

ACADEMIC PROGRAMS AND CENTERS, AND INDEPENDENT RESEARCH LABORATORIES, CENTERS, AND INSTITUTES

Vice Provost and Dean of Research and Graduate Policy and Dean of the Independent Laboratories, Centers, and Institutes: Arthur Bienstock

Associate Dean of Research: Ann M. Arvin

Associate Dean of Graduate Policy: M. Godfrey Mungal

Independent Research Laboratories, Centers, and Institutes perform multidisciplinary research that extends beyond the scope of any one of the University's organized schools.

The following laboratories, centers, and institutes report to the Vice Provost and Dean of Research and Graduate Policy:

Stanford Institute for Economic Policy Research

Geballe Laboratory for Advanced Materials

Edward L. Ginzton Laboratory

Global Climate and Energy Program

W. W. Hansen Experimental Physics Laboratory

Stanford Humanities Center

Stanford Institute for the Environment

Stanford Center for Innovations in Learning

Stanford Institute for International Studies

Kavli Institute for Particle Astrophysics and Cosmology

Center for the Study of Language and Information

Stanford Program for Bioengineering, Biomedicine, and Biosciences (BioX)

Stanford Institute for the Quantitative Study of Society

The Hoover Institution on War, Revolution and Peace and the Stanford Linear Accelerator Center (SLAC) report to the President and Provost. SLAC is independently operated under a contract with the Department of Energy.

Following is a description of the activities of these organizations and other academic programs and centers, including research activities, and where applicable, courses offered.

STANFORD CENTER FOR CHICANO RESEARCH

Faculty Executive Committee: Albert Camarillo (History, Comparative Studies in Race and Ethnicity), James O. Leckie (Engineering), Yvonne Maldonado (Pediatrics)

The Stanford Center for Chicano Research (SCCR) is an affiliated research unit of the Center for Comparative Studies in Race and Ethnicity (CSRE) and one of the founding member institutions of the Inter-

University Program for Latino Research (IUPLR). The objective of the SCCR is to facilitate basic and policy-oriented research on the nation's second largest ethnic minority group, Mexican Americans. As part of the IUPLR consortium, the SCCR also serves as one of the sites to support research projects involving faculty and graduate students and is currently supported through various grants from government agencies.

The participating faculty of SCCR include professors from several departments in the School of Humanities and Sciences, as well as faculty from Business, Education, Engineering, Law, and Medicine. The SCCR was founded in 1980 and remains the only research center of its kind at a major private university.

STANFORD INSTITUTE FOR ECONOMIC POLICY RESEARCH

Director: John B. Shoven

Deputy Director: Gregory Rosston

Institute Office: 579 Serra Mall

Phone: (650) 725-1874

Web Site: <http://siepr.stanford.edu>

The primary mission of the Stanford Institute for Economic Policy Research (SIEPR) is to encourage and support research on economic policy issues in areas such as economic growth, technology policies, environmental and telecommunication regulation, tax reform, international trade, and monetary policy. SIEPR pursues four interrelated goals in support of this mission: (1) facilitating graduate student and faculty research on economic policy issues; (2) building a community of scholars conducting policy research; (3) disseminating research findings broadly; and (4) linking academics at Stanford with decision makers in business and government.

SIEPR is a University-wide research institute, involving economists from the schools of Business, Engineering, Law, Humanities and Sciences, as well as the Hoover Institution and the Institute for International Studies. Affiliated faculty and students maintain appointments in their home departments while working on SIEPR projects. In addition, scholars visiting from other institutions may apply for affiliation with SIEPR.

Much of the research at SIEPR takes place in its three research centers and six programs. The Stanford Center for International Development (SCID; Roger G. Noll, Director) fosters research on the economic problems of developing economies and economies in transition, as well as analyzing the political aspects of economic policy reform and historical episodes of reform. For more information about this center call (650) 725-8730. The Center on Employment and Economic Growth (CEEG; Tim Bresnahan, Director) is focusing on the relationship between long-term economic growth, the economic success of individuals and families in their jobs and careers, and the role played by higher education and how it can supply workers and technology in the work force. The program on regulation is part of this center. The Center for Public and Private Finance (CPPF; John B. Shoven and Michael J. Boskin, co-Directors) encompasses work on macroeconomics and monetary policy, tax and budget policy, and finance.

Separate research programs within SIEPR and their directors are the California Policy Program (Thomas MaCurdy); the Energy, Natural Resources, and the Environment Program (James L. Sweeney); the Knowledge Networks and Institutions for Innovation Program (Paul A. David); the Program on the Japanese Economy (Masahiko Aoki); and the Program on Market Design (Susan Athey and Paul Milgrom).

GEBALLE LABORATORY FOR ADVANCED MATERIALS

Director: Malcolm R. Beasley

Web Site: <http://www-lam.stanford.edu>

The Geballe Laboratory for Advanced Materials (GLAM) is an Independent Laboratory that reports to the Dean of Research. The Laboratory supports the research activities of a number of faculty members from the departments of Applied Physics, Chemical Engineering, Chemistry, Electrical Engineering, Materials Science and Engineering, Mechanical Engineering, and Physics. The multidisciplinary foundations of faculty, students, and research provide a dynamic academic environment for a broad spectrum of scientific research areas including high temperature superconducting materials and devices, mesoscopic devices, magnetic recording and storage media materials, electronic materials, optoelectronic materials, nanoscale materials and phenomena, nanoprobe devices, highly correlated electronic systems, computational materials science, condensed matter theory and physics, polymeric and biological materials, crystal growth, and thin film synthesis of complex oxides.

GLAM also provides advanced materials characterization and synthesis facilities for its members as well as for the Stanford materials research community at large. They include a focused ion beam (FIB), scanning electron microscopy (SEM), scanning probe microscopy (SPM), transmission electron microscopy (TEM), x-ray diffraction analysis (XRD), and x-ray photoelectron spectroscopy (XPS) for characterization and thin film deposition capabilities for synthesis of materials. These facilities are managed by professional staffs who also conduct research and development of new tools and techniques in areas related to advanced materials synthesis and characterization.

The Geballe Laboratory for Advanced Materials is housed in the Moore Materials Research Building and McCullough Building complex.

EDWARD L. GINZTON LABORATORY

Director: David A. B. Miller

Web Site: <http://www.stanford.edu/group/ginzton/>

The Ginzton Laboratory houses the research activities of a number of faculty members from the departments of Applied Physics, Electrical Engineering, and Mechanical Engineering. The multidisciplinary foundations of faculty, students, and research provide a dynamic academic environment for scientific research in the fields of photonic science and engineering, quantum science and engineering, and nanoscience and engineering, including fiber optics, laser physics and applications, mesoscopic devices, microelectromechanical and microacoustic devices and systems, optoelectronic devices and systems, photonics, nanophotonics and photonic crystals, scanning optical microscopy, quantum cryptography and computing, tunneling and force microscopy, and ultrafast and nonlinear optics.

W. W. HANSEN EXPERIMENTAL PHYSICS LABORATORY (HEPL)

Director: Robert L. Byer

Web Site: <http://hepl.stanford.edu/>

HEPL is an independent laboratory celebrating over 50 years of fundamental science and engineering research. HEPL faculty and students are engaged in research in accelerator physics, astrophysics, dark mat-

ter in the universe, free electron lasers, fundamental tests of relativity in space, gamma ray observations, gravitational wave detection, quantum condensed matter, and space based solar physics studies. Many of the programs involve satellite-based studies in fundamental physics and engineering.

HOOVER INSTITUTION ON WAR, REVOLUTION AND PEACE

Director: John Raisian

Web Site: <http://www-hoover.stanford.edu/>

The Hoover Institution, founded in 1919 by Stanford alumnus Herbert Hoover, is a public policy research center devoted to the advanced study of politics, economics, and political economy, both domestic and foreign, as well as international affairs. Hoover fellows are the foundation of the research program. This varied and distinguished community of scholars strives to conceive and disseminate ideas defining a free society within the framework of three programs:

American Institutions and Economic Performance focusing on interrelationships of U.S. political and legal institutions and economic activity, often referred to as political economy.

Democracy and Free Markets focusing on political economy in countries around the world.

International Rivalries and Global Cooperation focusing on interrelationships among countries, examining issues of foreign policy, security, and trade.

By collecting knowledge, generating ideas, and disseminating both, the Institution seeks to secure and safeguard peace, improve the human condition, and limit government intrusion into the lives of individuals, all of which are consistent with three prominent values: peace, personal freedom, and the safeguards of the American system.

STANFORD HUMANITIES CENTER

Director: John Bender

Associate Director: Elizabeth S. Wahl

External Faculty Fellows: Margaret Lavinia Anderson (History, University of California, Berkeley), Sandra Barnes (Anthropology, University of Pennsylvania), Charles Griswold (Philosophy, Boston University), Jonathan Holloway (African American Studies, History, Yale University), Christopher Morris (History, University of Texas at Arlington), Harsha Ram (Slavic Languages and Literatures, University of California, Berkeley), Greg Shaya (History, College of Wooster), Peter Vargyas (Ancient History, University of Pécs, Hungary)

Internal Faculty Fellows: Margaret Cohen (French and Italian), John Felstiner (English), Charlotte Fonrobert (Religious Studies), Estelle Freedman (History), Hester Gelber (Religious Studies), Akhil Gupta (Anthropology), James Sheehan (History)

Geballe Dissertation Graduate Student Fellows: Lela Graybill (Art and Art History), Barnabas Malnay (Political Science), Christine McBride (English), Teresa Nava-Vaughn (History), Brad Pasanek (English), Mary Rose (Linguistics), Brett Whalen (History), Erica Yao (Art and Art History)

Web Site: <http://shc.stanford.edu/>

The Stanford Humanities Center promotes research and education in the humanities at Stanford and nationwide. In particular, it stresses work of an interdisciplinary nature, accomplished through the following programs: one-year residential fellowships for Stanford faculty, faculty

members from other institutions, and Stanford graduate and undergraduate students; public presentations (such as lectures, conferences, and publications); and a research workshop program sponsored by the Mellon Foundation that brings faculty and graduate students together regularly to advance ongoing research on topics of interdisciplinary interest.

Fellows are selected on the basis of an open competition. They pursue their own research and participate in a weekly seminar at the center throughout the year. Faculty fellows also contribute to the intellectual life of the Stanford community through activities such as giving departmental courses, participating in ongoing research workshops, or organizing conferences. Courses given by fellows in 2004-05 follow.

COURSES

CLASSICS

CLASSHIS 290. Social and Economic History of the Ancient Near East

4-5 units, Spr (Vargyas)

HISTORY

HISTORY 274D/374D. An American Place: The Lower Mississippi Valley since 1500

5 units, Win (Morris)

INTRODUCTION TO THE HUMANITIES

IHUM 37B. Literature into Life: Alternative Worlds

5 units, Spr (Felstiner)

IHUM 60. Sex: Its Cultures and Pleasures

5 units, Aut (Fonrobert, Gumbrecht)

RELIGIOUS STUDIES

RELIGST 3N. Murder in the Cathedral

3 units, Aut (Gelber)

STANFORD CENTER FOR INNOVATIONS IN LEARNING

Directors: Stig Hagstrom, Roy Pea

Executive Director: Sam Steinhardt

Center Offices: Wallenberg Hall (Building 160)

Web Site: <http://scil.stanford.edu>

The Stanford Center for Innovations in Learning (SCIL), established in February 2002, is dedicated to conducting scholarly research and related activities that advance the sciences, technologies, and practices supporting learning and teaching from early childhood through postsecondary education. Important related activities include support for innovative teaching in Wallenberg Hall, participation in the Wallenberg Global Learning Network (WGLN), and international activities, including SCILnet, the center's growing network of similar research centers around the world.

Researchers at SCIL focus on the most significant issues in learning and teaching, and on the ways that innovative uses of technologies can help address those issues. Research projects typically involve collaboration among faculty, senior staff members, and students from several disciplines, and often include scholars from other institutions and countries.

SCIL's research is based on a key insight of the last two decades of work in the learning sciences: learning is not a free-floating cognitive process, but a concrete social activity in which physical setting, social interaction, and the structuring and sequencing of events matter. The three main thrusts of our research agenda are strengthening the learner, structuring learning environments, and making learning visible.

Given the increasing role technology is likely to play in improving learning theory and practice around the world, another of SCIL's objectives is collaborative research and development with international partners. Since its inception, SCIL has been a member of the WGLN, an alliance between Stanford and learning laboratories in Sweden and Germany. The WGLN supports research projects that link Stanford researchers in the sciences, humanities, and medicine to their Swedish and German colleagues. In 2003-04, SCIL launched SCILnet, an program that seeks to establish research collaborations between international organizations and SCIL via grants and contracts from governments, foundations, and corporations. One key area of interest is the use of innovative and appropriate information and communication technologies in underserved communities and developing countries.

CENTER FOR THE INTERDISCIPLINARY STUDY OF SCIENCE AND TECHNOLOGY

Co-Directors: Michael Friedman, Robert McGinn

Executive Committee: Michael Friedman, Timothy Lenoir (on leave), Robert McGinn, Eric Roberts

Phone: (650) 725-0119; 725-0714

Web Site: <http://cisst.stanford.edu>

The Center for the Interdisciplinary Study of Science and Technology (CISST) brings together faculty, undergraduate and graduate programs, and research initiatives concerned with understanding science and technology in an interdisciplinary context. It is concerned equally with the historical, philosophical, and cultural study of science, technology, and medicine, and with critical analysis of issues raised by scientific and technological innovations in contemporary society. CISST houses two major programs: HPST (History and Philosophy of Science and Technology) and STS (Science, Technology, and Society); see their respective sections in this bulletin for their programs. CISST also sponsors visiting scholars, postdoctoral researchers, workshops, and speakers, providing a bridge between the humanities and social sciences, and the sciences and engineering.

At the undergraduate level, CISST houses STS, an undergraduate major that grants both a B.A. and a B.S. degree. The STS is designed to foster understanding of issues raised by the natures, consequences, and social shaping of technology and science in the contemporary world. To this end, the STS curriculum combines interdisciplinary, humanistic, and social scientific studies of science and technology in society with attainment of either technical literacy or fundamental understanding in some area of engineering or science. CISST also offers an honors program in STS that is open not only to STS majors but also to students in other majors who wish to pursue a senior honors project that addresses a question arising from the relations among science, technology and society. Prospective majors or honors students should consult the STS section in this bulletin.

