field trips for this course.

Kate O'Neill is an Assistant Professor of Society and Environment in the Department of Environmental Science, Policy and Management. Her academic interests focus on the ways different environmental political cultures produce differing policy outputs, and in how these subsequently affect and are affected by the international arena. Her research so far has addressed the international trade in hazardous wastes, especially among OECD countries, developing an institutional theory of regulatory differences to explain why some countries (e.g. Britain, France) legally import more hazardous wastes than others (such as Germany, Australia and Japan).

#### **Nutritional Sciences and Toxicology 84, Section I**

##### **Cancer and Diet (1 unit, P/NP)**

**Professor Ben de Lumen**

**Monday 9:00-10:00, 120 Morgan, CCN: 64604**

All of us are affected by cancer, one way or another. It is now apparent that although genetic predisposition varies, the key factors determining whether people develop cancer are environmental and there is strong evidence showing the link between diet and cancer. There is a vast literature on this but the course will start out with a report put out by the American Institute for Cancer Research and the World Cancer Research Fund in 1997. Then, we will look at relevant more current literature. We can also explore newspaper and magazine articles. Student participation by discussion and presentation are required.

Professor de Lumen's research interest is on Cancer and Diet, focusing on a cancer preventive peptide called lunasin that was discovered in his lab. Originally isolated from soy, lunasin has also been found in barley. Other seeds are being analyzed. He is a native of the Philippines and obtained his undergraduate degree from the

University of the Philippines, MS from the University of Missouri and PhD (Agricultural Chemistry/Biochemistry) from UC Davis. Before joining the faculty at Berkeley, he worked in the food industry for five years.

#### **Optometry 84**

##### **Why Engineers Love the Engineering of the Eye (1 unit, P/NP)**

**Professor Theodore Cohn**

**Wednesday 4:00-5:00, 458 Evans, CCN: 65508**

The eye is perhaps one of the most exquisite examples of engineering in the human body. Consider these features: the fastest muscles for movement, the richest network to supply metabolic needs, optical properties that would make a microscopist envious, the ability to 'see' a single photon (just one!), information processing cleverness and efficiency that computers can only begin to emulate, and mysterious mechanical, materials and electrical properties worthy of a detective thriller. Then consider these opportunities for next-generation discovery: why measure driver's acuity if it doesn't correlate with crashes or driving skill? How can we tell early enough if a blinding disease has just begun? What molecular manipulations can bring blind photoreceptors back to normal function? How do we signal needed emergency information through the eye in the most rapid and attention-getting way? Students will hear what experts say about some of these matters and will read about and report on facets of the eye of most interest to them. This course is also listed as Bioengineering 84 (CCN: 07308).

Theodore Cohn has researched the magic of the eye and vision for nearly forty years. His background is in bioengineering and vision science.

#### **Psychology 84**

##### **Jane Goodall Meets Edward Tolman: How Animals Behave at Berkeley (1 unit, P/NP)**

**Professors Lucia Jacobs and Eileen Lacey**

**Tuesday 3:00-5:00, G75 Tolman, CCN: 74689**

The goal of this seminar is to introduce sophomores to the wealth of behavioral research on animals conducted at Berkeley. Starting with perspectives from faculty who founded the program here, the seminar will be a series of talks and discussions with faculty, in an intimate seminar setting. Each speaker will discuss his or her research and explain the role of undergraduates in his or her research programme. Professors Jacobs and Lacey will then moderate a second hour of discussion of the concepts and principles illustrated by this line of research. Students interested in behavior will get a unique introduction to research at Berkeley, learning both what is going on and how they could become involved personally. After the weekly presentations, students will write a brief synopsis of the presentation and discussion. **This course is for students planning to major in a department that supports behavioral research, including Psychology, Integrative Biology, ESPM and Cognitive Science.** This course is also listed as Integrative Biology 84 (CCN: 43059).

Lucia Jacobs's research program explores how animals (including humans) navigate in the world. She is particularly interested in the evolution of cognition, specifically spatial memory and spatial navigation, and the evolution of the hippocampus, an important underlying neural substrate. Studying squirrels, kangaroo rats and other rodents, she measures spatial learning and hippocampal structure in different species, to understand the adaptive significance of their cognitive abilities. The first step is often a field study of spatial memory and spatial navigation under natural conditions. These studies lead to laboratory studies of spatial learning, memory and hippocampal structure.

