STANFORD INTRODUCTORY SEMINARS

Participating Faculty: Over 200 faculty from more than 60 departments take part in Introductory Seminars programs. See faculty listings in each department's section of this bulletin for pertinent information.

SIS Offices: 4th Floor, Sweet Hall, 590 Escondido Mall

Mail Code: 94305-3091 Phone: (650) 723-4338 Email: fsp@vpue.stanford.edu Web Site: http://introsems.stanford.edu/

Stanford Introductory Seminars provide opportunities for first- and second-year students to work with faculty in an intimate and focused setting. These courses aim to intensify the intellectual experience of the freshman and sophomore years by allowing students to work with faculty members in a small-group setting; introducing students to the variety and richness of academic topics, methods, and issues which lie at the core of particular disciplines; and fostering a spirit of mentorship between faculty and students. See "Freshman and Sophomore Programs" in the Undergraduate Education section of this bulletin for more information.

COURSES SOPHOMORE COLLEGE

Sophomore College offers sophomores the opportunity to study intensively in small groups with Stanford faculty for several weeks before the beginning of Autumn Quarter. It is a chance for students to immerse themselves in a subject and collaborate with peers, upper-class sophomore college assistants, and faculty in constructing a community of scholars. Students are also encouraged to explore the full range of Stanford's academic resources in workshops and individually. At its best, Sophomore College is characterized by an atmosphere of intense academic exploration. Each Sophomore College course enrolls 12 to 14 students, who live together in a Stanford residence and receive 2 units of academic credit for the work done in the course. Eligible students have been enrolled for no more than three academic quarters, have completed at least 36 units of academic work by the end of the Spring Quarter preceding the college, are sophomores in the Autumn Quarter during which the college is offered, and are in good academic standing. Students must also have an on-campus housing assignment for the ensuing academic year. Transfer students are eligible in a pilot program. Admitted students who are found to have academic standing problems after the completion of Spring Quarter may have their admission revoked. The Sophomore College program fee covers tuition, room, board, books, and class-required travel arranged by the program. The total fee is \$1300, but through the generosity of Stanford friends, all students automatically receive a \$800 scholarship. Students pay the remaining \$500, which is included in the University bill. Students are also responsible for travel to campus or off-campus site for some off-campus seminars, phone, network activation fees, and other personal expenses. Courses are announced in March; applications are due in April. For more information or to apply, see http://soco.stanford.edu/. September 2006 courses are listed here.

BIOLOGICAL SCIENCES

BIOSCI 10SC. Natural History, Marine Biology, and Research—The biology of Monterey Bay and the coastal mountains and redwood forests of Big Sur. Literary, artistic, and political history. Topics: conservation, sanctuary, and stewardship of the oceans and coastal lands. Meetings with conservationists, authors, environmentalists, politicians, land-use planners, lawyers, scientists, and educators.

2 units, Aut (Thompson, S)

BIOSCI 11SC. The Ecology of Invasions—Introduction to invasion ecology including the animal and plant species which are transforming ecosystems around the world. Ongoing research project in the Jasper Ridge Biological Preserve to investigate why the Argentine ant, once established, eliminates most native ant species, and why a few native species are able to resist.

2 units, Aut (Gordon, D)

CHEMICAL ENGINEERING

CHEMENG 10SC. How Computer Chips Are Made—The fabrication sequence for integrated circuits. Properties of solids. Semiconductors; transistors and their function in an integrated circuit. Transistor fabrication including doping, deposition, etching, and lithography. Future trends such as smaller transistors.

2 units, Aut (Bent, S)

CIVIL AND ENVIRONMENTAL ENGINEERING

CEE 10SC. Green Buildings—What makes a building green. The efficient use of energy, water, and construction materials to provide healthful and enjoyable spaces in which to live and work. Focus is on energy efficiency and architectural features that enable a building to provide a significant fraction of its own heating, cooling, and electrical needs.

2 units, Aut (Masters, G)

COMPARATIVE LITERATURE

COMPLIT 12SC. Ghost Stories: Why the Dead Return and What They Want from Us—Anxiety about mortality and wisdom about the cultural place of the past in the enduring genre of the ghost story from classical literature to popular film. Memory and regret, mourning and forgetting. Classic authors such as Hoffmann, Poe, James, Joyce, and Ibsen, and more recent authors such Paul Auster, Marie Darrieussecq, Catherine Lim, and Toni Morrison.

2 units, Aut (Berman, R)

DRAMA

DRAMA 10SC. Social Protest Drama and the Politics of Hip Hop **Performance**—Theater as a social weapon. Focus is on the 60s and 70s. How performances were shaped by their time and whether they transcend their historic context. Chicano and Black social protest theater. Past versus contemporary uses of social protest performance. Potential of Hip Hop performance as mechanism of social protest. Assignments include creating a social protest manifesto and a performance piece.

2 units, Aut (Elam, H)

ECONOMICS

ECON 14SC. A Random Walk down Wall Street - Modern finance theory. Financial instruments including stocks, bonds, options, mutual funds, and exchange-traded funds. Historical returns on asset classes. Equity analysis. Capital pricing model. Efficient market hypotheses. Index funds. Meetings with financial managers and venture capitalists.

2 units, Aut (Shoven, J)

ELECTRICAL ENGINEERING

EE 10SC. The Intellectual Excitement of Computer Science—Intellectual tradition of computer science. Topics include analysis of algorithms, computability, cryptography, hardware design, and artificial intelligence.

2 units, Aut (Hennessy, J; Koller, D)

ENGLISH

ENGLISH 15SC. Mixed Race in the New Millennium — Current controversies over mixed race identification. Political and aesthetic implications. Literary and pop cultural images in literature, performance, the Internet, and visual media. Legal leverage and national recognition gained in the last decade. Organizations, web sites, and affinity and advocacy groups, and their rhetoric and graphics.

2 units, Aut (Elam, M)

ETHICS IN SOCIETY

ETHICSOC 10SC. The Meaning of Life: Moral and Spiritual Inquiry through Literature—Short novels and plays as the basis for reflection on ethical values and the purpose of life. Why are people here? How do they find meaningful work? What can death teach about life? What is the meaning of success? What is the nature of true love? How can one find balance between work and personal life? How free are people to seek their own destinies? What obligations does one have to others?