CISST also publishes a selection of undergraduate research in STS in our electronic undergraduate journal, *Techne* (<http://www.stanford.edu/group/STS/techne>).

At the graduate level, CISST houses an interdisciplinary graduate program, the Program in History and Philosophy of Science and Technology (HPST), jointly administered by the History and Philosophy departments; it involves faculty and students in these and other departments in the humanities. Prospective students interested in applying to the graduate program should consult the HPST description in the catalogue as well as the admissions requirements of the appropriate department in which they wish to apply for a M.A. or a Ph.D.

STANFORD INSTITUTE FOR INTERNATIONAL STUDIES (SIIS)

Director: Coit Blacker
Deputy Director: Stephen Krasner
Web Site: <http://iis.stanford.edu>

The Stanford Institute for International Studies promotes individual and collaborative research on contemporary, policy-relevant issues that are international and interschool in character. Working in partnership with the seven schools at Stanford (Business, Earth Sciences, Education, Engineering, Humanities and Sciences, Law, and Medicine) and with the Hoover Institution, SIIS fosters excellence in research and teaching across disciplinary, school, and national boundaries. The priority areas of research are in the fields of international and regional peace and security; economic development and political change in East and Southeast Asia; the global environment challenge; and the delivery of health care in a comparative perspective.

Opportunities for undergraduate research include the Goldman Interschool Honors Program in Environmental Science, Technology, and Policy, and the CISAC Interschool Honors Program in International Security. The institute manages 10 undergraduate and graduate fellowship programs.

The constituent centers and programs within SIIS include the Asia-Pacific Research Center, the Center on Democracy, Development and the Rule of Law, the Center for Environmental Science and Policy, the Center for Health Policy, the Center for International Security and Cooperation, the European Forum, and the Stanford Japan Center—Research.

In the areas of public service and outreach, SIIS administers the Stanford Program on International and Cross-Cultural Education (SPICE), which develops internationally-oriented curricula for use by public school teachers.

The SIIS central office is located at 100 Encina Hall, telephone (650) 723-4581. For more information about particular SIIS programs, contact the programs directly (area code 650):

Asia/Pacific Research Center (A/PARC), 723-9741, Andrew Walder, *Director*
 Center on Democracy, Development and the Rule of Law, 724-7197, Stephen Krasner, *Director*
 Center for Environmental Science and Policy (CESP), 725-2606, Walter P. Falcon, Stephen Schneider, *Co-Directors*
 Center for Health Policy (CHP), 723-1020, Alan M. Garber, M.D., *Director*
 Center for International Security and Cooperation (CISAC), 723-9625, Scott Sagan, Christopher Chyba, *Co-Directors*
 European Forum, 723-4716, Norman Naimark, Amir Eshel, *Co-Convenors*
 Inter-University Center for Japanese Language Studies, 725-1490
 Stanford Program on International and Cross-Cultural Education (SPICE), 723-1116
 Stanford Japan Center—Research (Japan), 011 75-752-7073, extension 40

UNDERGRADUATE PROGRAMS

INTERSCHOOL HONORS PROGRAM IN ENVIRONMENTAL SCIENCE, TECHNOLOGY, AND POLICY

The Center for Environmental Science and Policy (CESP) coordinates a University-wide interschool honors program in environmental science, technology, and policy. Undergraduates planning to participate in the honors program are required to pursue studies in environmental sciences, technology, and policy, with a concentration in a single discipline. After completion of the prerequisite units, students join small group honors seminars to work with specific faculty members in the environ-

mental field on an honors thesis that incorporates both scientific principles and the policy aspects of selected environmental issues.

Courses in environmental studies appear under the course listings of the schools of Earth Sciences, Engineering, and Humanities and Sciences. Information about and applications to this program may be obtained from CESP, E401 Encina Hall East; telephone (650) 723-5697.

COURSES

IIS 195. Interschool Honors Program in Environmental Science, Technology, and Policy—Students from the schools of Humanities and Sciences, Engineering, and Earth Sciences analyze important problems in a year-long small group seminar. Combines research methods, oral presentations, preparation of an honors thesis by each student, and where relevant, field study.

1-9 units, Aut, Win, Spr (Naylor, Falcon, Daily, Schneider)

INTERSCHOOL HONORS PROGRAM IN INTERNATIONAL SECURITY

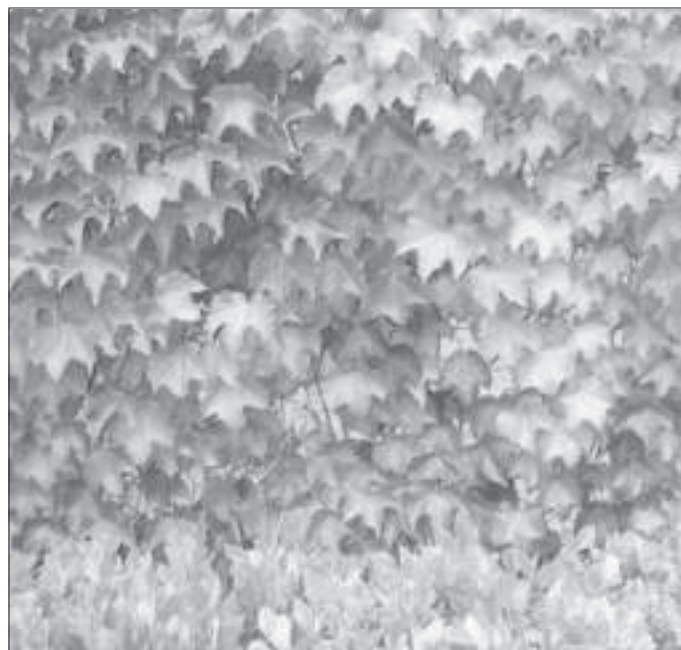
The Center for International Security and Cooperation (CISAC) coordinates a University-wide interschool honors program in international security. Students selected for the honors program fulfill individual department course requirements, attend a year-long seminar on international security research, and produce an honors thesis with policy implications. In order to qualify for the program, students must demonstrate sufficient depth and breadth of international security course work. Ideally, applicants to the program should have taken POLISCI 114S, International Security in a Changing World, MS&E 193, Technology and National Security, POLISCI 110B, Strategy, War, and Politics, and at least one related course such as ECON 150/PUBLPOL 104, Economic Policy Analysis, STS 110/MS&E 197/PUBLPOL 103B, Ethics and Public Policy, SOC 160, Formal Organizations, PUBLPOL 102/SOC 166, Organizations and Public Policy, and POLISCI 114T, Major Issues in International Conflict Management.

Information about and applications to this program may be obtained from the Center for International Security and Cooperation, E201 Encina Hall East, telephone (650) 723-0126.

COURSES

IIS 199. Interschool Honors Program in International Security—Students from different schools meet in a year-long seminar to discuss, analyze, and conduct research on international security. Combines research methods, policy evaluation, oral presentation, and preparation of an honors thesis by each student.

9-15 units, Aut, Win, Spr (Sagan, Stedman, Eden)



CENTER FOR THE STUDY OF LANGUAGE AND INFORMATION (CSLI)

Director: Byron Reeves
Executive Director: Keith Devlin
Center Offices: Cordura Hall
Mail Code: 94305-4115
Web Site: <http://www-csli.stanford.edu/>

CSLI supports research at the intersection of the social and computing sciences. It is an interdisciplinary endeavor, bringing researchers together from academe and industry in the fields of artificial intelligence, computer science, engineering, linguistics, logic, education, philosophy, and psychology. CSLI's researchers are united by a common interest in communication and information processing that ties together people and interactive technology.

The technologies of interest at CSLI are at the cutting edge of the information revolution. They include natural language processing, voice user interfaces, ubiquitous computing, collaborative work environments, handheld devices, information appliances, automatic language translation, conversational interfaces, machine learning, intelligent agents, electronic customer relationship management, and distance learning applications.

A primary goal of CSLI is to have a substantial and long-term intellectual impact on the academic and business communities involved with interactive technology. Our industry research partners and sponsors have a broad and facilitated access to ideas, faculty, students, and laboratories. Partners can share in the intellectual property of CSLI, and in the governance committees of the Center that establish research directions and funding priorities. CSLI accelerates knowledge transfer to products and services by involving executives and researchers in Stanford classrooms. CSLI partners can meet Stanford students studying in over 20 different degree programs across campus.

Course work related to the research at CSLI can be found in the "Program in Symbolic Systems" section of this bulletin.

STANFORD INSTITUTE FOR THE QUANTITATIVE STUDY OF SOCIETY (SIQSS)

Director: Norman H. Nie
Center Offices: 417 Galvez Mall, Encina Hall West, first floor
Web Site: <http://www.stanford.edu/group/siqss>

Founded in 1998, the Stanford Institute for the Quantitative Study of Society (SIQSS) is a multidisciplinary research institute affiliated with Stanford University's Office of Research and Graduate Policy. The Institute is devoted to producing and sponsoring high-quality empirical social science research about the nature of society and social change.

The central mission of SIQSS is to provide social knowledge for the larger society and to develop the empirical social sciences as a primary tool for understanding social reality. SIQSS seeks to fulfill this mission by undertaking large-scale, socially relevant, theoretically important, and methodologically sound social research. Examples of projects under way include unintended consequences of information and technology in society; education and its social outcomes; conducting the 2000 census under adversity; and an online scholarly journal, *IT & Society* at <http://www.stanford.edu/group/siqss/itandsociety/>.

Scholars participating in SIQSS research programs and activities are drawn from diverse disciplines throughout Stanford University and from

other academic institutions. SIQSS currently supports quantitative research through the following: Long-Term Institute-Initiated Research Programs, Stanford Faculty Research Grants and Student Research Assistantships, Stanford Faculty Fellows, Interdisciplinary Seminars, and the American Empirical Series.

INSTITUTE FOR RESEARCH ON WOMEN AND GENDER

Director: Londa Schiebinger
Web Site: <http://www.stanford.edu/group/IRWG/>

During the last decade, research on women and gender has had a profound influence on the social and medical sciences, and the humanities. Since its founding, the Institute for Research on Women and Gender's primary mission is to support scholarship on subjects related to women and gender and to organize educational programs that communicate these findings to a broader public.

Stanford faculty, staff, graduate students, and members of the community work together to stimulate a more informed analysis of issues concerning gender.

Institute projects span a wide range of disciplines, but rest on certain shared premises: that gender is a vital category of analysis for contemporary scholarship and policymaking and that the experiences of women as individuals and as a group can best be understood within their historical, social, and cultural contexts. The institute sponsors interdisciplinary research seminars and conferences that examine gender issues in areas such as aging, art, education, employment, family structures, gender segregation in the workplace and educational institutions, health care, history, law, literature, and psychology. Many scholarly publications have resulted from these activities.

SOCIAL SCIENCE HISTORY INSTITUTE (SSHI)

Web Site: <http://www.stanford.edu/group/sshi/>

The goal of Social Science History Institute is to re-engineer the manner in which students in social science departments learn about historical institutions and data, and the manner in which students in history and related disciplines are trained in social science methods. Historians and social scientists share many of the same substantive interests (the development of economies, political systems, and social structures, for example), but they approach them with different and complementary methods and bodies of evidence. There is, however, a great deal of potential for historians and social scientists to draw on the strengths of each other's methods to improve their own work and to foster increased interaction among the various disciplines that employ history as a laboratory to operationalize social science theories. The Social Science History Institute seeks to realize this potential by transplanting state of the art research methods from classics, economics, history, political science, and sociology across the boundaries of each discipline. Toward this end, SSHI offers, conferences, and research support for faculty and graduate students.

STANFORD LINEAR ACCELERATOR CENTER (SLAC)

Director: Jonathan Dorfan

Web Site: <http://www.slac.stanford.edu/>

The Stanford Linear Accelerator Center is devoted to experimental and theoretical research in elementary particle physics and astrophysics, to the development of theory and new techniques in particle accelerators, to research and development in particle detectors, and to the use of the SPEAR electron storage ring as a source of intense vacuum ultraviolet and x-ray beams for research in biology, chemistry, material science, environmental science, medical science, and physics. The center is on 425 acres of Stanford property west of the main campus and is operated under a contract with the Department of Energy. In a new initiative, Stanford University's Kavli Particle Astrophysics and Cosmology Institute is located on the SLAC campus.

SLAC is operated by Stanford as a national facility so that qualified scientists from universities and research centers throughout the country and world, as well as those at Stanford, may participate in the research programs at the center. Stanford graduate students may carry out research for the Ph.D. degree with members of the SLAC faculty. Graduate students from other universities also participate in the research programs of visiting groups.

Research assistantships are available for qualified students by arrangement with individual faculty members. There are also opportunities for summer employment in the research groups at the center. Students interested in research in the area of high energy physics, particle astrophysics, and accelerators should contact Professor Rafe H. Schindler, the high energy physics graduate student adviser. Research opportunities for students interested in the SPEAR X-ray science program are discussed below under SSRL.

STANFORD SYNCHROTRON RADIATION LABORATORY (SSRL)

Director: Keith O. Hodgson

Web Site: <http://www-ssrl.slac.stanford.edu>

SSRL, a division of the Stanford Linear Accelerator Center, is a National User Facility which provides synchrotron radiation, a name given to x-rays or light produced by electrons circulating in a storage ring at nearly the speed of light. These extremely bright x-rays can be used to investigate forms of matter ranging from objects of atomic and molecular size to man-made materials with unusual properties. The obtained information and knowledge is of great value to society, with impact in areas such as the environment, future technologies, health, and national security. Many of its 19 faculty hold joint appointments with campus departments.

SSRL has research programs in materials sciences as well as accelerator physics and development of advanced sources of synchrotron radiation, especially ultra short pulse, x-ray free electron lasers. The lab is interdisciplinary with graduate students actively pursuing degrees from Stanford campus departments that include Applied Physics, Chemical Engineering, Chemistry, Earth Sciences, Electrical Engineering, Materials Science and Engineering, Physics, and Structural Biology.

Students interested in working at the facility should contact a member of the SSRL faculty, one of the assistant directors, or other members of the Stanford faculty who use SSRL in their research programs.