Eileen Lacey's research program explores the evolution of behavioral diversity among vertebrates, with emphasis on studies of mammals. Specifically, by combining field studies of behavior, ecology, and demography with molecular genetic analyses of kinship and population structure, she seeks to identify the causes and consequences of variation in mammalian social behavior. Although she is broadly interested in social behavior and sponsors students working on a variety of vertebrate taxa, her current research focuses on studies of subterranean rodents from Argentina and Chile.

#### **Public Health 84**

**People, Parasites and the Three Gorges Dam (1 unit, LG)**  
**Professor Robert Spear**  
**Wednesday 4:00-6:00, 89 Dwinelle, CCN: 75905**

Humans are hosts to more than 400 different parasites that live out their lives in our bodies and our environment. Environmental changes—such as new dams—can affect the prevalence and intensity of infection in human populations. As a 600 km lake forms behind the Three Gorges Dam on China's Yangtze River, major ecological and agricultural changes are taking place, potentially putting millions at increased risk of parasitic infection. This seminar, intended for students in the natural sciences and engineering, will explore the nature and extent of these changes and their implications for human health. With particular attention paid to schistosomiasis, a parasitic disease found both above and below the Three Gorges region, students will examine various aspects of the potential impact of the dam on environmental determinants of disease transmission. **The seminar is intended for students majoring in the natural sciences or engineering. The issues we will address are inherently interdisciplinary, requiring input from the fields of ecology, hydrology, and infectious diseases as well as methods of computer simulation and remote sensing.**

Robert Spear is a professor in the Environmental Health Sciences Division of the School of Public Health. He is an engineer whose research has concerned the use of mathematical and statistical methods for quantifying human exposures to hazardous agents in the environment. For the last ten years his particular interest has been on the modeling of schistosomiasis in the mountains of southwestern Sichuan Province with the object of minimizing disease transmission.

**Rhetoric 84**

**Thinking Machines: The History of Artificial Intelligence (1 unit, P/NP)**  
**Professor David Bates**  
**Thursday 11:00-1:00, 7415 Dwinelle, CCN: 78247**

**This course will be held for seven weeks from February 14th-April 1st.**

The class will explore the history of "thinking machines." We will investigate some early and contemporary efforts to create machines that can think in some fashion. But we will also read philosophical texts that claim that the mind is itself a kind of machine. We will start with an examination of early modern "automata" (robots), go on to discuss bodies, machines, and thinking in the industrial age, then examine various examples of Artificial Intelligence, from Charles Babbage's mechanical computers to twenty-first century approaches to artificial thought. **The class should appeal to those interested in the history of science and technology, philosophy, cognitive science, psychology, and rhetoric.**

David Bates teaches Modern European Intellectual History in the Department of Rhetoric. His interests include the history of epistemology, the history of political thought, and interdisciplinary approaches to philosophy. He is working on a book tracing the history of human insight, from the Enlightenment through Artificial intelligence. He has published *Enlightenment Aberrations: Error and Revolution in France* (Cornell Univ. Press).



## 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.

**Chicano Studies 39A, Section I**  
**Race and Identity: The Latino Experience (1.5 units, P/NP)**  
**Professor Carlos Munoz Jr.**  
**Tuesday 10:00-12:00, 140 Barrows Hall, CCN: 13006**

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.

**Comparative Literature 39F**  
**Coffee and Cigarettes: The Literature of Anxiety and Boredom (4 units, LG)**  
**Professor Anne-Lise Francois**  
**MWF 2:00-3:00, 321 Haviland, CCN: 17266**