2 units, Aut (McLennan, W)

FILM AND MEDIA STUDIES

FILMSTUD 10SC. International Documentary Film—Historical, aesthetic, and formal elements of documentary through classic and contemporary international nonfiction films. Evolution of technology. How digital tools allow new filmmakers to emerge from underrepresented populations. Students create class web site with documentary photo essays of a Bay Area international community.

2 units, Aut (Samuelson, K)

GEOLOGICAL AND ENVIRONMENTAL SCIENCES

GES 12SC. Environmental and Geological Field Studies in the Rocky Mountains—Geologic origin from three billion years ago, paleoclimatology and glacial history, long- and short-term carbon cycle and global climate change, and environmental issues related to changing land-use patterns and increased demand for natural resources. Small groups analyze data to prepare reports and maps.

2 units, Aut (Chamberlain, P)

MUSIC

MUSIC 10SC. Sound, Digital Sound, and Massive Sound Media — Principles of sound production, hearing, and digital audio. Given the use of audio streaming and compression, and reliance on loudspeakers for the consumption of sound, are all aspects of sound being preserved? Team assignments in sound analysis, music recording, and instrument, and an individual topic for a web-based report.

2 units, Aut (Chafe, C)

MUSIC 11SC. Men, Women, and Opera—Six operas through the lenses of gender and sexuality. Italian romantic opera. Contemporary queer/feminist appropriations. Mozart's comic operas. Romantic obsessions with beauty, music, and love. Thinking and writing critically about music. Opera viewing. Team projects staging an operatic scene.

2 units, Aut (Hadlock, H)

POLITICAL SCIENCE

POLISCI 10SC. American Foreign Policy in the 21st Century—The substance of U.S. foreign policy, and the political considerations that influence the making and conduct of American diplomacy. Topics include the prospects for conflict and cooperation among the great powers, regional security, peacekeeping and peacemaking, international terrorism, the proliferation of weapons of mass destruction, the global economy, and the domestic politics of U.S. foreign policy.

2 units, Aut (Blacker, C)

POLISCI 12SC. Race, Ethnicity, and the Future of California — California is now the most racially and ethnically diverse state in the nation. The challenges facing Californians in light of population trends. How has public policy responded? Focus is on population growth, education, immigration, political participation, and economic growth. Preparation of a policy proposal to the California governor.

2 units, Aut (Fraga, L)

POLISCI 16SC. How European Empires Shaped the Modern World—How today's postcolonial world is influenced by European occupation. Why were Europeans so extroverted? How did Europe govern so many overseas territories for so long? The movement to political independence. Moral evaluation of the European colonial project. Readings include primary documents, historical overviews, and works analyzing imperialism, colonialism, and nationalism.

2 units, Aut (Abernethy, D)

POLISCI 17SC. What's the Matter with California? — Historical origins, evolution, and current status of California's political system. Chronic budget volatility, legislative paralysis, and the initiative process to make law. Deteriorating educational, transportation, and energy infrastructures, demographic and economic transformations unaccompanied by commensurate political adaptations, and failure to effect political change. The executive and legislative branches. Changing characteristics of the electorate. Role of political parties. Politics of redistricting, education, transportation, energy, and the environment. Discussion with policy makers and elected officials in Sacramento.

2 units, Aut (Brady, D; Kennedy, D; Noll, R)

RELIGIOUS STUDIES

RELIGST 11SC. Religion in Science Fiction and Fantasy—How the literature of science fiction and fantasy explores current conceptions about religion. Religious themes such as free will and determinism, immortality, apocalypse, and redemption. How religion figures in the contemporary imagination.

2 units, Aut (Gelber, H)

SYMBOLIC SYSTEMS

SYMBSYS 10SC. The University as a Local and Global Citizen — How Stanford impacts communities locally and globally. Focus is on opportunities for students, faculty, staff, and the institution to serve the world. Local history and tensions between Stanford and neighbors. Faculty and student involvement in local communities. Homelessness and the disparities of wealth. Environmental problems such as air pollution, traffic, and loss of open space. Involvement in work that serves the public.

2 units, Aut (Wasow, T; Davies, T)

FRESHMAN SEMINARS AND SOPHOMORE SEMINARS AND DIALOGUES

Freshman and Sophomore Seminars and Dialogues are offered in many disciplines throughout the academic year. Freshman preference seminars are given for 3-4 units to a maximum of 16 students, and generally meet twice weekly. Although preference for enrollment is given to freshmen, sophomores and first-year transfer students may participate on a space-available basis and with the consent of the instructor. Sophomore preference seminars and dialogues, similarly, give preference to sophomores and first-year transfer students, but freshmen may participate on a space-available basis and with the consent of the instructor. Sophomore preference seminars are given for 3-5 units to a maximum of 14 students, while sophomore preference dialogues take the form of a directed reading, and are given for 1-2 units to a maximum of 5 students.

All seminars require a brief application. See the *Time Schedule*, the Stanford Introductory Seminars course catalogue published each September, or http://introsems.stanford.edu/. Due dates for 2006-07 applications for both freshman and sophomore preference courses are: Autumn Quarter, 5 p.m., September 22; Winter Quarter, noon, December 8; Spring Quarter, noon, March 16.

For course descriptions, see course listings in the teaching department section of this bulletin.

F = preference to freshmen; S = preference to sophomores; Dial = dialogue; Sem = Seminar.