LIBRARIES AND COMPUTING RESOURCES

STANFORD UNIVERSITY LIBRARIES AND ACADEMIC INFORMATION RESOURCES

University Librarian and Director of Academic Information Resources:
Michael A. Keller

Web Site: <http://www-sul.stanford.edu>

Stanford University Libraries and Academic Information Resources develops and implements services within the University libraries that support research and instruction including academic computing functions. These services include acquiring and making available library collections in all formats, establishing policies and standards to guide the use of academic information resources, developing training and support programs for academic uses of computers, and maintaining the online library catalog.

In each library unit, reference staff provide general advice on locating and using both print and online information sources. Subject specialists and reference librarians offer assistance in specific disciplines either individually or in groups, by lecture to classes on request, tours, demonstrations, or special workshops.

Academic Computing provides technology expertise, resources and services in support of the University's academic mission, both directly to students and faculty, and to other organizations that in turn support aspects of the academic mission. In support of the academic mission, Academic Computing offers information on the use of technology in learning and teaching environments; operates and manages classrooms and public and multimedia computer clusters in Meyer Library; provides faculty-specific computing resources through the Academic Technology Specialist program and Academic Technology Lab; provides technology support to library services; operates and manages residential computing clusters and services; and supports the Stanford course management system.

Information about the scope of collections, physical facilities, and services (such as general borrowing regulations, reserve items, book stack access, interlibrary loans, and photocopies) is available at <http://www-sul.stanford.edu>, in publications, and in online guides at http://www-sul.stanford.edu/about_sulair/briefguide/index.shtml. Further explanation of library services is available from the Information Center staff in Cecil H. Green Library, or the reference staff in the University Libraries branches.

CENTRAL CAMPUS LIBRARIES

The Cecil H. Green Library (East and Bing Wings) maintains research collections in the humanities, social sciences, area studies, and interdisciplinary areas. These collections number more than 2.2 million volumes. The J. Henry Meyer Memorial Library houses the East Asia Library as well as the Academic Computing group of the Stanford University Libraries and Academic Information Resources (SULAIR) and provides instructional support services. In addition, Meyer Library houses the University's Digital Language Lab, computer clusters, technology enhanced classrooms, an Academic Technology Lab, an Assistive Learn-

ing Technology Center, and the central offices of Residential Computing and Academic Computing.

During regular academic sessions, both libraries are open Monday through Thursday from 8 a.m. to 12 midnight, Friday from 8 a.m. to 6 p.m., Saturday from 9 a.m. to 9 p.m. (Meyer is open 1 p.m. to 9 p.m. on Saturday), and Sunday from 12 noon to 12 midnight. Library hours information, including hours for holidays, intersessions, and other libraries on campus, is available on the web at http://www-sul.stanford.edu/libraries_collections/hours_locations.html.

These libraries can seat more than 2,000 readers at one time in a variety of seating arrangements: carrels, lounge areas, tables, computer workstations, individual studies, and group study rooms. Readers can connect their laptops to the campus network in many library locations.

Major service units housed throughout Green Library include: the Information Center; the Humanities and Area Studies Reading Room; the Social Science and Government Documents Reading Room; Foreign Language and Area Collections; Access Services; Current Periodicals, Newspapers, Media and Microtexts; and the Interlibrary Services Office. Green Library also houses reserves for most graduate and undergraduate courses in the humanities and social sciences, the Department of Special Collections, and the University Archives.

Throughout Green and Meyer, there are photocopy machines, telephones, and computers providing access to the online library catalog and the wealth of electronic resources available to the Stanford community.

BRANCH LIBRARIES

Humanities and Social Sciences Branch Libraries include the Art and Architecture Library, Cubberley Education Library, Music Library, and Archive of Recorded Sound.

Science Branch Libraries include the Branner Earth Sciences Library, Engineering Library, Falconer Biology Library, Mathematical and Computer Sciences Library, Harold A. Miller Library at the Hopkins Marine Station, Physics Library, and Swain Library of Chemistry and Chemical Engineering.

LIBRARIES—COORDINATES

J. Hugh Jackson Library, Graduate School of Business

Director: Kathy Long

Lane Medical Library

Director: Debra Ketchell

Crown Law Library

Director: Lance E. Dickson

Stanford Linear Accelerator Center Library

Head Librarian: Patricia Kreitz

HOOVER INSTITUTION ON WAR, REVOLUTION AND PEACE

Director: John Raisian

Associate Director: Elena Danielson

Web Site: <http://www-hoover.stanford.edu/hila/>

Since its founding by Herbert Hoover in 1919 as a special collection dealing with the causes and consequences of World War I, the Hoover Institution has become an international center for documentation, research, and publication on political, economic, social, and educational change in the 20th and 21st centuries.

The Hoover Library and Archives include one of the largest private archives in the world and have outstanding area collections on Africa, East Asia, Eastern Europe, Russia and the former Soviet Union, Latin America, the Middle East, North America, and Western Europe.

Holdings include government documents, files of newspapers and serials, manuscripts, memoirs, diaries, and personal papers of men and women who have played significant roles in the events of these centuries, the publications of societies and of resistance and underground movements, and the publications and records of national and international bodies, both official and unofficial, as well as books and pamphlets, many of them rare and irreplaceable. The materials are open to all Stanford students, faculty, and staff, to scholars from outside the University, and to the public at large.

INFORMATION TECHNOLOGY SYSTEMS AND SERVICES (ITSS)

Web Site: <http://itss.stanford.edu>

ITSS provides University leadership in the area of information technology. ITSS services can be divided into four categories:

- Computing and communication infrastructure capable of supporting the instructional, learning, research, and business activities of the University. This infrastructure includes campus-wide data, voice, and video communication facilities, and the distributed computing environment. These services tend to be less visible to end-users, but are the foundation upon which information technology services are delivered.
- Academic computing services to support instruction, research and learning activities. These include the Sweet Hall computing cluster, graphics lab, and servers that support instructional computing.
- Business and administrative computing facilities to support administrative information systems. These include core business systems, such as student information, fund raising, general ledger, accounts payables, and payroll.
- Services and technical support for departmental networks and computing environments. These services include departmental consulting, training and support for office and departmental support staff, and technical support to manage departmental computing environments.

Daily operations at Stanford rely upon the hundreds of applications and miles of wiring for data and phone services that ITSS maintains and supports. It is expected that phones will ring, computers interconnect, and systems function. ITSS directs its energies toward ensuring that the infrastructure and applications portfolio meet current needs and to ensure that future needs will be met as well; improvements are made to wiring, more storage is added to servers, applications are changed to meet new requirements, out of date services are removed and new ones replace them. Running, maintaining, and continually improving these services, and doing it cost effectively, is the core business of Information Technology Systems and Services.

For more details about ITSS and its services, see <http://itss.stanford.edu>. For more information about the variety of information technology resources available at Stanford, see <http://compcomm.stanford.edu>. For assistance with technology services at Stanford, contact the Stanford IT Help Desk by phoning (650) 725-HELP (4357) or submit a request through <http://helpsu.stanford.edu>.

THE CONTINUING STUDIES PROGRAM

Dean and Associate Provost: Charles Junkerman

Program Offices: 482 Galvez Mall

Mail Code: 94305-6079

Phone: (650) 725-2650; *Fax:* (650) 725-4248

Email: continuingstudies@stanford.edu

Web Site: <http://continuingstudies.stanford.edu>

The Continuing Studies Program provides adults from Stanford and the surrounding communities the opportunity to take classes on a part-time basis for intellectual enrichment, both personal and professional. Courses and events are offered in all four academic quarters, with over 350 courses planned for the 2004-05 academic year.

The faculty are primarily drawn from the ranks of the University's distinguished professoriate. The program presents a wide variety of courses, with a central concentration in the liberal arts, including literature, history, art and architecture, and music.

Tuition discounts are available to University employees, Stanford students and faculty, Stanford Alumni Association members, educators, and those over age 65.

For a course catalogue, contact the Continuing Studies Program by mail, phone, or email as above.

The Continuing Studies Program also administers the Master of Liberal Arts Program and Summer Session.

MASTER OF LIBERAL ARTS PROGRAM

Associate Dean and Director: Linda Paulson

Participating Faculty: David Abernethy (Political Science), Clifford Barnett (Anthropology), Russell Berman (Comparative Literature and German), Marc Bertrand (French, emeritus), Eavan Boland (English), John Bravman (Material Sciences and Engineering), Clayborn Carson (History), Wanda Corn, (Art and Art History), George Dekker (English), Carol Delaney (Anthropology), Gerry Dorfman (Hoover Institute and Political Science), Arnold Eisen (Religious Studies), Martin Evans (English), Anne Fernald (Psychology), Paula Findlen (History), Luis Fraga (Political Science), John Freccero (French and Italian), Larry Friedlander (English), Kenneth Fields (English), Hester Gelber (Religious Studies), Albert Gelpi (English), Barbara Gelpi (English), Monika Greenleaf (Slavic Languages), Robert Gregg (Religious Studies), Hans Ulrich Gumbrecht (French and Italian), Van Harvey (Religious Studies), Stephen Hinton (Music), Charles Junkerman (Continuing Studies Program), Nancy Kollmann (History), Marsh McCall (Classics), Robert McGinn (Management Science and Engineering, and Science, Technology, and Society), Mark Mancall (History), Joseph Manning (Classics), Diane Middlebrook (English), Thomas Moser (English), David Palumbo-Liu (Comparative Literature), Linda Paulson (English), Denis Phillips (Education, and, by courtesy, Philosophy), Jack Rakove (History), Ronald Rebolz (English), Rush Rehm (Drama), John Rick (Anthropological Sciences), John Rickford (Linguistics), Paul Robinson (History), Ramón Saldívar (English), Paul Seaver (History), Robert Siegel (Microbiology and Immunology), Thomas Wasow (Linguistics), Lee Yearley (Religious Studies), Ernlé Young (Center for Biomedical Ethics), Steven Zipperstein (History)

Web Site: <http://mla.stanford.edu>

Program Description—The Master of Liberal Arts (MLA) program aims to provide a flexible, interdisciplinary program for returning adult students who seek a broad education in the liberal arts. The underlying premise of the MLA program is that knowledge gained through an interdisciplinary course of study leads to intellectual independence and satisfaction not always found in discipline-based programs of study. The goals of the MLA program are to develop advanced critical thinking, to foster intellectual range and flexibility, and to cultivate an individual's ability to find the connections among different areas of human thought: art, history, literature, music, philosophy, political science, science, and theology.

The program is designed with part-time students in mind: seminars meet in the evening, and students complete the degree in 4-5 years. All master's seminars are taught by members of the Stanford faculty. Class size is limited to 20 students.

Degree Requirements—Candidates for the MLA degree must complete a minimum of 50 units of course work. These units must include a three quarter foundation course (equal to 12 units total), one core introductory seminar for entering students, at least seven 4-unit MLA seminars, and a 4-unit master's thesis. The remaining 2 units of required courses may be fulfilled by additional MLA seminars, relevant Continuing Studies Program course offerings, or by a summer session at Oxford. Students must also fulfill distribution requirements by taking at least 2 units of credit in each of the following areas: humanities; social science or social policy; and science, engineering, or medicine.

Foundation Course—During the Autumn, Winter, and Spring following admission to the program, there is a three quarter foundation course required of all students. The purpose of this course is to lay the groundwork for the interdisciplinary, intercultural studies the student will shortly undertake. The foundation course will introduce students to the broad framework of history, literature, philosophy, political science, and art.

Core Seminar—During the first quarter of the second year, new students take the core introductory seminar, *The Plague: An Introduction to Interdisciplinary Graduate Study*. This seminar aims to prepare students for interdisciplinary graduate work at Stanford. Students concentrate on writing a critical graduate paper, conducting library research, presenting the results of their research, and productively participating in a collaborative seminar.

MLA Seminars—Students are required to take at least seven MLA seminars of four units each. Each year, at least nine seminars are offered in the MLA program. Each MLA course requires a substantial seminar paper. Students are encouraged to use these papers as a way to investigate new fields of interest, as well as a way to develop different perspectives on issues in which they have an ongoing interest.

Master's Thesis—The MLA program culminates in the master's thesis. Students approaching the end of the program write a thesis, approximately 75-100 pages in length, that evolves out of work they have pursued during their MLA studies. The thesis is undertaken with the prior approval of the MLA program, and under the supervision of a Stanford faculty member. During the process of writing the thesis, students are members of a work-in-progress group, which meets regularly to provide peer critiques, motivation, and advice. Each student presents the penultimate draft of the thesis to a colloquium of MLA faculty and students, in preparation for revising and submitting the final draft to the adviser and to the MLA program. Additional information can be obtained from the Master of Liberal Arts program, 482 Galvez Mall, Stanford, CA 94305-6079; phone (650) 725-0061; email mlaprogram@stanford.edu, fax (650) 725-4248, web site <http://mla.stanford.edu>.

COURSES

An additional Spring Quarter offering was not yet available at the time this bulletin went to press.

101A. Foundations I—Required for first-year MLA students.
4 units, Aut (Steidle)

101B. Foundations II—Required for first-year MLA students.
4 units, Win (Steidle)

- 101C. Foundations III**—Required for first-year MLA students.
4 units, Spr (Berman)
- 102. The Plague: An Introduction to Interdisciplinary Graduate Study**
4 units, Aut (Paulson)
- 212. Radical Theater: Greek Tragedy Then and Now**
4 units, Aut (Rehm)
- 213. From Enlightenment to Modernism**
4 units, Aut (Berman)
- 214. Humanism and Modernism in 19th-Century Paris: Literature and the Arts**
4 units, Win (Bertrand)
- 215. European Literary Modernism**
4 units, Win (Terdiman)
- 216. Unity and Diversity in the American Republic**
4 units, Win (Fraga)
- 217. Democratic Wonder from Emerson to Cage**
4 units, Spr (Junkerman)
- 218. Philosophies of Technology**
4 units, Spr (Gumbrecht)
- 220. Shakespeare in Performance VII**
4 units, Sum (Friedlander)
- 221. American Film**
4 units, Sum (Fields)

SUMMER SESSION

Associate Dean: Patricia Brandt
Director of Admission and Student Services: Teresa Nishikawa
Program Offices: 482 Galvez Mall
Mail Code: 94305-6079
Phone: (650) 723-3109; *Fax:* (650) 725-6080
Email: summersession@stanford.edu
Web Site: <http://summer.stanford.edu>

Students attending Stanford Summer Session are enrolled in either a regular degree program, the Summer Visitor Program, or Summer College for High School Students.