Is there a literature of what Adam Phillips has called “that most absurd and paradoxical wish, the wish for a desire”? Why has the modern period been called the Age of Anxiety? What makes ennui a specifically modern experience? Why does it emerge with the modern legislation of the secular right to the pursuit of happiness? Under the rubric “coffee and cigarettes”—commodities whose introduction into Europe and the Americas somewhere between 1600-1800 marks the rise of colonialism and emergence of modern consumer economies—we will examine these and other questions in a range of literary texts and films, including works by Sade, Flaubert, Stendhal, Baudelaire, Kierkegaard, Freud, Svevo, Chaplin, Renoir, Hawks, Rapper, and Malick. As we trace the literary and extra-literary circulation of coffee and cigarettes as double signs of industry and idleness, solitude and sociability, leisure and work, our plan will be to use the socio-historical framework of coffee and tobacco production and consumption to ground our philosophical inquiry into peculiarly groundless psychological states (anxiety and boredom). But our analyses will probably more often lie with coffee and cigarettes as figures for the minor, everyday, futile pleasures of style. Particular attention will be thus given to the ways in which the works studied—literary and filmic stimulants and narcotics in their own right—define ways of “passing” or “killing” time. This seminar may be used to satisfy the Arts and Literature requirement in Letters and Science.

ANNE-LISE FRANÇOIS — English — works in the modern period, comparative romanticisms; lyric poetry; the psychological novel and novel of manners; gender and critical theory; literature and philosophy; and fashion and popular culture. She is currently revising for publication *Open Secrets: The Literature of Uncounted Experience*. Her essay on Romantic poetry, biotechnology and food politics, “Frankenfoods and the Bounds of Wordsworthian Piety,” is forthcoming in *Diacritics*, 2005. She has also published on falsetto in seventies disco and on the “gentle force” of habit in Hume and Wordsworth. (Ph.D., Princeton University)

**Computer Science 39J**  
**The Art and Science of Photography: Drawing with Light (2 units, P/NP)**  
**Professor Brian Barsky**  
**Friday 12:00-2:00, 405 Soda, CCN: 26244**

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

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

**Computer Science 39K**  
**Information Technology Goes to War (2 units, P/NP)**  
**Professor Randy H. Katz**  
**Monday 10:00-12:00, 320 Soda, CCN: 26245**

Necessity drives invention. In this seminar, we will examine the historical development of information technology, broadly defined as computing, communications, and signal processing, in the twentieth century within the context of modern warfare and national defense. Topics may include cryptography/cryptanalysis and the development of the computer; command and control systems and the development of the internet; the war of attrition and the development of the mathematics of operations research; military communications and the development of the cellular telephone system; precision munitions and the development of the Global Positioning System; and counter-terrorism and the development of mass information monitoring. We will endeavor to explain these developments in technical terms at a tutorial level. Our main focus is to engage the students in the historical sweep of technical development and innovation as driven by national military needs, and determine whether this represents a continuing framework for the twenty-first century.

Professor Randy H. Katz has been on the Berkeley faculty since 1983. His honors include the campus' Distinguished Teaching Award, memberships in the National Academy of Engineering and the American Academy of Arts and Sciences, Fellow status in his professional societies, and national awards for his undergraduate textbook authorship and undergraduate teaching.

**Earth and Planetary Science 39A**  
**Geological Influences in California Society Today (2 units, LG)**  
**Professors Mark Richards and Hans-Rudolph Wenk**  
**MW 5:00-6:00, 103 Moffitt, CCN: 19063**

In addition to five or six one-hour class meetings, this course includes one four-day field trip that will examine natural features of California that are of scientific and societal importance, such as volcanoes, mountain ranges, earthquake faults, rivers, coastlines, landslides, strata recording earth history, mines,

water and energy sources. Field trips go to different parts of California in spring and in fall. Students must bring a sleeping bag and tent, and pay a transportation and a commissary fee. Attendance at each lecture and one field trip is mandatory. Class will initially meet together, but after a few lectures, students will be assigned to a field trip of thirty students with one instructor per group **This course is restricted to freshmen only.**

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.