AERONAUTICS AND ASTRONAUTICS

AA 113N. Structures: Why Things Don't (and Sometimes Do) Fall Down—(S,Sem) GER:DB-EngrAppSci

3 units, Win (Springer, G)

AA 115N. The Global Positioning System: Where on Earth are We, and What Time is It? — (F,Sem) GER:DB-EngrAppSci

3 units, Spr (Enge, P)

AMERICAN STUDIES

 ${\bf AMSTUD\,68N.\,Mark\,Twain\,and\,American\,Culture} - (Same\,as\,ENG-LISH\,68N.)\,(F,Sem)\,GER:DB-Hum$

4 units, Aut (Fishkin, S)

AMSTUD 114N. Visions of the 1960s—(S,Sem) GER:DB-Hum, EC-AmerCul

5 units, Aut (Gillam, R)

APPLIED PHYSICS

APPPHYS 79Q. Energy Choices for the 21st Century—(S,Sem) 3 units, Aut (Fox, J; Geballe, T)

BIOCHEMISTRY

BIOC 118Q. Genomics and Medicine—(S,Sem)GER:DB-Engr-AppSci

3 units, Spr (Brutlag, D)

BIOENGINEERING

BIOE 70Q. Medical Device Innovation—(S,Sem)

3 units, Spr (Doshi, R)

BIOMEDICAL INFORMATICS

BIOMEDIN 109Q. Genomics: A Technical and Cultural Revolution—(Same as GENE 109Q.) (S,Sem)

3 units, Win (Altman, R)

BIOLOGICAL SCIENCES

BIOSCI 11N. Biotechnology in Everyday Life—(F,Sem) GER:DB-NatSci 3 units, Aut (Walbot, V)

BIOSCI 13N. Environmental Problems and Solutions—(F,Sem) GER:DB-NatSci

3 units, Spr (Ehrlich, P)

BIOSCI 14N. Plants and Civilization—(F,Sem) GER:DB-NatSci 3 units, Spr (Mooney, H)

BIOSCI 15N. Environmental Literacy—(F,Sem) GER:DB-NatSci, WRITE-2

3 units, Win (Schneider, S)

BIOSCI 21N. Evolutionary Basis of Animal Sexual Behaviors—(F,Sem) GER:DB-NatSci

3 units, Spr (Baker, B)

BIOSCI 25N. Biogeography of Disease—(F,Sem)

3 units, Aut (Hadly, E)

BIOSCI 25Q. The Molecular Basis of Genetic Disease—(S,Sem) GER:DB-NatSci

3 units, Spr (Kopito, R)

BIOSCI 26N. Maintenance of the Genome—(F,Sem) GER:DB-NatSci 3 units, Spr (Hanawalt, P)

BIOSCI 28N. Molecular Basis of Cancer—(F,Sem) GER:DB-NatSci 3 units, Spr (Fang, G)

BIOSCI 31Q. Ants: Behavior, Ecology, and Evolution—(S,Sem) 3 units, Spr (Gordon, D)

BIOSCI 33N. Conservation Science and Practice—(F,Sem) GER: DB-NatSci

3 units, Spr (Daily, G)

CHEMICAL ENGINEERING

CHEMENG 60Q. Environmental Regulation and Policy—(S,Sem) GER:DB-EngrAppSci

3 units, Aut (Robertson, C; Libicki, S)

CHEMENG 70Q. Masters of Disaster—(S,Sem) GER:DB-EngrAppSci 3 units, Aut (Robertson, C; Moalli, J)

CHEMENG 80Q. Art, Chemistry, and Madness—(S,Sem)

3 units, Spr (Frank, C; Loesch-Frank, S)

CHEMISTRY

CHEM 22N. Naturally Dangerous—(F,Sem)

2 units, Aut (Collman, J), Spr (Collman, J)

CHEM 24N. Nutrition and History—(F,Sem)

2 units, Spr (Huestis, W)

CHEM 25N. Science in the News—(F,Sem)

3 units, Aut (Andersen, H)

CHEM 27N. Lasers: The Light Fantastic—(F,Sem) GER:DB-NatSci 3 units, Win (Moerner, W)

CHINESE GENERAL

CHINGEN 74Q. What is Modern Chinese?—(S,Dial)

1-2 units, Spr (Sun, C)

CIVIL AND ENVIRONMENTAL ENGINEERING

 $\begin{tabular}{ll} \textbf{CEE 31Q. Accessing Architecture through Drawing} - (S,Sem) GER: \\ DB-EngrAppSci \\ \end{tabular}$

4 units, Aut (Walters, P)

CEE 46Q. Fail Your Way to Success—(S,Sem) GER:DB-Engr-AppSci

3 units, Spr (Clough, R)

CEE 48Q. Designing Organizations to Execute Global Projects—(S,Sem)

4 units, Win (Levitt, R)

CEE 80N. The Art of Structural Engineering—(F,Sem) GER:DB-EngrAppSci

4 units, Win (Billington, S)

CLASSICS ART/ARCHAEOLOGY

CLASSART 21Q. Eight Great Archaeological Sites in Europe—(S,Sem) GER:DB-Hum, WRITE-2

3-5 units, Aut (Shanks, M)

CLASSICS GENERAL

CLASSGEN 6N. Antigone: From Ancient Democracy to Contemporary Dissent—(Same as DRAMA 12N.) (F,Sem) GER:DB-Hum, EC-Gender

4 units, Aut (Rehm, R)

CLASSGEN 17N. Odysseus of Many Turnings—(F,Sem)

4-5 units, Aut (Martin, R)

CLASSGEN 20N. Mapping the Mediterranean—(F,Sem)

4-5 units, Aut (Parker, G)

CLASSGEN 24N. Sappho: Erotic Poetess of Lesbos—(F,Sem)

3-5 units, Win (Peponi, A)

CLASSGEN 53N. Are We Our Bodies?—(Same as COMPLIT 53N.) (F,Sem)

3-4 units, Spr (Nightingale, A)

CLASSICS/HISTORY

CLASSHIS 22N. Ancient and Modern Slavery—(F,Sem) GER:DB-Hum *3-5 units, Spr (Scheidel, W)*

CLASSHIS 50Q. Rome, Europe, and China: Convergence and Divergence—(S,Dial)

1-2 units, Win (Scheidel, W)

COMMUNICATION

COMM 118Q. Theories of Film Practice—(S,Sem) WRITE-2

4 units, Win (Breitrose, H)

COMPARATIVE LITERATURE

COMPLIT 10N. Shakespeare and Performance—(F,Sem) GER:DB-Hum, EC-Gender

3 units, Spr (Parker, P)

COMPLIT 11Q. Shakespeare, Playing, Gender—(S,Sem) GER:DB-Hum, EC-Gender

3 units, Win (Parker, P)

COMPLIT 18N. Thomas Mann's *Death in Venice*—(Same as GERGEN 18N.) (F,Sem)

4 units, Aut (Berman, R)