The regular degree program is for students who are candidates for a Stanford degree and who are continuing their academic work in Summer Quarter. Degree-seeking Stanford students should indicate on Axxess during Spring Quarter that they intend to register for Summer Quarter. Separate application is not required.

The Summer Visitor Program is for students who are not presently candidates for a Stanford degree. It is open to students who are currently enrolled in or have graduated from another college or university. Qualified high school students who have completed at least their sophomore year may be admitted to the Summer College.

Students in Summer Session in general enjoy the privileges of students in the regular degree program except that work completed cannot be applied toward a Stanford degree or credential until the student has been admitted to regular standing. Admission as a summer visitor does not imply later admission to matriculated status. However, should the visitor matriculate at a later date through normal admission procedures, the summer work may, in most cases, be applied toward the requirements for a Stanford degree or credential.

For more information, contact Summer Session by email, mail, phone, or fax using the listings above. Information is updated annually in February and may also be found online at <http://summer.stanford.edu>.

UNDERGRADUATE EDUCATION

Vice Provost for Undergraduate Education: John Bravman
Web Site: <http://www.stanford.edu/dept/undergrad/ovp>

As the chief academic officer for undergraduate education, the Vice Provost initiates policies and programs, assesses and manages continuing programs, oversees curricular innovation, and coordinates the undergraduate activities of the three Schools (Humanities and Sciences, Earth Sciences, and Engineering) which offer undergraduate majors and minors. The Center for Teaching and Learning, Freshman and Sophomore Programs, the Freshman Dean's Office, Undergraduate Advising, and Undergraduate Research Programs report to the Vice Provost of Undergraduate Education.

CENTER FOR TEACHING AND LEARNING

Associate Vice Provost for Undergraduate Education and Director: Michele Marinovich

Senior Associate Director (Science and Engineering): Robyn Wright Dunbar

Associate Director (Humanities): Mariatte Denman

Associate Director (Social Sciences and Technology): Marcelo Clerici-Arias

Academic Technology Specialist: Jeremy Sabol

Assistant Director for Academic Success: Adina Glickman

Administrators: Cristen Osborne, Linda Salser

Oral Communication Program Director: Doree Allen

Lecturers: John Bilderbeck, Thomas Freeland, Jennifer Hennings, James Milojkovic, Joyce Moser, Anne Pasley, James Wagstaffe, Randall A. Williams

Department Offices: Sweet Hall, 4th floor

Mail Code: 94305-3087

Center Phone: (650) 723-1326

Email: TeachingCenter@stanford.edu

Web Site: <http://ctl.stanford.edu>

The Center for Teaching and Learning is a university-wide resource on effective teaching and public speaking for faculty, lecturers, and teaching assistants and on both effective learning and public speaking for undergraduates and graduate students.

SERVICES TO UNDERGRADUATE AND GRADUATE STUDENTS

CTL provides a wide range of resources for students who want to enhance their study approaches and clarify their learning strategies. Through courses, individual counseling, and workshops, CTL helps students build skills that are the foundation for continuous improvement and lifelong learning.

Free tutoring is available to undergraduates in several introductory subjects. See <http://ctl.stanford.edu/Tutoring> for details on where and when tutors can be found. Students interested in and qualified for tutoring can apply to be tutors and, if accepted, can take CTL's course on tutoring; the application process takes place in February.

SERVICES TO FACULTY, LECTURERS, AND TEACHING ASSISTANTS

CTL provides the Stanford community with services and resources on effective teaching. Our goals are: to identify and involve successful teachers who are willing to share their talents with others; to provide those

who are seeking to improve their teaching with the means to do so; to acquaint the Stanford community with important innovations and new technologies for teaching; to prepare new teachers for their responsibilities; to contribute to the professional development of teaching assistants; to expand awareness of the role of teaching at research universities; and to increase the rewards for superior teaching.

CTL also has responsibility for helping teaching assistants (TAs) with their preparation for and effectiveness in teaching, and for helping departments with designing effective TA training programs. Programs include: videotaping, microteaching, and consultation; small group evaluation; workshops and lectures; a handbook on teaching and a library of teaching materials; quarterly teaching orientations; an informative quarterly newsletter; and work with individuals, groups, and departments on their specific needs. For further details, see CTL's teaching handbook or the CTL brochure, both available by calling (650) 723-1326, or see <http://ctl.stanford.edu>.

For questions or requests, email TeachingCenter@stanford.edu.

ORAL COMMUNICATION PROGRAM

The Oral Communication Program at CTL provides opportunities for undergraduates and graduate students to develop or improve their oral communication skills. Courses and workshops offer a comprehensive approach to speech communication, including training in the fundamental principles of public speaking and the effective delivery of oral presentations. The goal is to enhance students' general facility and confidence in oral expression. The program also provides innovative, discipline-based instruction to help students refine their personal speaking styles in small groups and classroom settings. Those interested in individualized instruction or independent study are invited to visit the program's Speaking Center in Sweet Hall, where trained student tutors, multimedia, and instructional resource materials are available on an ongoing basis. For further details, call (650) 725-4149 or 723-1326 or consult our web site at <http://ctl.stanford.edu>.

COURSES

All courses listed with CTL promote acquisition of strong public speaking skills and/or teaching excellence.

CTL 56. Building a Successful Academic Career—For freshmen in expanded advising programs. Techniques for honing academic skills for college, and applying those skills to better define intellectual identity in academic pursuits.

1 unit, Aut, Win (Williams)

CTL 60/160. Investigating Stanford's Treasures—Private tours of some of Stanford's greatest resources led by Stanford experts; students interview the experts and introduce them to the class at the site. One hour of class discussion a week. Treasures may include Jasper Ridge Biological Reserve, Memorial Church, Special Collections, and the Martin Luther King, Jr., Papers Project.

1-2 units, Aut (Moser)

CTL 115/215. Voice Workshop—An innovative workshop focusing on breath, voice production, expansion of vocal range and stamina, and clarity of articulation. Geared toward public speaking generally: presentations, lectures, job talks, etc. Can be taken in conjunction with CTL 117.

1-2 units, Aut, Win, Spr (Freeland)

CTL 116A. The Language of Film Noir: From Bogart to Pulp Fiction—The quintessential American film genre which combined femmes fatales, anti-heroes, lost dreams, violence, and a distinct style of expression. Film viewings, student oral presentations, and analyses of films.

1-2 units (Moser) alternate years, given 2005-06

CTL 116B. Screwballs and the Language of Laughter: American Comic Film from Chaplin to Present—A sampling of American comic masterpieces including silent movies, 30s screwball films, and works by Billy Wilder, Woody Allen, and contemporary film makers. Film viewings, student oral presentations, and analyses of films.

1-2 units, Win (Moser)

CTL 117/217. The Art of Effective Speaking—Introduction to the principles and practice of effective oral communication. Through formal and informal speaking activities, students develop skills in framing and articulating ideas through speech. Strategies are presented for speaking extemporaneously, preparing and delivering multimedia presentations, formulating persuasive arguments, refining critical clarity of thought, and enhancing general facility and confidence in oral self-expression.

3 units, Aut, Win (Freeland, Allen)

CTL 118. Public Speaking—A practical approach to the art of public speaking. Emphasis is on developing skills in various speech types: exposition, argumentation, and persuasion. Students sharpen their skills with the aid of textbooks, videotapes, texts of famous speeches and participation in a final program of talks. Students also evaluate presentations by others.

3 units, Sum (Wagstaffe)

CTL 119. Oral Communication Tutor (Consultant) Teaching Practicum—Seminar for students with a strong background in public speaking who wish to train as public speaking tutors for CTL's Oral Communication Program. Readings, exercises, and supervised teaching refine speaking skills. Preparation to serve as a peer tutor in a variety of academic disciplines. Prerequisite: consent of instructor.

3 units, Spr (Allen, Bilderbeck)

CTL 120. Peer Tutor Training—Goal is to help students become effective peer tutors for course material already mastered by articulating aims; developing practical tutoring skills including strategies for drop-in sessions; observing experienced tutors; discussing reading assignments; role playing; and reflecting on experiences as a peer tutor intern. Prerequisite: consent of instructor.

1 unit, Aut, Spr (Glickman)

CTL 125. From the Page to the Stage: The Performance of Literature—The oral interpretation of literature as performance art and mode of literary analysis. Focus is on contemporary and local expression including topics such as the Spoken Word Collective at Stanford, the ensemble performance of short works of fiction by San Francisco's Word for Word Performing Arts Company, and the storytelling art of Awele Makeba which combines theater, oral history, and music. No previous performance experience necessary.

3 units, Spr (Allen)

CTL 177. Performance of Power: Oratory and Authority from the Ancient World to the Postmodern—Speech as action as essential to leadership. Theories and examples of oratory, from Aristotle to Margaret Thatcher, assessing each as a model of voice-activated authority. The impact of mass media technologies as they transform the public space of oratory.

2-3 units, Spr (Freeland)

CTL 199/299. Independent Study—Special study under lecturer direction, usually leading to a written report or an oral presentation. Register with lecturer's permission using the section number associated with the instructor.

1-3 units, Aut, Win, Spr, Sum (Staff)

CTL 201. Science Course Design—(Same as GES 201.) For students interested in an academic career and who anticipate designing science courses at the undergraduate or graduate level. Goal is to apply research on science learning to the design of effective course materials. Topics include syllabus design, course content and format decisions, assessment planning and grading, and strategies for teaching improvement.

2-3 units, Aut (Wright-Dunbar)

CTL 219. Oral Communication for Graduate Students—Graduate student speaking activities such as teaching (delivering lectures, guiding discussion, and facilitating small groups), professional presentations and conference papers, and preparing for orals and defenses. In-class projects, discussion, and individual evaluation assist students in developing effective techniques for improving oral communication skills.

1-3 units, Sum (Allen)

FRESHMAN AND SOPHOMORE PROGRAMS

Assistant Vice Provost and Program Director: Sharon Palmer
Associate Director and Academic Technology Specialist: Dena Slothower
Assistant to the Dean of Freshman-Sophomore and Potter Colleges: Jenise Christensen
Academic Technology Specialist: Carlos Seligo
Oral Communication Lecturer: Joyce Moser
Administrators: Gari Gene, Mona Kitasoe, Jasmine Lu, Gary Matsumura
Department Offices: Sweet Hall, 4th floor
Phone: (650) 723-4338
Web Site: <http://fsp.stanford.edu/>

Freshman and Sophomore Programs (FSP), a division of the office of the Vice Provost for Undergraduate Education, sponsors and supports Freshman-Sophomore and Potter Colleges, as well as Stanford Introductory Seminars, including Freshman Seminars, Sophomore Seminars and Dialogues, and Sophomore College. FSP also coordinates initiatives that encourage faculty and students to build on relationships formed in introductory seminars by forming on-going mentoring and research partnerships based on their shared intellectual interests. FSP is located on the fourth floor of Sweet Hall. For detailed information, see <http://fsp.stanford.edu/> or call (650) 723-4338.

FRESHMAN-SOPHOMORE COLLEGE AND POTTER COLLEGE

The Freshman-Sophomore College at Sterling Quad is a residence for approximately 180 freshmen and sophomores interested in broad intellectual exploration of the liberal arts and sciences. Potter College is designed to create an interdisciplinary community of upper-class students engaged in intellectual exploration with a focus on research, writing, public speaking, and honors.

STANFORD INTRODUCTORY SEMINARS

Stanford Introductory Seminars (SIS) provide opportunities for first- and second-year students to work closely 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. Over 200 faculty from more than 60 departments take part in the introductory seminars programs. The courses are given department credit and most count towards an eventual major in the field. Most also fulfill General Education Requirements (GERs).

Some faculty who have taught Freshman Seminars or Sophomore College volunteer to continue working with their students through a formal advising relationship during the students' sophomore year.

FRESHMAN SEMINARS AND SOPHOMORE SEMINARS AND DIALOGUES

Freshman Seminars and Sophomore Seminars and Dialogues are offered in many disciplines throughout the academic year. Freshman preference seminars are typically 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 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. For a list of introductory

seminars offered in 2004-05, see the “Stanford Introductory Seminars” section of this bulletin. See the SIS annual course catalogue, published each September, or web site, <http://introsems.stanford.edu/>, for an application or more information.

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. Students immerse themselves in a subject and collaborate with peers, upper-class sophomore assistants, and faculty in constructing a community of scholars. They 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 twelve to fourteen students, who live together in a Stanford residence and receive two units of academic credit. Eligible students will have been enrolled for no more than three academic quarters; be sophomores in the Autumn Quarter during which the college is offered; be in good academic standing; and have completed at least 36 units of academic work by the end of the Spring Quarter preceding the college. Students must also have an on-campus housing assignment for the ensuing academic year. Transfer students are not eligible. Admitted students who are found to have academic standing problems after the completion of Spring Quarter may have their admission revoked. Tuition, room, the remainder of board costs, and class-required travel are covered by Sophomore College. Each student pays a \$400 fee toward the cost of board; this fee is included in the Autumn Quarter University bill. Students are also responsible for travel to campus, phone, network activation one-time fee, and other personal expenses. Courses are announced in March, and applications are due in April. For a list of Sophomore College Seminars offered, please see the SIS section in this Bulletin. For more information or to apply, see the Sophomore College web site at <http://soco.stanford.edu/>.

DEAN OF FRESHMEN AND TRANSFER STUDENTS

Assistant Vice Provost and Dean of Freshman and Transfer Students: Julie Lythcott-Haims
Web Site: <http://frosh.stanford.edu/>

The Freshman Dean's Office, a division of VPUE, is the primary resource for helping new undergraduates make the transition to Stanford. Programs under its umbrella include Approaching Stanford, New Student Orientation, Freshman Advising, Expanded Advising Programs, and Frosh Council. Offices are located on the first floor of Sweet Hall and in 123 Meyer Library; phone (650) 72-FROSH (3-7674) and (650) 725-1533, or email frosh@stanford.edu. New students and their parents are encouraged to visit.