### **Engineering 39A**

#### **Archival Research Workshop (1.5 units, LG)**

**Instructors James Casey, David Farrell and Peter Hanff**

**Wednesday 1:00-2:30, 360 Bancroft Library, CCN: 27938**

This workshop offers undergraduates from any major the opportunity to perform research using resources from the archives of the Bancroft Library, as well as some other specialized libraries at the University. Students will have direct access to the unique collections of original manuscripts, papers, early printed editions, photographs, paintings, and other items in the Berkeley archives. These cover literary, historical, philosophical, social, cultural, scientific, and artistic areas. Of particular interest are social and technological movements in California during the nineteenth and twentieth centuries. For example, the Bancroft Library has a superb collection of documents, drawings, and paintings from the Gold Rush era; holds the reports, engineering drawings, and photographs for the Golden Gate and Bay Bridge projects; has an extensive archive on the poetry and fiction of the Beat Generation; and houses the papers of the Sierra Club and the Free Speech Movement. In the past, we have found that the seminar works best when our students come from diverse cultural and academic backgrounds and are eager to engage in academic dialogue. After some introductory sessions on the use of primary documents and artifacts in research, students will explore the archives in areas of interest to the group. By mid-semester, several topics will be identified and participants will subsequently work in teams of two or three to pursue in-depth research on a set of topics that preferably will complement one another. Creativity in research is encouraged and everyone is expected to participate vigorously in the discussions. Library specialists will provide technical assistance. A presentation and report based on original research will be due at the end of the semester. This course is sponsored by the College of Engineering Interdisciplinary Studies Program.

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

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

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

### **Engineering 39B**

#### **Introduction to Computational Engineering (1.5 units, P/NP)**

**Professor John Verboncoeur**

**Tuesday 3:30-5:00, 52I Cory, CCN: 27939**

This seminar introduces the program in Computational Engineering Science, a multidisciplinary field linking together elements of biology, chemistry, applied mathematics, physics, and all great areas of engineering. The course includes a series of lectures and guest speakers with topics ranging from multidisciplinary real-world projects to introductions to modeling and simulation. Small projects illustrate the progression from problem definition to modeling to simulation to interpretation and comparison with experiment and observation. There are no prerequisites. **Priority is given to Engineering Science students.**

John Verboncoeur is an Associate Professor-in-Residence in the Department of Nuclear Engineering. His research interest is computational physics.

**Environmental Economics and Policy 39C**  
**Using Economics to Analyze and Debate Hot Topics (2 units, LG)**  
**Professor Jeffrey Perloff**  
**Wednesday 3:00-5:00, 109 Morgan, CCN: 01218**

The purpose of this seminar is to use microeconomics to analyze some of the most controversial political and social topics of the day, such as the key ones in the Presidential election. Starting at the first session, we will collectively choose these topics based on student interest. Possible topics include the economics of gay marriages, permitting seniors and others to buy pharmaceuticals abroad, allowing oil drilling in the Arctic National Wildlife Refuge, global warming, markets for pollution, outsourcing and the World Trade Organization, Enron and other management scandals, intellectual property rights and the internet (downloading music and videos), tax refunds, U.S. immigration laws, and mad cow disease. The seminar is premised on the view that there are generally many sides to each topic and discussion and debate will be encouraged. We will collectively decide how many sessions to spend on each topic and how to run the seminar. Some weeks we may collectively analyze and discuss a topic (first assigning individuals or groups to gather different facts and opinions and then share this information during the session). Other weeks, we may debate topics, possibly holding the debates twice and switching sides. Still in other weeks, we may write and exchange brief newspaper-column-like position papers. To prepare for sessions, students will gather information and opinions using the internet or other sources, write up brief papers to share, and read materials written by classmates.

**The student must be enthusiastic: willing to put in time outside of the seminar collecting information and willing to participate during the seminar. In addition, the student must have had at least an introductory microeconomics course such as EEP I (preferably) or ECON I.** This seminar may be used to satisfy the Social and Behavioral Sciences requirement in Letters and Science.

Jeff Perloff is chair and professor of Agricultural and Resource Economics at the University of California, Berkeley. His economic research covers industrial organization, marketing, labor, trade, and econometrics. His textbooks are Modern Industrial Organization (coauthored with Dennis Carlton) and Microeconomics. He has been an editor of Industrial Relations and an associate editor of the American Journal of Agricultural Economics and is an associate editor of the Journal of Productivity Analysis. He has consulted with nonprofit organizations and government agencies (including the Federal Trade Commission and the Departments of Commerce, Justice, and Agriculture) on topics ranging from a case of alleged Japanese television dumping to the evaluation of social programs. He has also conducted research in psychology. He is a fellow of the American Agricultural Economics Association. He received his B.A. in economics from the University of Chicago in 1972 and his Ph.D. in economics from the Massachusetts Institute of Technology in 1976. He was previously an assistant professor in the Department of Economics at the University of Pennsylvania.