COMPLIT 40N. Reading Across Literature—(F,Sem) GER:DB-Hum 5 units, Spr (Palumbo-Liu, D)

COMPLIT 41Q. Ethnicity and Literature—(S,Sem) GER:DB-Hum, EC-AmerCul

3-5 units, Aut (Palumbo-Liu, D)

COMPLIT 53N. Are We Our Bodies?—(Same as CLASSGEN 53N.) (F.Sem)

3-4 units, Spr (Nightingale, A)

COMPARATIVE MEDICINE

COMPMED 81N. Comparative Anatomy and Physiology of Mammals—(F,Sem)

3 units, Win (Bouley, D)

COMPMED 83Q. Horse Medicine—(S,Dial)

1-2 units, Aut (Green, S)

COMPUTER SCIENCE

CS 20N. The Role of Information Technology in Global Conflict Resolution—(F,Sem)

3 units, Spr (Shoham, Y)

CS 26N. Motion Planning for Robots, Digital Actors, and Other Moving Objects—(F,Sem) GER:DB-EngrAppSci

3 units, Spr (Latombe, J)

CS 48N. The Science of Art—(F,Sem) GER:DB-EngrAppSci 3 units, Win (Levoy, M)

CS 73N. Business on the Information Highways—(F,Sem) WRITE-2 3 units, Spr (Wiederhold, G; Barr, A; Tessler, S)

CS 74N. Digital Dilemmas—(F,Sem) GER:DB-EngrAppSci 3 units, Aut (Dill, D)

CULTURAL AND SOCIAL ANTHROPOLOGY

CASA 8N. The Anthropology of Globalization—(F,Sem) GER:DB-SocSci

3-4 units, Aut (Ebron, P)

CASA 9N. Anthropology of Food—(F,Sem)

3-4 units, Spr (Gupta, A)

CASA 100Q. Ethnographies of North America: An Introduction to Cultural and Social Anthropology—(S,Sem) GER:DB-SocSci

3-4 units, Win (Wilcox, M)

DRAMA

DRAMA 12N. Antigone: From Ancient Democracy to Contemporary Dissent—(Same as CLASSGEN 6N.) (F,Sem) GER:DB-Hum, EC-Gender

4 units, Aut (Rehm, R)

DRAMA 13N. Hamlet(s)—(F,Sem) GER:DB-Hum

4 units, Win (Rayner, A)

DRAMA 16N. Beauty or the Beast? Kitsch and Contemporary Culture—(F,Sem)

4 units, Aut (Jakovljevic, B)

DRAMA 17N. From Inside the First World: Women of Color Playwrights Re-mapping the U.S.—(Same as SPANLIT 178N.) (F,Sem) GER:DB-Hum, EC-AmerCul

3 units, Win (Moraga, C)

DRAMA 18N. American Performance Traditions—(F,Sem) GER: DB-Hum

4 units, Spr (Fordyce, E)

 $\begin{tabular}{ll} \textbf{DRAMA 180Q. Noam Chomsky: The Drama of Resistance} - (S,Sem) \\ GER:DB-Hum \end{tabular}$

3 units, Aut (Rehm, R)

DRAMA 184Q. The Dancing Couple as a Lens on American Culture, 1890-1950—(S,Sem) GER:DB-Hum

4 units, Spr (Ross, J; Powers, R)

DRAMA 188Q. From Brecht to Müller: German Theater and Performance since World War II—(S,Dial)

1-2 units, Aut (Weber, C)

DRAMA 189Q. Mapping and Wrapping the Body—(S,Sem) GER: DB-Hum

3 units, Aut (Eddelman, W)

EARTH SYSTEMS

EARTHSYS 45N. Powering the Rim: Energy Issues for the Pacific—(Same as GES 45N.) (F,Sem)

3 units, Win (Howell, D; Graham, S)

ECONOMICS

ECON 11N. Understanding the Welfare System—(F,Sem)

2 units, Aut (MaCurdy, T)

ECON 93Q. Global Capital Markets—(S,Dial)

2 units, Win (Marotta, G)

EDUCATION

EDUC 92Q. Leadership, Ethics, and the Law—(S,Sem)

3-5 units, Aut (Davis, S)

EDUC 94Q. Catastrophe as Curriculum: Teaching and Representing the Holocaust-(S,Dial)

1-2 units, Spr (Wineburg, S)

EDUC 115Q. Identities, Race, and Culture in Urban Schools—(S.Sem)

3 units, Spr (Nasir, N)

ELECTRICAL ENGINEERING

EE 10N. How Musical Instruments Work—(F,Sem) GER:DB-Engr-AppSci

3 units, Spr (Miller, D)

EE 18N. Pi and Other Physical Constants in Math, Physics, and Engineering—(F,Sem)

3 units, Spr (McKeown, N)

EE 19N. How the Internet Works—(F,Sem)

 $3\ units,\ Win\ (Tobagi,\ F)$

EE 20N. Hacking Stuff—(F,Sem)

3 units, Win (Peumans, P)

EE 21N. What is Nanotechnology?—(F,Sem)

3 units, Aut (Wong, P)

EE 60Q. Man versus Nature: Coping with Disasters Using Space Technology—(Same as GEOPHYS 60Q.) (S,Sem) GER:DB-EngrAppSci 3 units, Aut (Zebker, H)

ENGLISH

ENGLISH 52N. Top Ten Books—(F,Sem)

3 units, Win (Jones, G)

ENGLISH 53N. Winners of the Nobel Prize in Literature—(F,Sem) 3 units, Win (Shloss, C)

ENGLISH 62N. Eros in Modern American Poetry—(F,Sem) GER:

3 units, Win (Fields, K)

ENGLISH 64N. Growing Up in America—(F,Sem) GER:DB-Hum 3 units, Aut (Moya, P)

ENGLISH 66N. Homage: The Art of Influence—(S,Sem) 3 units, Spr (Tallent, E)

ENGLISH 68N. Mark Twain and American Culture—(Same as AMSTUD 68N.) (F,Sem) GER:DB-Hum

4 units, Aut (Fishkin, S)

ENGLISH 69O. Sources of Global Challenges Today, Possibilities for **Global Solutions:** A Literary Exploration—(S,Sem)