UNDERGRADUATE ADVISING

Interim Director: Carol Porter

Program Offices: Sweet Hall, 1st floor

Phone: (650) 723-2426

Web Site: <http://uac.stanford.edu/>

The Undergraduate Advising Programs coordinate the advising program for students who have not declared a major field of concentration. Freshmen are assigned to academic advisers according to their residence and their preliminary academic interest. Many freshmen receive enhanced academic support through participation in Expanded Advising Programs (EAP). Most sophomores who are undecided about their majors continue to work with their advisers from the first year. Some sophomores participate in the Sophomore Mentoring Program (SMP), which matches faculty mentors with students who have shared intellectual interests through a freshman seminar or sophomore college class. By the end of the sophomore year, undergraduates must declare a major. In junior and senior years, students are advised by faculty from the major department or program.

The Undergraduate Advising Programs (UAP) partners with faculty, staff, and students (peer advisors and mentors) to address students' intellectual and developmental goals. The center staff includes professional advisers who meet with students individually to set academic goals and to devise strategies for achieving those goals. The staff also coordinates a comprehensive array of academic advising programs and services designed to support and supplement the undergraduate curriculum.

The UAP staff of professional advisers provides advising to all students, freshmen through seniors. These UAP advisers offer students help when the academic adviser is unavailable or when additional advice is needed. Other UAP services include: assistance with curriculum planning; help with choosing a major; information on designing an individually designed major (IDM); academic and personal counseling related to academic performance; advice regarding plans to attend graduate or professional school; peer tutoring for subject areas; and learning skills classes. Reference guides to graduate and professional schools are available.

UNDERGRADUATE RESEARCH PROGRAMS

Director: Susie Brubaker-Cole

Associate Director for Honors Writing Programs: Hilton Obenzinger

Associate Directors for Student Services: Renee Courey, Brian Thomas

Program Office: Sweet Hall, fourth floor

Web Site: <http://urp.stanford.edu>

Undergraduate Research Programs (URP), a division of the office of the Vice Provost for Undergraduate Education (VPUE), seeks to foster and expand undergraduate participation in the creation of new knowledge at Stanford. URP sponsors and supports a broad range of programs that encourage undergraduates to work closely and individually with faculty on research, advanced scholarship, and creative projects. Programs are designed to serve students who are new to research, as well as those with considerable research experience who are able to take on advanced, independent projects. URP actively maintains the university's commitment to diversity, and the range of research projects and topics reflects the broad diversity of Stanford's faculty and student populations.

STUDENT GRANT PROGRAMS

URP offers research grants to currently registered Stanford undergraduates. Grants support faculty-mentored research projects, and are typically used to pay for the research supplies, travel, and room and board

associated with such projects. For the 2004-2005 academic year, students have access to five grant programs:

Small Grants provide up to \$1500 for student-conceived projects that explore a topic of interest or contribute to the development of the student's intellectual interests. Applications are considered each quarter, and are due October 21, 2004, January 27, 2005, and April 21, 2005.

Large Grants support major projects with up to \$5000. Funded projects typically culminate in an honors thesis or some other substantial final product that demonstrates a focused and intellectually rigorous perspective on the topic of interest. Applications are due April 4, 2005.

Chappell Lougee Scholarships are available to sophomores pursuing projects in the humanities and social sciences, and provide up to \$5000. Funded students commit to a research advising program that prepares them to undertake a capstone project or honors thesis in the future. Applications are due December 6, 2004.

Angel Grants provide up to \$3000 to students producing a finished public creative work such as an art exhibit, stage production, or concert. There is no deadline; applications are accepted on a revolving basis.

Conference Travel Grants support students who have been invited to present their work at a professional or scholarly conference. Grants of up to \$1500 fund travel expenses to and from the conference and normal conference registration. Students demonstrating financial need may also include conference-associated food and lodging in their budget. These applications are also accepted on a revolving basis.

The application for any student grant consists of (1) a student-authored project proposal, including a line-item budget, and (2) a letter of support written by a member of the Academic Council. URP may also consult student transcripts as well as outside faculty reviewers. Proposals are judged on significance, feasibility, and evidence of student preparedness.

Large Grant and Chappell Lougee Scholarship recipients may include a stipend within their budget if they are dedicating a substantial amount of time to their project over the Summer Quarter. These students may also request additional funding to help meet the Financial Aid Office's expected student contribution.

URP also provides considerable advising support for students considering a research grant. URP staff members offer proposal writing and project design consultation as well as advice on administrative policies. Students can view sample proposals at the URP office. For more information on student grant programs, see the URP web site at <http://urp.stanford.edu/>.

DEPARTMENTAL AND FACULTY-SPONSORED RESEARCH OPPORTUNITIES

DEPARTMENTAL AND RESEARCH CENTER PROGRAMS

Departments, interdisciplinary programs, and Stanford research centers may apply through the URP office for VPUE Departmental Grants for Undergraduate Research to support programs that provide undergraduates with close mentorship and training in scholarship and research. Typically, departments pair students with a faculty member or faculty-led research group according to their mutual scholarly interests. Students conduct substantive, directed research on a particular aspect of the faculty's research project, either part-time (during the school year) or full-time (during the summer), and they meet frequently with their faculty mentors to discuss progress and future directions for the project. The official request for proposals may be found on the faculty resources section of the URP web pages. Students should check with URP staff to determine which departments and centers currently sponsor research programs.

FACULTY GRANTS FOR UNDERGRADUATE INDEPENDENT STUDY AND RESEARCH

Individual faculty members may also apply through the URP office for VPUE Faculty Grants for Undergraduate Research. Faculty Grants provide funding for undergraduates to work closely with faculty on a

directed research project. Typical student research activities include conducting literature reviews, developing and conducting research surveys, collecting and analyzing data, aiding in the development of course materials, and conducting laboratory experiments. Faculty determine student participation in this program, so students should contact departments and faculty for more information. Faculty may obtain the official request for proposals on the faculty resources section of the URP web site.

ONLINE RESOURCE FILES

Stanford students can obtain free access to two databases through the web, available at <http://urp.stanford.edu>, designed to facilitate undergraduate and faculty research collaborations. Odyssey lists openings for student research assistants on faculty projects. The Iliad Faculty Interests file contains information about the research interests of individual Stanford faculty across the University. Faculty members with ongoing research programs are encouraged to identify a piece of their project appropriate to undergraduate competencies and to list it through Odyssey.

SUMMER RESEARCH COLLEGE

Summer Research College (SRC) is an eight- or ten-week residential program managed by URP for students engaged in faculty-mentored research endeavors on campus over the summer.

SRC aims to foster close intellectual and social contact among students and faculty in an interdisciplinary residential community. During the day, students work with their faculty advisers or research groups campus-wide. In the evenings and on weekends, they have opportunities to share in research discussions, dinners with faculty guests, social and cultural activities, and other informal gatherings with fellow researchers.

SRC is not a source of funding for student research; it is a residential program intended to enrich undergraduates' summer research experience. Residents of SRC obtain funding through URP and non-URP funding programs. For more information about SRC, including registration procedures and college policies, see the URP web site at <http://urp.stanford.edu>.

HONORS PROGRAMS

Qualified undergraduates are encouraged to participate in honors programs offered by departments and interdisciplinary programs. These capstone programs, usually completed in the senior year, provide opportunities for students to engage in advanced research, analysis, and articulation with faculty guidance. Honors programs may require in-depth research or field work with an extended written thesis, laboratory work accompanied by a report, or a creative project. Some honors programs require a public oral and visual presentation of the project's results. Each department and interdisciplinary program develops its own requirements for entry into its program and criteria for honors projects. Some honors programs require students to be majors, while other programs are avail-

able to any undergraduate with relevant preparation. Students are urged to check with each department and program to determine eligibility and other requirements. The URP sponsors the Golden and Firestone Honors Awards in recognition of the most exceptional student honors theses.

HONORS WRITING PROGRAMS

In addition to thesis writing support organized by departments and programs, URP offers writing consultation in the form of workshops during seminars, as well as consultation with graduate student assistants and faculty providing writing support for different honors programs. Students writing honors theses can also obtain individual editorial consultation at the URP office. Editorial support is also offered for other advanced writing needs, such as revision of a paper for publication in a professional journal, and personal statements and essays for master's and doctoral programs, and for national fellowship competitions (see Fellowships and Graduate School Applications Services below).

HONORS COLLEGE

The Honors College brings students writing honors theses to campus in September before the start of the regular school year for a program of group and major-based activities. By concentrating solely on the thesis for nearly three weeks, Honors College participants begin the senior year with a serious commitment to independent scholarship in an atmosphere of shared intellectual purpose. The college sponsors crossdisciplinary forums, such as writing workshops and methodology panels, as well as residential activities, such as cultural and social outings, and a celebratory concluding event to which students invite their research advisors. Students participating in Honors College receive a research stipend, room and board, and special access to computers. For students with demonstrated financial need, summer-time earnings replacement funds are also available.

FELLOWSHIPS AND GRADUATE SCHOOL APPLICATIONS SERVICES

URP staff provide practical advice to Stanford undergraduates and recent graduates on how to prepare and apply for master's and doctoral programs. Along with the Overseas Resource Center, URP staff help students to compete for merit scholarships and post-baccalaureate fellowships. The URP offers workshops and individual consultations on choosing a graduate school and fellowship program, writing personal statements, soliciting letters of recommendation, and speaking in interviews. The URP office also administers campus nomination competitions for the Goldwater, Udall, Beinecke, Center for the Study of the Presidency, Jack Kent Cooke, Carnegie, and Truman scholarships. The Overseas Resource Center specializes in preparing students for undergraduate international study and post-baccalaureate fellowship competitions by providing individual consultations and workshops on personal statements, project design, and interview strategies.



STUDENT AFFAIRS

Vice Provost for Student Affairs: Gene I. Awakuni
Web Site: <http://www.stanford.edu/dept/vpsa/>

Student Affairs supports the academic mission of the University by fostering a climate conducive to living and learning in a diverse community. The division encompasses programs and services for undergraduates and graduate students which include the Office of Residential Education, the Office of the University Registrar, the Vaden Health Center, and the Dean of Students Office. The Vice Provost for Student Affairs reports directly to the Provost and is responsible for providing leadership, policy direction, administrative support for budget, personnel, facilities, and development, as well as oversight of the efficiency and effectiveness of each of the division's units. The Vice Provost interacts with the President, the Provost, the University Cabinet, faculty, schools, department representatives, students, and parents. The Vice Provost also serves as an ex officio member of the Senate of the Academic Council.

DEAN OF STUDENTS

Associate Vice Provost for Student Affairs and Dean of Students: Greg Boardman
Web Site: <http://www.stanford.edu/dept/vpsa/>

The Office of the Dean of Students seeks to ensure that the University is sensitive and responsive to the needs of students. The office is responsible for several administrative offices and community centers including: the Asian American Activities Center; Bechtel International Center; Black Community Services Center; Career Development Center, El Centro Chicano; Judicial Affairs; Lesbian, Gay, Bisexual, and Transgender Community Resource Center; Native American Cultural Center/American Indian Program Office; Office of Multicultural Education; Tresidder Memorial Union; the Office of Student Activities, including Greek Affairs; and the Women's Community Center. The office also provides consultation and coordination with approximately 600 student organizations, student media, activities, publications, and the Associated Students of Stanford University. The office is located in Tresidder Memorial Union, telephone (650) 723-2733. Students are welcome to visit the Dean of Students to discuss ideas, personal issues, or general concerns about student life.

INTERNATIONAL CENTER

Web Site: <http://www.stanford.edu/dept/icenter/>

The Bechtel International Center (I-Center) is a meeting place for students and senior research scholars at Stanford from throughout the world and for internationally oriented U.S. students, faculty, and short-term visitors on the campus. Through a variety of social, cultural, and educational programs, I-Center facilities are utilized to acquaint students and scholars with the life of the University and the community, and to bring them together in activities of mutual interest.

The I-Center emphasizes the international dimensions of the University through its advising services, through the cultural contributions to campus life by the various nationalities represented, and by bringing to the attention of U.S. students the many overseas opportunities available for study abroad, scholarships for research and study abroad, and short-term work abroad.

I-Center services include advisers, working closely with the University's academic departments, include advising foreign students and scholars on matters such as immigration, referrals to counselors in personal matters relating to academic performance, psychological and cultural adjustment, promoting cultural exchanges, and advising spouses and families about opportunities and resources in the community.

The Overseas Resources Center, within the I-Center, provides the following services: advising on scholarships for study and research over-

seas, information on non-Stanford study abroad and passport photos, international student ID cards, and youth hostel membership cards.

JUDICIAL AFFAIRS AND STUDENT CONDUCT

In March 1996, President Gerhard Casper convened the Committee of 15 and requested a review of the student judicial system at the University under the then-existing Legislative and Judicial Charter of 1968. During the following year, the Committee of 15 conducted an extensive review of the existing charter and process and drafted a new charter to take its place. The Student Judicial Charter of 1997 was approved by the Associated Students of Stanford University, the Senate of the Academic Council, and the President of the University during Spring Quarter 1996-97 and Autumn Quarter 1997-98, replacing the earlier charter and becoming effective in January 1998. Cases of alleged violations of the University's Honor Code, Fundamental Standard, and other student conduct policies now proceed through an established student judicial process based upon the Student Judicial Charter of 1997, which can be found in its entirety at the University's Office of Judicial Affairs web site at <http://judicialaffairs.stanford.edu>. The web site also contains the policies, rules, and interpretations, as well as the University's Student Conduct Penalty Code, applicable to those students found responsible for violating the Honor Code, the Fundamental Standard, or other University policy or rule.

When a violation of the Fundamental Standard, Honor Code, or other University policy or rule governing student conduct is alleged, or whenever a member of the University community believes such a violation has occurred, he or she should contact the Office of Judicial Affairs, at Tresidder Memorial Union, 2nd floor, phone (650) 725-2485, fax (650) 736-0247, or email judicial.affairs@stanford.edu.

The primary codes of conduct for students are the Fundamental Standard and Honor Code.

THE FUNDAMENTAL STANDARD

Students at Stanford are expected to know, understand, and abide by the Fundamental Standard, which is the University's basic statement on behavioral expectations articulated in 1896 by Stanford's first President, David Starr Jordan, as follows:

"Students are expected to show both within and without the University such respect for order, morality, personal honor, and the rights of others as is demanded of good citizens. Failure to do this will be sufficient cause for removal from the University."