**History 39G**  
**Muslims, Jews, and Christians in Fiction and Travel Narratives (4 units, LG)**  
**Professor Leslie Peirce**

**Thursday 10:00-12:00, 3104 Dwinelle, CCN: 39111**

Works of fiction and narratives of travel will be the lens through which we examine the meeting of the worlds of Islam, Christianity, and Judaism in the Mediterranean and the Middle East. The books we read will be our entry points into the broader historical question of how peoples of different religious and ethnic identities lived together before the twentieth century. Some of the works we will read are Amin Maalouf's *Leo Africanus*, Tariq Ali's *The Book of Saladin*, A.B. Yehoshua's *Journey to the End of the Millennium*, Orhan Pamuk's *My Name is Red*, and Amitav Ghosh's *In an Antique Land*. The geographic span of these works takes us from Spain to India, and the time span from the eleventh to the nineteenth century.

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 39H**

**Youth as Experience and Metaphor in Modern Japan (4 units, LG)**

**Professor Andrew Barshay**

**Wednesday 2:00-4:00, 3104 Dwinelle, CCN: 39835**

Youth is universal, a phase of every individual human life in every society; it is also a time of intense self-consciousness, learning, and conflict. In this seminar I hope to explore what it has meant to be young in modern Japan--from the opening of the country in the 1850s, to the present. We'll consider youth as an individual and collective experience portrayed in fiction, poetry, autobiographical and religious writings, film, etc., but also as a metaphor for the experience of Japanese society itself as it literally entered a new world, a new space-time, once after the fall of the shogunate in 1868, in the early decades of the 20th century, through total war and defeat in the 1940s, again in the 1960s, and perhaps again today.

Professor Barshay received all university degrees from UCB, and has been a member of the faculty since 1989. His main teaching area is modern Japan. His main research area is Japanese and comparative social thought. Most recently he has published "The Social Sciences in Modern Japan: The Marxian and Modernist Traditions" (UC Press, 2004). Professor Barshay is also chair of the Center for Japanese Studies.

**History 39I**

**Soviet History Through Film and Fiction (4 units, LG)**

**Professor Yuri Slezkine**

**Tuesday 2:00-4:00, 2523 Tolman, CCN: 39838**

The class is devoted to the relationship between fact and fiction in the Soviet Union. We will discuss novels, short stories, and movies that attempt to represent life in twentieth-century Russia, from the eve of the revolution to the aftermath of the fall of communism. The authors we will be reading include Anton Chekhov, Isaac Babel, Andrei Platonov, Mikhail Bulgakov, Alexander Solzhenitsyn, Yuri Trifonov, and Sergei Dovlatov. Requirements: participation in discussion and weekly one-page essays.

Yuri Slezkine is a Professor of History. He authored *The Jewish Century* (Princeton, 2004), *Arctic Mirrors: Russia and the Small Peoples of the North* (Ithaca, 1994); coauthored *Speak Russian!* (Austin: University of Texas Press, 1990); and coedited *In the Shadow of Revolution: Life Stories of Russian Women from 1917 to the Second World War* (Princeton UP, 2000) and *Between Heaven and Hell: The Myth of Siberia in Russian Culture* (New York: St. Martin's Press, 1993).

**Industrial Engineering and Operations Research 39B, Section I**

**Enterprise Engineering (2 units, LG)**  
**Professor Ilan Adler**  
**Tuesday 4:00-6:00, 106 Moffitt, CCN: 41003**

Industrial Engineering and Operations Research has grown well beyond its roots in manufacturing and branched into virtually all areas of human enterprise. Strategic breakthroughs have come from applying the risk-analysis and resource-allocation tools of IEOR to modern industries that include sports, finance, energy, service, health care, agriculture, communications, and law enforcement. IEOR operates on the interface between information and decisions and is widely considered to be ideal technical training for engineers who want future careers in designing and managing the complex, information-driven enterprises of the twenty-first century.

This course will introduce basic methods and applications of industrial engineering and operations research (IE\OR). We will explore approaches for solving interesting and diverse problems, in areas ranging from business to public policy to sports. Students will form teams and develop strategies for attacking these problems. We will also spend time discussing IE\OR approaches to solving these problems systematically. The semester will conclude with a final project that demonstrates some of these IE\OR strategies on a practical problem. Students will be given the opportunity to apply some IEOR techniques to decisions that directly affect their future. Students who are not declared IEOR majors but who are considering it as their possible field of expertise are encouraged to take this seminar.