3-5 units, Aut (Drake, S)

ENGLISH 77N. Living in the Past: Italy in the Anglo-American Imagination—(F,Sem) GER:DB-Hum

3 units, Aut (Evans, M)

ENGLISH 82Q. Shakespeare's Plays—(S,Sem) GER:DB-Hum 5 units, Win (Rebholz, R)

ENGLISH 83Q. Playwriting: A Workshop in Craft — (S,Sem) 4 units, Aut (DiPirro, K)

ENGLISH 84N. Workshop in Shakespeare and Performance— (S,Sem) GER:DB-Hum

3 units, Win (Friedlander, L)

ENGINEERING

ENGR 1590. Japanese Companies and Japanese Society—(Same as MATSCI 159O.) (S,Sem) GER:DB-SocSci 3 units, Spr (Sinclair, R)

FEMINIST STUDIES

FEMST 188N. Imagining Women: Writers in Print and in Person—

4-5 units, Aut (Miner, V)

FRENCH GENERAL

FRENGEN 48N. Machiavelli and Sons—(F,Sem)

5 units, Aut (Edelstein, D)

FRENGEN 190Q. Parisian Cultures of the 19th and Early 20th Centuries—(S,Sem) GER:DB-Hum

4 units, Spr (Bertrand, M)

GENETICS

GENE 104Q. Law and the Biosciences—(S,Sem) WRITE-2 3 units, Spr (Greely, H)

GENE 106Q. The Heart of the Matter—(S,Sem) GER:DB-NatSci 3 units, Win (Myers, R)

GENE 109Q. Genomics: A Technical and Cultural Revolution — (Same as BIOMEDIN 109Q.) (S,Sem)

3 units, Win (Altman, R)

GEOLOGICAL AND ENVIRONMENTAL SCIENCES

GES 42N. Earthquakes, Faults, and Mountains of the Bay Area-(F,Sem)

5 units, Aut (Hilley, G)

GES 43N. Environmental Problems — (F,Sem) GER:DB-NatSci 3 units, Win (Loague, K)

GES 45N. Powering the Rim: Energy Issues for the Pacific — (Same as EARTHSYS 45N.) (F,Sem)

3 units, Win (Howell, D; Graham, S)

GES 49N. Field Trip to Death Valley and Owens Valley—(F,Sem) GER:DB-NatSci

3 units, Win (Mahood, G)

GES 50Q. The Coastal Zone Environment — (S,Sem) GER:DB-NatSci 3 units, Win (Ingle, J)

GES 54Q. California Landforms and Plate Tectonics—(S,Sem) GER: DB-NatSci

3 units, Aut (Miller, E)

GES 550. The California Gold Rush: Geologic Background and Environmental Impact—(S,Sem) GER:DB-NatSci, WRITE-2 3 units, Spr (Bird, D)

GES 57Q. How to Critically Read and Discuss Scientific Literature—(S,Sem) GER:DB-NatSci, WRITE-2

3 units, Win (Paytan, A)

GEOPHYSICS

GEOPHYS 5Q. Earthquakes and Archaeology—(S,Dial) 2 units, Win (Kovach, R)

GEOPHYS 20O. Predicting Volcanic Eruptions—(S,Sem) 3 units, Spr (Segall, P)

GEOPHYS 600. Man versus Nature: Coping with Disasters Using Space Technology—(Same as EE 60Q.) (S,Sem) GER:DB-EngrAppSci

3 units, Aut (Zebker, H)

GERMAN GENERAL

GERGEN 18N. Thomas Mann's Death in Venice—(Same as COMPLIT 18N.) (F,Sem)

4 units, Aut (Berman, R)

GERGEN 104Q. Resistance Writings in Nazi Germany—(S,Sem) GER:DB-Hum

3 units, Aut (Bernhardt, E)

GERGEN 140Q. Liberty, Values, and Virtues—(S,Sem) GER:DB-

4 units, Spr (Berman, R)

GERMAN LITERATURE

GERLIT 123N. The Brothers Grimm and Their Fairy Tales—(F,Sem) GER:DB-Hum

4 units, Spr (Robinson, O)

HEALTH RESEARCH AND POLICY

HRP89Q. Introduction to Crosscultural Issues in Medicine—(S,Sem) GER:EC-AmerCul

3 units, Win (Corso, I)

HISTORY

HISTORY 20N. Russia in the Early Modern European Imagination—(F,Sem) GER:DB-Hum, EC-GlobalCom, WRITE-2 5 units, Spr (Kollmann, N)

HISTORY 30N. Fiction and English Society—(F,Sem) 4 units, Aut (Stansky, P)

HISTORY 32N. The English Revolution—(F,Sem) GER:DB-Hum 4-5 units, Spr (Como, D)

HISTORY 33N. The French Revolution—(F,Sem)

5 units, Win (Baker, K)

HISTORY 33Q. Shakespeare's London: The Politics and Culture of Growth—(S,Sem)

5 units, Win (Seaver, P)

HISTORY 36N. Gay Autobiography—(F,Sem) GER:DB-Hum, EC-Gender

4 units, Win (Robinson, P)

HISTORY 37N. The Second World War as Experience and Memory —

5 units, Aut (Sheehan, J)

HISTORY 38N. The Body — (F,Sem) GER:DB-Hum, EC-Gender 5 units, Spr (Freedman, E)

HISTORY 44N. The History of Women and Gender in Science, Medicine, and Engineering—(F,Sem) GER:DB-Hum, EC-Gender 4 units, Win (Schiebinger, L)

HISTORY 48Q. South Africa: Contested Transitions—(S,Sem) GER: DB-Hum

3 units, Win (Samoff, J)

HISTORY 62N. The Atomic Bomb in Policy and History—(F,Sem) GER:DB-SocSci

5 units, Spr (Bernstein, B)

HISTORY 90Q. Buddhist Political and Social Theory—(S,Sem) GER: DB-SocSci, EC-GlobalCom

4-5 units, Aut (Mancall, M)

HISTORY 92N. Comparative Colonialism—(F,Sem) GER:DB-Hum, EC-GlobalCom

5 units, Aut (Uchida, J)