Actions that have been found to be in violation of the Fundamental Standard include:

- Physical Assault
- Property Damage
- Forgery
- Theft
- Sexual harassment or other sexual misconduct
- Misrepresentation in seeking financial aid, University housing, University meals, or other University benefits
- Driving on campus while under the influence of alcohol
- Misuse of computer equipment or email
- Sending threatening or obscene messages

There is no standard penalty which applies to violations of the Fundamental Standard. Penalties range from a formal warning to expulsion. Each case is fact specific; considerations include the nature and seriousness of the offense, the motivation underlying the offense, and precedent in similar cases.

THE HONOR CODE

The Honor Code is the University's statement on academic integrity. It is essentially the application of the Fundamental Standard to academic matters. Provisions of the Honor Code date from 1921, when the honor system was established by the Academic Council of the University Faculty at the request of the student body and with the approval of the President. The Honor Code reads:

“A. The Honor Code is an undertaking of the students, individually and collectively:

- 1) that they will not give or receive aid in examinations; that they will not give or receive unpermitted aid in class work, in the preparation of reports, or in any other work that is to be used by the instructor as the basis of grading;
- 2) that they will do their share and take an active part in seeing to it that others as well as themselves uphold the spirit and letter of the Honor Code.

“B. The faculty on its part manifests its confidence in the honor of its students by refraining from proctoring examinations and from taking unusual and unreasonable precautions to prevent the forms of dishonesty mentioned above. The faculty will also avoid, as far as practicable, academic procedures that create temptations to violate the Honor Code.

“C. While the faculty alone has the right and obligation to set academic requirements, the students and faculty will work together to establish optimal conditions for honorable academic work.”

Examples of conduct that have been found to be in violation of the Honor Code include:

Copying from another’s examination paper or allowing another to copy from one’s own paper

Unpermitted collaboration

Plagiarism

Revising and resubmitting a quiz or exam for regrading without the instructor’s knowledge and consent

Representing as one’s own work the work of another

Giving or receiving aid on an academic assignment under circumstances in which a reasonable person should have known that such aid was not permitted

In recent years, most student disciplinary cases have involved Honor Code violations; of those, the most frequent arise when a student submits another’s work as his or her own, or gives or receives unpermitted aid. The standard penalty for a first offense is a one quarter suspension from the University and 40 hours of community service. In addition, many faculty members issue a “No Pass” for the course in which the violation occurred. The standard penalty for multiple violations (for example, cheating more than once in the same course) is a three quarter suspension and 60 hours of community service.

STUDENT DISABILITY RESOURCE CENTER (SDRC)

Center Office: 563 Salvatierra Walk

Mail Code: 94305-8540

Phone: (650) 723-1066 (voice); 723-1067 (TDD)

Web Site: <http://www.stanford.edu/group/DR/C/>

The Student Disability Resource Center (SDRC), open weekdays from 9 a.m. to noon, and 1 to 5 p.m., is the central administrative office that coordinates a number of services and resources for undergraduate and graduate students with documented disabilities. The students who use the SDRC’s services have a variety of disabilities, including mobility impairments, learning disabilities, chronic illness, psychological disabilities, and sensory disabilities. The mission of the SDRC is to provide students with disabilities equal access to all facets of university life: education, housing, recreation, and extracurricular activities. To initiate services, a student contacts the SDRC directly and meets with a Program Coordinator to determine what services and accommodations will support the student’s disability-related needs. Students who are eligible for services will be asked to submit professional documentation of their disabilities to the SDRC. Services include, but are not limited to, notetaking, Braille, scanning to e-text, oral or sign language interpretation, stenocaptioning, books on tape, extended time on examinations, and a distraction free room for taking examinations. During the academic year, the SDRC runs a golf cart service called DisGo Cart for use by students who use wheelchairs or who have temporary or permanent mobility impairments.

The Assistive Learning Technology Center, located on the second floor of Meyer Library, is maintained by the Office of Accessible Edu-

cation. The ALTeC provides a wide variety of hardware and software devices, ergonomic furniture, and expert technical advice intended to provide individuals with disabilities independent access to information technology. Each of workstations provides a combination of scanners, refreshable Braille displays, CCTVs, expanded keyboards, Braille embossers, alternative input devices, voice recognition software, screen-readers, text-readers, screen-magnification, eye/head tracking, Braille translation, word prediction, and/or on-screen keyboards. Macintosh screen-reading software (outSPOKEN) and screen magnification (in-Large) are also available in the Tresidder and Meyer computer clusters for Macintosh users with print impairments. Students, staff, and faculty are all welcome to use any of the ALTeC’s services, if verified by the SDRC or the ADA/Section 504 Compliance Officer. ALTeC staff is also available to assess the access barriers potentially presented by various disabilities and to recommend compensatory and access strategies. For details, screenings, or demonstrations, please contact the SDRC.

TRESIDDER MEMORIAL UNION

Tresidder Memorial Union (TMU) is a center of community activity on the Stanford campus. It houses a variety of food services; meeting rooms for special occasions; a ticket office, a campus information center; branch offices and ATMs for the Stanford Federal Credit Union, and Wells Fargo; ATMs for Bank of America; a fitness center; and a hair styling shop. Tresidder Express carries groceries, magazines, and sundries. A full range of food services is provided at TMU.

TMU is also the home of the Associated Students of Stanford University (ASSU), the Office of the Vice Provost for Student Affairs, the Dean of Students Office, and the Office of Student Activities.

VOLUNTARY STUDENT ORGANIZATIONS

At its March 1963 meeting, the Board of Trustees adopted the following policy:

“Students are encouraged to study, discuss, debate, and become knowledgeable about contemporary affairs. Expressing opinions or taking positions with respect to these matters is up to the individual students or to volunteer groups of students so constituted that they are authorized to speak for their members. This is not a function of student government at Stanford.

“All students are required to become members of the Associated Students of Stanford University, which represents them with respect to student affairs on the Stanford campus. The student government, under this policy, is not authorized to speak for students on other matters.

“Under such regulations as may be established from time to time by the President of the University, students may form voluntary organizations constituted to speak for their members with respect to matters outside the scope of student government, provided such organizations clearly identify themselves and, in any public statements, make it clear that they do not represent or speak for the University or the Associated Students.

“Any questions concerning the interpretation and application of this policy shall be resolved by the President of the University.”

Voluntary student organizations are those organizations: (1) in which membership is not mandatory and is nondiscriminatory, (2) in which membership is both open and limited to current Stanford students registered in a degree-granting program, (3) in which students make all organizational decisions, and (4) whose purposes and procedures are consistent with the goals and standards of the University. In order to use University facilities, the Stanford name, or to receive ASSU funding, all voluntary student organizations must register with the University through the Office of Student Activities on the second floor of Tresidder Memorial Union.

As a condition of registration, each voluntary student organization must file and have approved each of the following:

1. A statement of purpose and organizational constitution.
2. A statement about membership eligibility.
3. Clear procedures for officer elections.
4. Identification of the authorized representative of the group, who must be a currently registered student, and at least five active members in the organization who are currently registered students.

Each voluntary student organization must renew its registration with the University annually, early in Autumn Quarter, by submitting new registration materials.

If a voluntary student organization that is registered with the University seeks to use University facilities for meetings open to more than its own members and to specifically invited guests, such meetings shall be subject to the regulations of the Committee on Public Events. All organization events held in University facilities must receive event approval from the Office of Student Activities and Stanford Events.

A voluntary student religious organization may hold open meetings in University facilities only with the approval of the Office of the Dean of the Chapel.

A registered voluntary student organization may advocate publicly a position on a public issue, provided the organization clearly identifies itself, and provided such an organization in any public statement makes clear it does not represent or speak for the University or for the Associated Students.

No student group may use University space or facilities or receive other University support for purposes of supporting candidates for public office. Groups may use public places such as White Plaza for tables, speeches, and similar activities; may have intermittent use of on-campus meeting rooms; and may request to reserve auditoriums and similar space for public events including speeches by political candidates as long as all University guidelines are followed.

CAREER DEVELOPMENT CENTER

Center Office: 563 Salvatierra Walk

Web Site: <http://cardinalcareers.stanford.edu>

Counseling Services—Monday to Friday, 9 a.m. to 12 noon, 1 p.m. to 5 p.m.; (650) 725-1789.

Employment Services—Monday to Friday, 8:15 a.m. to 4:30 p.m.; (650) 723-9014.

Reference File Services—Monday to Friday, 9 a.m. to 12 noon, 1 p.m. to 3 p.m.; (650) 723-1548.

The Career Development Center (CDC) offers a wide range of services from counseling, workshops, and presentations to on-campus recruiting, job/internship databases, reference file services, library resources, and alumni networking, to help students make informed decisions and to plan for life after Stanford.

Services are open to undergraduates and graduate students, and all students are encouraged to visit in person or via the web. Programs and services are free to students; limited services are available to alumni and student spouses and domestic partners.

The following suggestions may assist in approaching and using the CDC to best benefit:

- Visit early in a Stanford career.
- Gather general career information through the career resource center, internship database, handouts, and alumni network.
- Inquire about individual counseling for all stages of career planning and development.
- Participate in workshops to clarify career goals. Workshops provide valuable learning experiences through the interaction and support of other participants.
- Use the Cardinal Recruiting Program as a convenient way to interview with employers; or use the Reference File Service to ease the management of applications for graduate school or employment.

HAAS CENTER FOR PUBLIC SERVICE

The Haas Center for Public Service connects academic study with community and public service to strengthen communities and develop effective public leaders. To accomplish these objectives, the center collaborates with associated units at Stanford to implement programs in five areas of work.

Through the center's fellowship programs, undergraduates perform summer internships in community organizations and government agencies, locally, nationally and internationally. Postgraduate fellowships allow graduating seniors to work with a mentor in a nonprofit or public agency for a year. With support from the center, Stanford faculty members have created dozens of service-learning courses that involve Stanford students providing direct service to local schools, nonprofit organizations and government agencies. The center's Public Service Scholars Program supports seniors writing honors theses that combine academic research with public service. Faculty also support students engaged in public service research under their supervision using funds administered by the center. Faculty from Stanford's School of Education collaborate with the center to provide curriculum guidance and training for tutors and mentors at nearby schools. Another community program trains students to bring results of scientific research to neighboring schools. The federally-supported Community Service Work-Study program, administered in conjunction with the financial aid office, allows students to satisfy work-study obligations year-round by working in community organizations and public agencies. Center staff provide leadership development through training, advising, and resources to Stanford in Government, Alternative Spring Break, and other student groups engaged in service. A year-long leadership program brings students together with community and public leaders to enhance the students' own skills.

The Haas Center also houses associated programs, including: Stanford in Washington (a unit of the School of Humanities and Sciences); the Institute for Diversity in the Arts (a program of the Committee on Black Performing Arts and the Drama department); and Volunteers in Asia (VIA), a nonprofit cultural and educational exchange program.

Students interested in public service fellowships, service-learning courses, community-based research, public and community service internships for youth and education, or service organization leadership development should visit the Haas Center, see <http://haas.stanford.edu>, or call (650) 723-0992.

VADEN HEALTH CENTER

Center Office: 866 Campus Drive

Web Site: <http://vaden.stanford.edu>

The Allene G. Vaden Health Center strictly protects the confidentiality of information obtained in medical care and counseling.

MEDICAL SERVICES

Medical Services (650-498-2336, ext. 1) is the first stop for diagnosis and treatment of illness, injury, and ongoing conditions, as well as preventive counseling and education. Services (without charge) include:

- Medical appointments in general medicine and sports medicine.
- Medical advice for routine concerns throughout the day. When Medical Services is closed, advice for urgent conditions is available from our on-call physician.
- Referral to specialists, primarily at Stanford Hospital and Clinics and Menlo Medical Clinic.
- Additional services (fees may apply): allergy injections, immunizations, physical exams for employment and scholarships, HIV testing, laboratory, X-rays, pediatric immunizations (academic year only), drug screening (academic year only).
- Pharmacy (650-498-2336, ext. 3), physical therapy (650-723-3195) and travel services (650-498-2336, ext. 1) are available on site.

COUNSELING AND PSYCHOLOGICAL SERVICES (CAPS)

CAPS (650-723-3785) helps students who experience a wide variety of personal, academic, and relationship concerns. Services (without charge) include:

- Evaluation and brief counseling, including personal, couples and group therapy. Students requesting or requiring longer, ongoing therapy incur fees.
- Workshops and groups that focus on students' social, personal, and academic effectiveness.
- Crisis counseling for urgent situations 24 hours a day.
- Specially trained staff to meet the needs of student survivors of sexual assault (Campus Sexual Assault Response and Recovery Team, 650-725-9955).
- Consultation and outreach to faculty, staff, and student organizations.

HEALTH PROMOTION SERVICES

Health Promotion Services (650-723-0821) educates and supports students to help them make informed, healthy decisions about their lifestyle and behavior. Services include:

- Individual preventive counseling and resource referral concerning nutrition, weight management, eating and body image, alcohol, tobacco and other drug use, sexual assault and harassment, relationships, intimacy and gender issues, and sexual health.
- Health education speakers, programs, events, and workshops at student residences, community centers, student organizations, and for new students (such as Real World: Stanford).
- Academic courses and internships.
- Student groups and volunteer opportunities including Peer Health Educators and anonymous HIV testing and counseling.

HEALTH INSURANCE

All registered students are required to have health insurance. Call (650) 723-2135 for more information. Cardinal Care, a University-sponsored plan for students, fulfills this requirement. Insured by The Chickering Group, an Aetna Company (medical), and ValueOptions (mental health), Cardinal Care features comprehensive, worldwide coverage, services by referral at Stanford University Medical Center, and lowest costs when one initiates care at Vaden Health Center. Health insurance for spouses, domestic partners and children is available. Options for voluntary dental insurance are offered.