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.

**Molecular and Cell Biology 91A, Section I**  
**Delaying Aging and Degenerative Diseases (2 units, P/NP)**  
**Professor Bruce Ames**  
**Tuesday 4:00-6:00, 103 GPB, CCN: 57883**

**The class will end in March; details to be announced later**

Professor Ames will give the first lectures for orientation. Students will then each give a talk on one aspect of aging or a degenerative disease associated with aging. The course will emphasize nutrition and optimizing essential micronutrients as the key factors in delaying aging, as well as what is known about mechanisms.

Bruce Ames is a Professor of Biochemistry and Molecular Biology, a member of the National Academy of Sciences, and a recipient of many prizes, including the Japan Prize and the U.S. National Medal of Science. His research interests include the causes of aging, the causes of cancer, and how diet influences health.

**Nuclear Engineering 39A, Section I**  
**Issues in Nuclear Science and Engineering (2 units, LG)**  
**Professor William Kastenberg**  
**MW 3:00-4:00, 3106 Etcheverry, CCN: 64006**

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

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

### **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, CCN: 65506**

**This course will meet for five weeks from February 15th to March 17th**

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.

### **Political Science 39B, Section I**

#### **Problems in East Asian Politics (2 units, P/NP)**

**Professor Lowell Dittmer**

**Monday 5:00-7:00, Room B4, Unit III, CCN: 72186**

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 are not only cases of unresolved national identity crisis but 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 pages) 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 Social and Behavioral Sciences and International Studies 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).

**Public Health 39E**  
**The Medical Detective (2 units, P/NP)**  
**Professor Arthur Reingold**  
**Wednesday 10:00-12:00, 106 Mulford, CCN: 75903**

Have you read newspaper stories about SARS or the chicken 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.

**Rhetoric 39F**  
**Getting Inside the Text: Close Reading and the Art of Rhetoric (2 units, LG)**  
**Professor Daniel F. Melia**  
**Tuesday 1:00-2:30, 7415 Dwinelle, CCN: 77868**

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.

### **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, CCN: 83112**

**This course will meet for five weeks from February 15th to March 17th**

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: 65506).

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)**

**Professor Kausalya Hart**

**Tuesday 8:00-10:00, Library Unit III, 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 and Social and Behavioral Sciences requirements in Letters and Science.

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

**Theater, Dance, and Performance Studies 39, Section I**  
**Seeing Dancing and Performance as a Cultural Response (2 units, LG)**  
**Lecturer SOE Carol Murota**  
**Tuesday 2:00-3:30, 183 Dwinelle, CCN: 88047**

Students will attend six dance performances presented on our own UC campus and in San Francisco. They will learn how to see this ephemeral art form through lectures and discussions with the artists, critics, and performers. **Students must be flexible to attend the theater on nights when tickets are available. Most tickets are discounted through the generosity of the Consortium for the Arts at Berkeley and Cal Performances.**

Carol Murota is a senior lecturer in Theater, Dance, and Performance Studies. She is the director of the University Dance Theater and contributing choreographer for the Bay Area Repertory Dance Company. Her most recent choreography was "leaving home," a cross-disciplinary collaboration with actors, dancers, and composer performer Julian Smedley.

**Undergraduate Business Administration 39AC, Section I**  
**Philanthropy: A Cross-Cultural Perspective (3 units, LG)**  
**Professor M. Frances Van Loo**  
**TuTh 11:00-12:30, C250 Cheit, CCN: 08462**

This class will compare and contrast the variety of gift-giving and sharing traditions that make up American philanthropy. Both the cultural antecedents and their expression in this country will be explored from five ethnic and racial groups: Native American, European American, African American, Hispanic American, and Asian American. The goal is to gain a greater understanding of the many dimensions of philanthropy as it is practiced in the United States today. **This course fulfills the American Cultures requirement.**

**Frances Van Loo is a Professor in the Graduate Division of the Haas School of Business where she specializes in the management of nonprofit organizations and philanthropy. She is currently working on a book that incorporates the research from students in this class on their racial/ethnic philanthropic heritage.**