HUMAN BIOLOGY

HUMBIO 84Q. Social Justice, Responsibility, Health—(S,Sem) 4 units, Aut (Heaney, C)

HUMBIO 86Q. Love: An Exploration—(S,Sem)

3 units, Spr (Murray, A)

HUMBIO 87Q. Women and Aging—(Same as MED 87Q.) (S,Sem) GER:EC-Gender

5 units, Win (Winograd, C)

HUMBIO 88Q. Neuroethics: Neurotechnology, Free Will, and the Privacy of Human Thought—(S,Sem)

3 units, Spr (Illes-Van Der Loos, J)

HUMBIO 91Q. Neuroethology: The Neural Control of Behavior— (S,Sem) GER:DB-NatSci

3 units, Aut (Fernald, R)

HUMBIO 94Q. The Nation's Health—(S,Sem)

3 units, Aut (Heller, G)

HUMBIO 950. Gender, Culture, and HIV/AIDS—(S,Sem) GER: EC-Gender, WRITE-2

4 units, Win (Brown, N)

HUMBIO 96Q. The Death Penalty: Policy, Philosophy, and Controversy—(S.Sem)

3-4 units, Spr (Abrams, W)

HUMBIO 97Q. Sport, Exercise, and Health: Exploring Sports Medicine—(Same as ORTHO 97Q.) (S,Sem)

3 units, Spr (Matheson, G)

HUMBIO 99Q. Becoming a Doctor: Readings from Medical School, Medical Training, Medical Practice—(S,Sem)

4 units, Aut (Zaroff, L)

JAPANESE GENERAL

JAPANGEN 71N. Language and Gender in Japan: Myths and **Reality**—(F,Sem)

4 units, Win (Matsumoto, Y)

JAPANGEN 73N. Japanese Horror: The Trope of the Vengeful Ghost—(F,Sem)

4 units, Aut (Reichert, J)

LAW

LAW 107Q. Legal Craft and Moral Intuitions—(Same as POLISCI 33Q.) (S,Sem)

4 units, Win (Kelman, M)

LAW 108Q. The Federalist—(S,Sem)

2 units, Spr (Kramer, L)

LINGUISTICS

LINGUIST 44N. Living with Two Languages—(F,Sem) GER:DB-SocSci

3 units, Spr (Clark, E)

LINGUIST 47N. Languages, Dialects, Speakers—(F,Sem) GER: DB-SocSci

3 units, Aut (Anttila, A)

LINGUIST 56Q. What is the Opposite of Masculine? Gay Men and Masculinity—(S,Sem)

3 units, Spr (Zwicky, A)

LINGUIST 58Q. The Changing Practices of Letter Writing-(S,Dial)

2 units, Win (Traugott, E)

LINGUIST 59N. Language in the U.S.—(F,Sem)

3 units, Win (Rickford, J)

MANAGEMENT SCIENCE AND ENGINEERING

MS&E 920. International Environmental Policy—(S,Sem) 4 units, Win (Weyant, J)

MS&E 93Q. Nuclear Weapons, Terrorism, and Energy—(S,Sem) GER:DB-EngrAppSci

3 units, Spr (Hecker, S)

MS&E 94Q. The Public Use and Misuse of Mathematics: How to Interpret Numbers as Used by Media and Politicians—(S,Sem) 3 units, Spr (May, M)

MATERIALS SCIENCE AND ENGINEERING

MATSCI 70N. Building the Future: Invention and Innovation with Engineering Materials—(F,Sem) GER:DB-EngrAppSci, WRITE-2 5 units, Spr (Bravman, J)

MATSCI 159Q. Japanese Companies and Japanese Society—(Same as ENGR 159Q.) (S,Sem) GER:DB-SocSci

3 units, Spr (Sinclair, R)

MATHEMATICS

MATH 80Q. Capillary Surfaces: Explored and Unexplored Territory—(S.Sem)

3 units. Win (Finn, R)

MATH 88Q. The Mathematics of the Rubik's Cube—(S,Sem) 3 units, Spr (Bump, D)

MECHANICAL ENGINEERING

ME 10N. Form and Function of Animals Skeletons—(F.Sem) 3 units. Win (Carter, D)

ME 12N. The Jet Engine—(F,Sem) GER:DB-EngrAppSci 3 units, Win (Eaton, J)

ME 13N. Designing the Human Experience—(F,Sem) GER:DB-Engr-AppSci

3 units, Win (Leifer, L)

ME 16N. The Science of Flames—(F,Sem) GER:DB-EngrAppSci 3 units, Win (Mitchell, R)

ME 18Q. Creative Teams and Individual Development—(S,Sem) GER:DB-EngrAppSci

3 units, Aut (Wilde, D)

ME 21N. Renaissance Machine Design — (F,Sem) GER: DB-EngrAppSci 3 units, Win (Cutkosky, M)

ME 22N. The Art of Experimentation — (F,Sem)

3 units, Aut (Santiago, J)

MEDICINE

MED 70Q. Cancer and the Immune System—(S,Sem) WRITE-2 3 units, Spr (Negrin, R)

MED 87Q. Women and Aging—(Same as HUMBIO 87Q.) (S,Sem) GER:EC-Gender

5 units, Win (Winograd, C)

MED 88Q. Dilemmas in Current Medical Practice—(S,Sem)

3 units, Aut (Croke, J; Jones, H)

MED 93Q. The AIDS Epidemic: Biology, Behavior, and Global **Responses**—(S,Sem)

3 units, Aut (Katzenstein, D)

MED 940. Hormones, Health, and Disease—(S,Sem)

3 units, Win (Feldman, D)

MED 108Q. Human Rights and Health—(S,Sem)

3 units, Win (Laws, A)

MED 118Q. Coronary Heart Disease, Pathophysiology, and Treat-

ment-(S,Sem)

3 units, Spr (Stertzer, S)

MOLECULAR AND CELLULAR PHYSIOLOGY

MCP 100Q. The Hippocampus as a Window to the Mind — (S,Sem) 3 units, Spr (Madison, V)

MUSIC

MUSIC 13Q. Classical Music and Politics: Western Music in Modern China—(S,Sem) GER:DB-Hum, EC-GlobalCom

3 units, Spr (Cai, J)