OTHER SERVICES AND PROGRAMS

BOOKSTORE

Web Site: <http://www.stanfordbookstore.com>

Organized in 1897, Stanford Bookstore, (650) 329-1217, located at 519 Lasuen Mall, provides a diverse selection of books, course materials, and supplies to the students, faculty, staff, and community in and surrounding Stanford. The bookstore carries over 130,000 titles, including a wide selection of books written by Stanford authors, making it one of the largest bookstores in the nation. The bookstore also carries a complete selection of Stanford logo apparel, gifts and souvenirs, periodicals, and a café that provides an enhanced shopping experience. The Computer Store, in the main branch, sells academically priced computer hardware and software. Other services include shipping of purchases, gift certificates, book buyback, fax service, postage stamp sales, an ATM machine, and Enterprise Rent-A-Car hotline. There are five branches in addition to the Stanford Bookstore that also serve the community: the Stanford Professional Bookstore Palo Alto, (650) 614-0280, which carries medical and technical books, supplies, stationery, medical instruments, best-sellers, and clothing; The Track House Sports Shop, (650) 327-8870, at the corner of Campus Drive and Galvez Street; Tresidder Express convenience store in Tresidder Union; the Stanford Shop, (650) 614-0295, at the Stanford Shopping Center; and the Bookshop, (650) 725-2775, at the Cantor Center for the Arts.

STANFORD CONFERENCE SERVICES

A conference is defined as any student or adult group that convenes for part of a day (including a luncheon), overnight, or for several days, outside the regular or summer academic sessions for registered students.

To make arrangements for holding a new conference from June 18 through Labor Day, contact Jeff Marson, sales/marketing coordinator for Conference Services, (650) 725-1427, jmarson@stanford.edu. For conferences occurring immediately after Labor Day through June 17, contact Non-Academic Facilities Scheduling in the Office of the University Registrar, (650) 723-6755, or email reg-events@stanford.edu. Policies concerning conferences are the responsibility of the offices of the President and the Provost.

External organizations interested in meeting at Stanford must obtain sponsorship from a University department. Conferences initiated by University departments or external organizations must demonstrate consistency with the University's academic mission. The sponsoring department submits its proposal to the Director of Conferences for review in terms of available facilities and for the approval of the President's Office.

On-campus residential housing and dining services are normally available from the Sunday following Commencement through Labor Day. Assistance with arrangements for tables, chairs, audiovisual aids, signage, and other equipment may be made through Conference Services. For more information, see <http://conference.stanford.edu>. During the academic year, housing arrangements for University-sponsored visitors can be made through the SLAC Guest House; see <http://slacguesthouse.stanford.edu>.

OMBUDS

Stanford University Ombuds: David Rasch
Ombuds Office: Building 310, Room 104, Main Quad
Phone: (650) 723-3682
Email: rasch@stanford.edu
Web Site: <http://vaden.stanford.edu>
School of Medicine Ombuds: Martha McKee
Email: martha.mckee@stanford.edu

The charge to the Ombuds office at Stanford is: "The Ombudsperson's task is to protect the interests and rights of members of the Stanford community from injustices or abuses of discretion, from gross inefficiency, from unnecessary delay and complication in the administration of University rules and regulations, and from inconsistency, unfairness, unresponsiveness, and prejudice in the individual's experience with University activities. The Ombudsperson's office exists to receive, examine, and channel the complaints and grievances of members of the Stanford community, and to secure expeditious and impartial redress."

Any troublesome matter in the University community may be discussed in confidence with the University Ombuds. Services of the office are available to students, staff, and faculty.

Although possessing no decision making authority, the Ombuds has wide powers of inquiry. The Ombuds refers matters to the proper person or office expeditiously and, where appropriate, assists in negotiations or provides access to mediation. (For the role of the office of the Ombuds in cases of sexual harassment, see the "Non-Academic Regulations" section of this bulletin.)

POLICE SERVICES

Department Office: Corner of Campus Drive and Serra Street
Phone: (650) 723-9633
Web Site: <http://police.stanford.edu>

The Stanford Department of Public Safety is a full service police department that operates 24 hours a day, 7 days a week. For police, fire, or ambulance response, dial 9-1-1, or 9-9-1-1 from a University phone. Emergency assistance can also be obtained by using one of the nearly 100 Blue Emergency Phone Towers strategically placed around campus.

The department is comprised of the following divisions:

The Field Services Division consists of sworn and non-sworn officers who patrol the campus and respond to calls for service. Sworn officers receive their police powers through the Santa Clara County Sheriff's Office. Sworn officers have the legal authority to stop vehicles, make arrests, and enforce all laws. Non-sworn officers assist the sworn officers with security patrols, evidence collection, crime prevention presentations, and other assigned tasks.

Community Service Division: Community Service Officers (CSOs) enforce the parking rules and regulations on campus, and provide traffic control at special events, construction zones, and accident scenes. CSOs also provide building security during emergency or critical incidents.

The Support Services Division provides logistical, technical, and accounting support to the department. Special events are handled through this division as well. Special Events Personnel (SEPs) provide security at campus events including athletic events, concerts, student-sponsored events, and dignitary visits. SEPs are available for hire by groups needing security at their University events. Contact the special events office at (650) 723-4924, or email event_security@stanford.edu, for more information.

The Administrative Support Division supports the department through training, recruiting, payroll, human resources, and other business functions.

For additional safety information or to view the yearly crime statistics, see the *Stanford Safety and Security Almanac*, available free from Public Safety, or see <http://police.stanford.edu>.

THE OFFICE FOR RELIGIOUS LIFE

Phone: (650) 723-1762
Web Site: <http://religiouslife.stanford.edu>

The Office for Religious Life in Memorial Church nurtures spiritual, religious, and ethical life for the Stanford University community and beyond. Multifaith exploration and dialogue, central in Stanford's history from its founding, is a vital part of both its ethos and education.

The Deans for Religious Life oversee and provide support for Stanford Associated Religions (S.A.R.), some thirty religious organizations invited to offer their spiritual services to the campus. The Deans are committed to welcoming students of all genders and sexual orientations, all religious and non-religious traditions, and all cultural backgrounds. They strive to ensure that students, faculty and staff find lively, thoughtful and supportive contexts on Stanford's campus, in which to pursue their spiritual journeys.

STANFORD ALUMNI ASSOCIATION

Web Site: <http://www.stanfordalumni.org>

Established in 1892 by members of Stanford's first graduating class, the Stanford Alumni Association oversees alumni activities and services, including reunions/homecoming, campus conferences, regional and class programming and events, *Stanford Magazine*, a web site, enrichment education, faculty-led travel, and alumni networking, mentoring, and volunteering.

SAA's Student Programs group works with undergraduate and graduate students, providing programming to foster class identity and lifelong connections to Stanford and the Stanford community. Programs include Sophomore Academic Dinners (to help students who are selecting majors), Junior Alumni Night (to connect students with alumni in various professions), Care Packages for students during Dead Weeks, Senior Send-Off (to help students connect to Stanford alumni in the communities they will move to upon graduation), Senior Dinner on the Quad (to celebrate the completion of their Stanford undergraduate days as a class), Class Day Luncheon (featuring a final lecture by a favorite professor), the Night Before Party (one last bash for soon-to-be-graduates and their families), and the Cardinal Class Core Induction Ceremony (for seniors who agree to play ongoing leadership roles in keeping their class connected). In addition, SAA sponsors Happy Hours and Open Houses for graduate students and advises the Senior Class Officers.

For further information, call (800) 786-2586 or (650) 723-2021, or see <http://www.stanfordalumni.org>.

STANFORD EVENTS

Stanford Events supports the mission and goals of Stanford University through open engagement of the campus community and the worldwide public. The department has three divisions: Public Events, Stanford Lively Arts, and the Stanford Ticket Office.

Public Events oversees, advises, and produces University events and ceremonies as designated by the President's office such as: Commencement, Baccalaureate, the University President's inaugurations, New Student Orientation Convocation, Community Day/Founders' Celebration, and other high-profile university events. This division also serves in an advisory capacity to the schools, departments, and student groups on campus, and oversees University policy and procedure regarding campus events. The Public Events office has final approval authority of Stanford facility and open space use for non-academic public events on campus. Information about University event planning, policies, procedures, and University facilities can be found at <http://stanfordevents.stanford.edu>, or (650) 723-2551.

Stanford Lively Arts, the University's presenting program, annually brings to campus a full season of music, dance, and theater by world-famous artists and exceptional newcomers. It furthers research and creativity through world premieres, unique collaborations, and commissions. In addition to on-stage performances, Lively Arts extends and supplements the academic life of the University through master classes, extended residencies, workshops, lectures and demonstrations, and group discussions. Internationally acclaimed artists perform serious work with Stanford students in classrooms as well as in residence halls. Discounts on performances are available for faculty, staff, and students. For tickets and more information, see <http://livelyarts.stanford.edu>, or call (650) 725-ARTS (2787).

Stanford Ticket Office provides ticketing services for the arts and entertainment events of Stanford University. Tickets for Stanford Lively Arts, Stanford music and drama departments, Stanford Jazz Workshop/Festival, and the ASSU Concert Network are among the event tickets that are available through this office. For more information, see <http://tickets.stanford.edu>, or call (650) 725-ARTS (2787).

AWARDS AND HONORS

FACULTY AND STAFF AWARDS

KENNETH M. CUTHBERTSON AWARD

The Kenneth M. Cuthbertson Award was established in 1981 for recognition of exceptional service to Stanford University. It was established by members of the faculty who wish to remain anonymous. All members of the Stanford community are eligible for the award; the sole criterion is the quality of the contribution that the recipients have made to the University. The award provides a way of honoring members of the staff and faculty for their efforts on behalf of the University.

Ordinarily, one award is made each year. The award was first presented in 1981 to the person for whom it is named. Kenneth M. Cuthbertson was one of the early architects of Stanford's long-term financial planning and fundraising program. His service to Stanford has set an enduring standard for those who will come after him. The award is made annually at the University Commencement Ceremony.

LLOYD W. DINKELSPIEL AWARDS

The Lloyd W. Dinkelspiel Awards recognize distinctive and exceptional contributions to undergraduate education at Stanford University. The two principal awards are made to the faculty or staff members adjudged to have made the most distinctive contribution to the development and enrichment of undergraduate education in its broadest sense. Two awards are also made to graduating seniors who combine academic achievement with effective contributions to undergraduate student life. Preference is given to service in the School of Humanities and Sciences in the area of liberal education. The awards are made from an endowment fund established in memory of Lloyd W. Dinkelspiel, a Stanford alumnus and trustee. The awards are made annually at the University Commencement Ceremony.

WALTER J. GORES AWARDS

The Walter J. Gores Faculty Achievement Awards for excellence in teaching were established by bequest of Walter J. Gores, Stanford Alumnus of the Class of 1917 and a professor at the University of Michigan for 30 years. Teaching is understood in its broadest sense and includes, in particular, lecturing, leading discussions, tutoring, and advising at the undergraduate or professional levels. Any member of the teaching staff of the University is eligible for an award, including all faculty of professorial rank, instructors, lecturers, teaching fellows, and teaching and course assistants. Ordinarily, awards are made to a senior faculty member (associate or full professor) or senior lecturer; a junior faculty member or member of the teaching staff; and a teaching assistant (graduate or undergraduate student). The awards are made annually at the University Commencement Ceremony.

ALLAN COX MEDAL FOR FACULTY EXCELLENCE FOSTERING UNDERGRADUATE RESEARCH

The Allan Cox Medal for Faculty Excellence Fostering Undergraduate Research is awarded annually to a faculty member who has established a record of excellence directing undergraduate research over a number of years. It may also go to a faculty member who has done an especially outstanding job with just one or two undergraduates who demonstrated superior work. The medal was established in memory of the former professor of Geophysics and Dean of the School of Earth Sciences, a strong supporter of faculty-student research collaboration.

HERBERT HOOVER MEDAL FOR DISTINGUISHED SERVICE

David Starr Jordan's firm belief that every academic degree should represent work actually done in or under the direction of the institution granting it has meant that, since its founding, Stanford has awarded no honorary degrees. As a means of recognizing extraordinary individuals who deserve special acknowledgment, the Stanford Alumni Association in 1962 voted to establish the Herbert Hoover Medal for Distinguished Service. The name pays tribute to the former President's example of service to his University, to his country, and to the cause of world humanitarianism. Indeed, Mr. Hoover was the first award recipient. The gold medal is presented following selection by an anonymous committee appointed by the Chair of the Board of Directors of the Alumni Association. There have been 11 honorees.

STUDENT AWARDS

BOOTHE PRIZE FOR EXCELLENCE IN WRITING

Awarded during the freshman year, the Boothe Prize recognizes excellence in writing. Students are selected for this honor on the basis of essays written for courses fulfilling the Introduction to the Humanities or Writing and Rhetoric requirements. The prize is named for Mr. and Mrs. D. Power Boothe, Jr., whose gifts to the University reflect their interest in the humanities.

PRESIDENT'S AWARD FOR ACADEMIC EXCELLENCE IN THE FRESHMAN YEAR

The President's Award honors students who have exceptionally distinguished academic records that exemplify a strong program of study in the freshman year. Students eligible for the award normally have completed Writing and Rhetoric and Introduction to the Humanities requirements during their first year at Stanford.

DEANS' AWARD FOR ACADEMIC ACHIEVEMENT

The Deans of Earth Sciences, Engineering, and Humanities and Sciences recognize from five to ten undergraduate students each year for their academic endeavors. Honorees are cited for noteworthy accomplishments which represent more than a high grade point average or success in course work. Faculty nominate students who have exceptional tangible achievements in classes or independent research, national academic competitions, a presentation or publication for a regional or national audience, or exceptional performance in the creative arts.

FIRESTONE MEDAL FOR EXCELLENCE IN RESEARCH

The Firestone Medal is awarded to seniors in recognition of excellence in undergraduate research. Departments in the School of Humanities and Sciences nominate students who have completed outstanding honors projects in the social, physical, and natural sciences.

ROBERT M. GOLDEN MEDAL FOR EXCELLENCE IN THE HUMANITIES AND CREATIVE ARTS

The Golden Medal recognizes outstanding achievement in the humanities and the creative arts. Seniors receive these medals upon nomination by their major department.

HOEFER PRIZE FOR EXCELLENCE IN UNDERGRADUATE WRITING

The Hoefer Prize recognizes students and faculty for their work in courses that meet the University Writing Requirement for writing in the major. Prizes are awarded in each of the five areas of the undergraduate curriculum: humanities, social sciences, natural sciences, engineering, and earth sciences.