MUSIC 14N. Women Making Music — (F,Sem) GER:DB-Hum, EC-Gender

3 units, Aut (Hadlock, H)

MUSIC 15Q. Topics in American Music—(S,Sem) GER:DB-Hum, EC-AmerCul

3 units. Win (Cohen, A)

MUSIC 16N. Music, Myth, and Modernity: Wagner's Ring Cycle and Tolkien's Lord of the Rings — (F,Sem) GER:DB-Hum, EC-GlobalCom

3 units, Spr (Grey, T)

MUSIC 17N. The Operas of Mozart—(F,Sem) GER:DB-Hum 3 units, Win (Berger, K)

MUSIC 17Q. Perspectives in North American Taiko—(S,Sem) GER:

DB-Hum, EC-AmerCul 4 units, Spr (Sano, S)

MUSIC 35N. The Music and Ideas of Charles Ives—(F,Sem) GER: DB-Hum, EC-AmerCul

3 units, Aut (Barth, G)

MUSIC 36N. Experimental Instruments—(F,Sem)

4 units, Aut (Applebaum, M)

NEUROLOGY AND NEUROLOGICAL SCIENCES

NENS 66Q. The Diseased Brain: Multiple Sclerosis as a Model of Neurological Illness—(S,Sem) Introduction to medical neuroscience through multiple sclerosis. Examination of gross and microscopic specimens of normal and diseased human brains; diagnostic test procedures; diagnostic reasoning processes leading to identification of illnesses; and the medical, social, and psychological dimensions of living with chronic illness and disability. Patient interviews and demonstrations of neurodiagnostic procedures such as electroencephalography (EEG), electromyography (EMG), cerebrospinal fluid analysis, and magnetic resonance imaging (MRI). Recommended: background in biological sciences.

3 units, Win (Dorfman, L)

NEUROSURGERY

NSUR 61Q. Biocomputation and Design—(S,Sem) Research and development in computerized medical technology, and applications from patient-monitoring devices and two-dimensional image-based diagnostics to robotic surgery and volumetric image-based surgical navigation. Research at Stanford in biomedical computation and biomedical design. Requirements for effective use of robotics, three-dimensional imaging, and medical informatics. Common denominators for biomedical computation and design. Usability requirements for designing software or instrumentation for clinicians and healthcare systems. Recommended: math and computer background.

4 units, Spr (Shahidi, R)

ORTHOPEDIC SURGERY

ORTHO 95Q. Human Performance: Its Measurement and Analysis—(S,Sem) Lab-based. Measuring and interpreting human performance data. Clinical problems using the following types of tests: VO₂max, anaerobic power and endurance, flexibility, muscular strength and endurance, lactate threshold, exercise ECG and echocardiography, bone density, gait analysis, joint motion analysis, and nutritional analysis.

3 units, Win (Matheson, G)

ORTHO 97Q. Sport, Exercise, and Health: Exploring Sports Medicine—(Same as HUMBIO 97Q.) (S,Sem)

3 units, Spr (Matheson, G)

PATHOLOGY

PATH 103Q. Leukocyte Migration — (S,Dial)

1 unit, Aut (Michie, S)

PATH 105Q. Final Analysis: The Autopsy as a Tool of Medical Inquiry—(S,Sem)

3 units, Spr (Regula, D)

PEDIATRICS

PEDS 1040. Medicine's Greatest Discoveries—(S,Sem) Anatomy, circulation, bacteria, vaccination, anesthesia, x-ray, tissue culture, cholesterol, antibiotics, and DNA. The history of these discoveries; lives of the discoverers, including Vesalius, Harvey, Leeuwenhoek, Jenner, Roentgen, and Fleming; and trials they faced in their personal and professional journeys. Guest lectures from Medical school faculty.

3 units, Win (Prober, C)

PEDS 111Q. Issues of Race and Ethnicity in the Health of Children —

(S,Sem) Medicine and pediatrics from a public-health, evidence-based perspective. How research methods unmask health issues for at-risk racial and ethnic groups of children. Determinants of health with regard to race and ethnicity and ideas for changes in public policy. Students identify an area of interest and proposed intervention.

3-4 units, Aut (Burgos, A)

PHILOSOPHY

PHIL 11N. Skepticism—(F,Sem) GER:DB-Hum 3 units, Aut (De Pierris, G)

PHIL 13N. What is Truth?—(F,Sem) GER:DB-Hum 3 units, Win (Mints, G)

PHIL 14N. Belief—(F,Sem) GER:DB-Hum 3 units, Spr (Lawlor, K)

PHIL 16N. Values and Objectivity—(F,Sem) GER:DB-Hum 3 units, Aut (Ryckman, T)

PHYSICS

PHYSICS 11N. The Basic Rules of Nature—(F,Sem) GER:DB-NatSci 3 units, Spr (Shenker, S)

PHYSICS 18N. Revolutions in Concepts of the Cosmos—(F,Sem) GER:DB-NatSci

2 units, Win (Abel, T)

PHYSICS 41N. Mechanics, Insights, Applications, and Advances —

3 units, Win (Burchat, P)

PHYSICS 45N. Advanced Topics in Light and Heat—(F,Sem) 1 unit, Aut (Romani, R)

PHYSICS 61N. Applications of Electromagnetism—(F,Sem) 1 unit, Aut (Gratta, G)

PHYSICS 80N. The Technical Aspects of Photography—(F,Sem) 3 units, Win (Osheroff, D)

PHYSICS 83N. Physics in the 21st Century—(F,Sem) GER:DB-

3 units, Aut (Dimopoulos, S)

PHYSICS 87N. The Physics of One: Nanoscale Science and Tech**nology**—(F,Sem)

3 units, Aut (Manoharan, H)

POLITICAL ECONOMY (GSB)

POLECON 111Q. Game Theory and Mathematical Models in **Politics**—(S,Sem) Rational choice methodology in political science. Why have third-party candidates been unsuccessful in the U.S. when other countries often have numerous political parties? Does racial gerrymandering contribute to Republican control of the House of Representatives? Why do people vote, despite the slim chance that a single vote determines an election? Is there a difference between policy outcomes under unified government versus divided government.