FREDERICK EMMONS TERMAN ENGINEERING SCHOLASTIC AWARD

The School of Engineering annually presents the Terman Award to seniors for outstanding academic achievement. The awardees share their award with a high school teacher of their nomination.

PHI BETA KAPPA

Phi Beta Kappa is a nationwide society honoring students for the excellence and breadth of their undergraduate scholarly accomplishments. Membership in the Stanford Chapter (Beta of California) is open to undergraduates of all majors. To be elected to Phi Beta Kappa at Stanford, a student must achieve academic distinction in the major as well as in courses across a broad range of fields.

Approximately a tenth of the members of a graduating class are elected to Phi Beta Kappa. Of this number, about one fifth are chosen in their junior year, the remainder in their senior year.

The chapter's election guidelines define breadth of study as excellence beyond the major field. To be considered for election, a student must have taken at least three courses of three units or more at Stanford for a letter grade in each of the following three major domains of knowledge: Humanities; Science, Engineering, and Math; and Social Sciences, by the time elections are held early in the Spring Quarter. To be considered for election, students who transfer in their junior year must have taken *at least* two courses at Stanford in two of the major domains and at least one course in the third domain, and must have completed a minimum of 75 units of academic work at Stanford by the end of Winter Quarter.

Although there is no direct correlation between Stanford University General Education Requirements (GER) and Phi Beta Kappa breadth requirements, examples of courses that satisfy the Phi Beta Kappa breadth criterion include those listed in the *Stanford Bulletin* as satisfying undergraduate GERs in Areas 2 to 4. Courses taken for GER Area 1 are not considered sufficient to satisfy the PBK breadth criterion.

A grade of '+' or 'CR' is not considered a sign of distinction. Minimally satisfying the breadth criterion is not considered a sign of distinction; successful candidates will have satisfied some component of the breadth requirement outside the major.

The academic records of eligible students are automatically reviewed, so no special action is required for students wishing to be considered for membership. Anonymity in the election process is ensured by removal of the students' names from their academic records before consideration. Students who desire that their records not be made available for consideration by the Stanford chapter of Phi Beta Kappa should inform the Registrar, Old Union, Stanford, CA 94305-3005.

EXCHANGE PROGRAMS AND CROSS-ENROLLMENT AGREEMENTS

Stanford has exchange programs and cross-enrollment agreements with a number of other colleges and universities. The purpose of these programs and agreements is to offer Stanford students courses and training that are not available in the Stanford curriculum.

EXCHANGE PROGRAMS UNDERGRADUATE

Stanford has exchange programs with four colleges and universities that allow students to exchange schools for a quarter/semester or for a year, depending on the school. These programs are best suited to students in their junior year, when the major area of study has been determined. Stanford students register for zero units at Stanford during the quarter(s) in which they are attending another college or university and pay the regular Stanford tuition. Courses taken at the other institution are treated as transfer credit back to Stanford. Students should contact the External Credit Evaluation section of the Office of the University Registrar to determine whether the courses taken through an exchange program may qualify for credit toward a Stanford degree. Only the number of units accepted in transfer, not the course titles or the grades received, are recorded on the Stanford transcript.

Exchange programs are currently available at three historically black institutions: Howard University in Washington D.C.; and Morehouse College and Spelman College in Atlanta, Georgia. The exchange program at Dartmouth College in Hanover, New Hampshire, focuses on Native American Studies. Further information is available at the Undergraduate Advising Center.

GRADUATE

The Exchange Scholar Program is open to doctoral students in the fields of humanities, social sciences, and sciences who have completed one full year of study at one of the participating institutions. These students may apply to study at Stanford for a maximum of one academic year to take advantage of particular educational opportunities not available on the home campus. The participating institutions are Brown University, University of Chicago, Columbia University, Cornell University, Harvard University, Massachusetts Institute of Technology, Princeton University, University of Pennsylvania, and Yale University. Further information on the program may be obtained from the Degree Progress Office, Old Union, or from the graduate dean's office at participating institutions. Some institutions may place restrictions on specific departments.

Stanford also has separate exchange programs with the University of California, Berkeley, and the University of California, San Francisco. Further information may be obtained at the Office of the University Registrar.

CROSS-ENROLLMENT AGREEMENTS FOR ROTC

Stanford has cross-enrollment agreements for the Reserve Officers' Training Corps (ROTC) with the Navy and Marine Corps ROTC program at the University of California at Berkeley, the Army ROTC program at Santa Clara University, and the Air Force ROTC program at San Jose State University. The purpose of these agreements is to allow Stanford students to engage in military training while working on their degrees from Stanford. Courses taken in ROTC programs are offered by and through UC Berkeley, Santa Clara, and San Jose State. The courses do not qualify to be used towards the 12 unit requirement for full-time registration status or satisfactory academic progress requirements for Stan-

ford undergraduates. Certain ROTC courses may be eligible to be used as transfer credit if they qualify under Stanford's transfer credit practices.

Normally, students who participate in ROTC training complete a four-year course of instruction at the respective institution that consists of two years of basic courses during the freshmen and sophomore years, and an advanced course of instruction during the junior and senior years. Students who accept ROTC scholarships are generally subject to a service obligation, depending on the regulation of the particular service.

Stanford students who are enrolled in ROTC programs under the cross-enrollment agreements are eligible to compete for scholarships to include full tuition and a monthly stipend (Navy and Air Force), or other varying amounts (Army). Students normally compete for national scholarships as high school seniors, although current Stanford students may be eligible to enroll in ROTC on a non-scholarship basis. Non-scholarship ROTC students are eligible to compete for scholarships, and individual services may offer additional scholarship programs to current qualifying undergraduate and graduate students. Interested students should contact the appropriate military professor at the host institution to obtain information on these programs and to initiate application procedures (see below).

Students who satisfactorily complete an ROTC program and are awarded a Stanford degree qualify for a commission as a Second Lieutenant in the U.S. Army, an Ensign in the U.S. Navy, a Second Lieutenant in the U.S. Marines, or a Second Lieutenant in the U.S. Air Force.

For questions concerning the ROTC programs, Stanford students should consult one of the following: Air Force ROTC, San Jose State University, San Jose, CA 95192-0051, telephone (408) 924-2960; Army ROTC, Department of Military Science, Santa Clara University, Santa Clara, CA 95053, telephone (408) 554-6836; Naval ROTC, 152 Hearst Gym, University of California, Berkeley, CA 94720-3640, telephone (510) 642-7602.

COURSES

AIR FORCE ROTC

The following are offered by San Jose State University:

AS 001A,B. The Foundation of the United States Air Force—Freshman year. Introduces students to the Air Force and AFROTC. Characteristics, missions, and organization of the Air Force; officership and professionalism, career opportunities, military customs and courtesies, and communications skills.

AS 002A,B. The Evolution of the United States Air and Space Power—Sophomore year. Air and space power through historical study and analysis. The capabilities, function, and doctrinal employment of aerospace forces. Emphasis is on oral and written communication skills. Required leadership lab.

AS 131A,B. Air Force Leadership Studies—Junior year. Leadership, management fundamentals, professional knowledge, Air Force personnel system, ethics, and communication skills. Application level knowledge of skills required of junior Air Force officer through case studies, practical exercises, and seminar discussion. Required leadership lab. Prerequisites: AS 001A,B, AS 002A,B, or as determined by department chair.

AS 141A. National Security Affairs—Senior year. The national security process, international and regional relations, advanced leadership ethics, and Air Force doctrine with focus on the military as a profession, officership, military justice, civilian control of the military, and current issues affecting military professionalism. Required leadership lab. Pre- or corequisites: AS 131A,B, or as determined by department chair.

AS 141B. Preparation for Active Duty—Senior year. The role of the Air Force officer in contemporary society emphasizing skills to facilitate a smooth transition from civilian to military life. Required leadership lab. Pre- or corequisites: AS 131A,B, or as determined by department chair.

Leadership Laboratory—Complements courses above. Freshman and

sophomore years: Air Force customs and courtesies, drill and ceremonies, and military commands. Junior and senior year: advanced leadership experiences involving planning and controlling military activities of the cadet corps, preparation and presentation of briefings, and other oral and written communications.

ARMY ROTC

FRESHMAN YEAR

MILS 11. Basic Leadership I: Introduction to Leading Organizations—Taught on Stanford campus. The Army's theory of leadership through the primary field manual on leadership plus supplementary readings as assigned. Basic soldier skills. The Army's physical fitness program. One 60-minute class per week; three 3-hour leadership labs required. One weekend field exercise away from the University.

MILS 12. Basic Leadership II: Leadership Theory—Taught on Stanford Campus. Review Army leadership theory from MILS 11 and survey other leadership theories. Comparative leadership theory. The Army's formal ethical decision making process. Effective communication techniques. One 60-minute class per week. Three 3-hour leadership labs required. One evening military formal dinner.

MILS 13. History of Military Leadership—Taught on Stanford campus. How leadership is a central factor in preparing for and winning battles. How leaders succeed or fail. Leadership principles to train, prepare for, and conduct military operations. One 60-minute class per week. Three 3-hour leadership labs required. One weekend field training exercise away from the University.

SOPHOMORE YEAR

MILS 21. Basic Leadership III: Leadership in Practice—Taught on Stanford campus. Army leadership theory. Case studies of leadership. How personal leadership is critical to the success or failure of an organization. Ethical organizational climate. One 60-minute class per week. Five 3-hour labs per quarter. One weekend field training exercise away from the University.

MILS 22. Battle Analysis—Taught on Stanford campus. Analysis of military battles to understand the reasons for success or failure of both leaders and units in the battles. The principles of war, the role played by formal tactics in battle, the role of weapons systems and their improvements, and the role of leaders. Battles may include examples from the classical period, the American Civil War, WW II, and a modern American battle. One 60-minute class per week. Five 3-hour labs per quarter. One formal military dinner during an evening.

MILS 23. Troop Leading Procedures—Taught on Stanford campus. Plans and orders that enable small units to complete assigned tasks. Formal military decision making process. Planning techniques used to develop orders. Briefing plans and decisions. Review of basic soldier skills. One 60-minute class per week. Five 3-hour labs per quarter. One field training exercise away from the university.

JUNIOR YEAR

MILS 131. Leading Small Organizations I—Taught at Santa Clara University. Troop leading procedures and military decision making process in small unit planning and preparation. Advanced planning techniques and writing formal orders. Emphasis is on developing advanced skills needed for Army ROTC National Advanced Leadership Camp. Three 60-minute classes or two 90-minute classes per week. Five 3-hour labs per quarter. One field training exercise away from the university. Prerequisites: MILS 11, 12, 13, 21, 22, and 23, or consent of department chair.

MILS 132. Leading Small Organizations II—Taught at Santa Clara University. How small organization leaders exercise control of their organizations. Emphasis is on planning strategies, problem solving, practical exercises, and preparation for the Army ROTC National Advanced Leadership Camp. Army risk assessment and risk management doctrine. Three 60-minute classes or two 90-minute classes per week.

Five 3-hour labs per quarter. One formal military dinner. Prerequisite: MILS 131, or consent of department chair.

MILS 133. Leading Small Organizations III—Taught at Santa Clara University. Small unit tactical proficiency. Troop leading procedures and the military decision making process in the preparation of Patrol OPOD's. How to call for, adjust, and integrate indirect fires into a scheme of maneuver. Conditions and procedures utilized at advance camp to prepare cadets to render optimal performance in the camp environment. Three 60-minute classes or two 90-minute classes per week. Five 3-hour labs per quarter. One field training exercise away from the University. Prerequisite: MILS 132, or consent of department chair.

SENIOR YEAR

MILS 141. Leadership Capstone I: Staff Management—Taught at Santa Clara University. First course in the Capstone to the Army ROTC program. Management of a small Army organization, the Army ROTC cadet battalion, through regular formal meetings and briefings. Assignment to an actual staff or leadership position within the battalion organization. Depending on the position assigned, students are responsible for management areas including budget, logistics, personnel, public affairs, training, and organization operations. Students must show proficiency in understanding Army leadership principles and methods as well as planning and procedures for leading small organizations. One 3-hour seminar per week. Five 3-hour labs per quarter. One weekend field training exercise away from the University. Prerequisite: MILS 133, or consent of department chair.

MILS 142. Leadership Capstone II: Military Ethics—Taught at Santa Clara University. Second course in the Capstone to the Army ROTC program. Management of the Army ROTC cadet battalion. New position assignments. Introduction to just war theory. One 3-hour seminar per week. Five 3-hour labs per quarter. One evening formal military dinner. Prerequisite: MILS 141.

MILS 143. Leadership Capstone III: Transition to Lieutenant—Taught at Santa Clara University. Final course in the Capstone to the Army ROTC program. The moral employment of forces and weaponry. Goal is to ensure a smooth transition into the Army as a second lieutenant. One 3-hour seminar per week. Five 3-hour labs per quarter. One weekend field training exercise away from the University. Prerequisite: MILS 142.

NAVAL ROTC

The Department of Naval Science at UC Berkeley offers programs of instruction for men and women leading to active duty reserve commissions in the U.S. Navy or U.S. Marine Corps. Navy option students enrolled in one of the four-year programs normally complete the following courses during the first two years.

NS 1. Introduction to Naval Science—Freshman year.

NS 2. Sea Power and Maritime Affairs—Freshman year.

NS 3. Leadership and Management—Sophomore year.

NS 10. Ship Systems—Sophomore year.

Navy option students enrolled in either the four- or two-year program normally complete the following courses during their junior and senior years.

NS 12A. Navigation and Naval Operations I—Junior year.

NS 12B. Navigation and Naval Operations II—Junior year.

NS 401. Naval Ship Systems—Senior year.

NS 412. Leadership and Ethics—Senior year.

In addition to the above courses, Navy option ROTC students are required to participate in weekly professional development laboratories (drill) at UC Berkeley and complete a number of other courses at Stanford including one year of calculus, physics, and English, and one quarter of computer science, and military history or national security policy.

In lieu of NS401, NS10, NS12A and NS12B, Marine option students participate in Marine Seminars and complete MA154, History of Littoral Warfare, and MA20, Evolution of Warfare, or a designated equivalent course. Marine option students also participate in the weekly professional development laboratories.