5 units, Win (Shotts, K)

POLITICAL SCIENCE

POLISCI 21N. The Evolution of Voting Rights in the U.S.—(F,Sem) GER:DB-SocSci

5 units, Win (Fraga, L)

POLISCI 330. Legal Craft and Moral Intuitions—(Same as LAW 107Q.) (S,Sem)

4 units, Win (Kelman, M)

POLISCI 35Q. Food and Politics—(S,Dial)

2 units, Win (Reich, R)

POLISCI 41Q. Building Democracy after Conflict: Iraq in Comparative Perspective—(S,Sem)

5 units, Spr (Diamond, L)

POLISCI 46N. Contemporary African Politics—(F,Sem) GER:DB-SocSci, EC-GlobalCom

5 units, Aut (Weinstein, J)

PORTUGUESE LITERATURE

PORTLIT 193Q. Spaces and Voices of Brazil through Films—

3-4 units, Aut (Wiedemann, L)

PSYCHIATRY

PSYC 76Q. Neurobiology of Mood, Temperament, and Creativity -(S,Sem) Current neurobiological and psychological research on mood, temperament, and creativity; the evolving field of neuroscience; and how new technologies are helping to illuminate these previously obscure processes. Methods to assess mood, temperament, and creativity. WRITE-2 4 units, Win (Ketter, T)

PSYC 78Q. Mental Health in Women Athletes—(S,Sem) Developmental, social, and performance issues in women's team sports. Topics include transition to Stanford, time management, coping with injuries, and preparing for the future. Case studies.

3 units, Aut (Steiner, H; Denny, K)

PSYC 111Q. Madness and the Womb: Mental Illness in Women through the Centuries—(S,Sem) Historical and current concepts of mental illness in women. Premenstrual dysphoric disorder (PMS), postpartum depression, menopausal mood disorders, and eating disorders. Historical biopsychosocial approach. Readings include women's diaries and advice books, physicians' casebooks, and 19th- and 20th-century medical texts. Guest speakers from art and literature departments. Literary and artistic images, and the social and cultural contexts of these disorders during the last 300 years.

3 units, Win (Rasgon, N; Williams, K; Reynolds, M)

PSYCHOLOGY

PSYCH 7Q. Language Acquisition — (S,Sem)

3 units, Aut (Fernald, A)

PSYCH 12Q. Self Theories—(S,Dial)

2 units, Win (Gross, J)

PSYCH 13N. Culture and Social Relationships—(F,Sem) GER:DB-SocSci

3 units. Win (Tsai, J)

PSYCH 16N. Amines and Affect—(F,Sem) GER:DB-SocSci 3 units, Win (Knutson, B)

PSYCH 17N. Language and Society: How Languages Shape Lives — (F,Sem) GER:DB-SocSci

3 units, Aut (Boroditsky, L)

PSYCH 21N. Conflict, Dispute, Resolution, and the Pursuit of Justice—(S,Sem)

3 units, Spr (Ross, L)

PSYCH 22N. The Psychology of Everyday Morality—(F,Sem) 4 units, Spr (Monin, B)

RELIGIOUS STUDIES

RELIGST 4N. The Creation of Woman—(F,Sem) GER:DB-Hum, EC-Gender

3 units, Aut (Fonrobert, C)

RELIGST 6N. The Life of the Buddha—(F,Sem) GER:DB-Hum, EC-GlobalCom

3 units, Win (Zimmermann, M)

RELIGST 7N. The Divine Good: Secular Ethics and Its Discontents—(F,Sem)

4 units, Spr (Sockness, B)

SCIENCE, TECHNOLOGY, AND SOCIETY

STS 101Q. Technology in Contemporary Society—(S,Sem) GER: DB-SocSci

4 units, Aut (McGinn, R)

SLAVIC GENERAL

SLAVGEN 13N. Russia and the Russian Experience—(F,Sem) GER: DB-Hum

3-4 units, Win (Schupbach, R)

SLAVGEN 77Q. Russia's Weird Classic: Nikolai Gogol—(S,Sem)

GER:DB-Hum

3 units, Aut (Fleishman, L)

SOCIOLOGY

SOC 15N. The Transformation of Socialist Societies—(F,Sem)

3 units, Win (Tuma, N)

SOC 22N. The Roots of Social Protest—(F,Sem)

3 units, Spr (Olzak, S)

SOC 26N. The Changing American Family—(F,Sem)

3 units, Aut (Rosenfeld, M)

SOC 32N. Law in Society—(F,Sem) GER:DB-SocSci

3 units, Spr (Sandefur, R)

SOC 46N. Race, Ethnic, and National Identities: Imagined Com-

munities—(F,Sem)

3 units, Spr (Rosenfeld, M)

SPANISH LITERATURE

SPANLIT 107N. Latin American Women: Novels and Films—(F.Sem)

3-5 units, Win (Ruffinelli, J)

SPANLIT 114N. Lyric Poetry—(F,Sem)

3-5 units, Spr (Predmore, M)

SPANLIT 115N. Growing up Bilingual—(F,Sem) GER:EC-AmerCul

3-5 units, Spr (Valdés, G)

 $\textbf{SPANLIT 116N. New World Creation Narratives} - (F, Sem) \ GER:$

DB-Hum

3-4 units, Aut (Brotherston, J)

SPANLIT 178N. From Inside the First World: Women of Color

Playwrights Re-mapping the U.S.—(Same as DRAMA 17N.) (F,Sem)

GER:DB-Hum, EC-AmerCul

3 units, Win (Moraga, C)

SPECIAL LANGUAGE PROGRAM

SPECLANG 198Q. Modern Greece in Film and Literature - (S, Sem)

3-5 units, Aut (Prionas, E)

STATISTICS

STATS 43N. Displaying Data: Principles, Computer Graphics, and

the Internet — (F,Sem) GER:DB-Math

3 units, Win (Walther, G)

SURGERY

SURG 68Q. Current Concepts in Transplantation—(S,Sem) WRITE-2

3 units, Spr (Martinez, O; Krams, S)

 $SURG\ 69Q.$ It's All in the Head: Understanding Diversity, Develop-

 $\boldsymbol{ment, and \ Deformities \ of \ the \ Face} - (S,Sem)$

3-4 units, Win (Helms, J)