The Biotechnology-Related Center and Institutes

The Biotechnology-Related Center and Institutes

College of Science and Mathematics

College of Engineering

College of Agriculture, Food and Environmental Sciences

Academic Resources

BIOTECHNOLOGY PROGRAMS

Biotechnology is broadly defined as the application of modern technological advances, whether in genetics, chemistry, engineering, or other fields, to biological systems. Modern biotechnology has evolved over the last twenty years to advance the power of molecular biology and genetic engineering technology to further develop microorganisms, as well as plants and animals, for improved manufacturing of biomedical and agricultural products.

Examples of today's biotechnology applications range from the production of human insulin in bacterial cells to the development and use of genetically engineered crops, animals, and microbial fermentation for the production of crop protection products as well as the use of microbes to help clean up the environment (bioremediation) or the use of computers to help decipher complex genetic information (bioinformatics). Biotechnology is also used in the development of new technologies and therapies applied to health, nutrition, and the treatment of diseases in both human and non-human animals.

The biotechnology industry is highly interdisciplinary and involves people with backgrounds in biochemistry, biology, microbiology, agriculture, engineering, as well as business and law. For additional program information, please refer to the program’s catalog description.

College of Agriculture, Food and Environmental Sciences

Agricultural and Environmental Plant Sciences, BS
Agricultural Systems Management, BS
Agriculture, MS
Animal Science, BS
BioResource and Agricultural Engineering, BS
Soil Science, BS

College of Engineering

Biomedical Engineering, BS, MS
Civil and Environmental Engineering, MS
Computer Science, BS, MS
Engineering, MS
Environmental Engineering, BS
General Engineering, BS

College of Science and Mathematics

Biochemistry, BS
Biological Sciences, BS, MS, Minor
Biotechnology Minor
Microbiology, BS, Minor

Biotechnology-Related Center and Institutes

The Dairy Products Technology Center (DPTC) conducts research that provides the scientific and technological basis for new and improved dairy food products and processes. Through research and outreach, undergraduate and graduate programs train students to enter careers in the dairy industry and allied fields. Contact: Dr. Rafael Jimenez-Flores, 805-756-6103, rjimenez@calpoly.edu.

The Environmental Biotechnology Institute (EBI) focuses on advancing biotechnology research on the Central Coast. Faculty partnerships with major corporations and local laboratories carry out research efforts and offer learning experiences for students. Research projects include the study of microbial communities in the environment, genomics, bioremediation, fungal biotechnology, and microbial diversity and evolution. Contact: Dr. Chris Kitts, 805-756-2949, ekitts@calpoly.edu.

The Renewable Energy Institute, a multidisciplinary institute involving the Colleges of Agriculture, Engineering and Architecture, offers research and teaching opportunities in the development of renewable energy sources including biomass, wind, passive- and active-solar energy. Contact: Margot MacDonald, 805-756-1298, mmcdonald@calpoly.edu.

The Advanced Technology Laboratory (St. Jude Bioengineering Laboratory) symbolizes the dynamic partnership between academia, government and industry. Faculty and students pursue applied research projects such as bioinstrumentation, medical devices, biomaterials, microfluidics, biomems, tissue engineering, biomechanics, bioremediation, prosthetic robotics and microbial interaction with materials. Contact: Dr. Dan Walsh, 805-756-6400, dwalsh@calpoly.edu.

CENTER FOR TEACHING AND LEARNING
Bruno Giberti, Director, Center for Teaching and Learning
Walt Bremer, Director, Instructional Technology
Robert E. Kennedy Library (35) Room 209, 805 756-7002
www ctl.calpoly.edu

The Center for Teaching and Learning (CTL) promotes educational excellence in the curriculum and co-curriculum while providing Cal Poly with opportunities for professional and organizational development. The center sponsors courses, learning communities, panels, speakers, and workshops on themes relating to academic leadership, educational diversity, instructional technology, pedagogy, program review, SOTL (scholarship of teaching and learning), student learning, and student success. Center associates are available for classroom visits and other forms of consultation regarding teaching and learning.

COMPUTING AT CAL POLY
Timothy J. Kearns, Vice Provost & CIO
Information Technology Services (ITS)
Frank E. Pilling Bldg. (14), 805 756-7000
http://servicedesk.calpoly.edu

Cal Poly’s learn-by-doing environment is enhanced by electronic access to learning materials and resources, multimedia classrooms, distance learning and videoconferencing facilities, digital video editing systems, media and presentation equipment checkout, and open access student computing labs. Students frequently use computers...
in their courses, and are strongly encouraged to have access to a computer and the Internet in their residences.

Students, faculty, staff and others accessing Cal Poly’s information technology resources agree to abide by the Responsible Use Policy and other policies at http://security.calpoly.edu/policies/.

When connecting to the university network, students are expected to comply with campus security standards. This includes ensuring that networked devices are protected against viruses, spyware, and other threats. Standard tools are available for students to use for this purpose.

**ENDOWED CHAIRS AND PROFESSORS**

Cal Poly has received generous corporate and private donations and grants that have created endowed chairs and professorships, and helped support new faculty positions. Endowment funds support faculty teaching and research and provide opportunities for students to become involved in research. Examples include the J. G. Boswell Professorship (College of Agriculture, Food and Environmental Sciences); the Bartlett Professorship, the Chrones Endowed Professorship, the Forbes Endowed Professorship, the Hood Professorship Endowment, the Lockheed Martin Endowed Professorship (College of Engineering); the Susan Currier Visiting Professorship for Teaching Excellence in the Liberal Arts (College of Liberal Arts); the Arthur C. Edwards Endowed Chair of Polymers and Coatings, the Unocal Chair for Environmental Studies, and two Unocal Professors of Marine Science (College of Science and Mathematics); and the Joseph and Victoria Cotchett endowed professorship of educational technology (School of Education).

**HEALTH PROFESSIONS PREPARATION**

Health Professions Advising Center
805 756-2615 Bldg. 53, Room 219
healthprofessions@calpoly.edu
http://healthprofessions.calpoly.edu

Cal Poly provides excellent preparation and resources for students interested in a career in the health professions. Information about professional school prerequisites, internships, research opportunities, health professions experience, and other requirements, is available at the Health Professions Advising Center.

**Choosing a Major.** There is no best major to prepare students for professional school as long as the prerequisite courses for the chosen profession are completed. A major should be chosen on the basis of interest. Professional schools are concerned with the overall quality and scope of the undergraduate work and not with the major course of study. Specific requirements vary for each professional school, so students should contact the schools directly.

Health Professions Peer Advising Program

Health professions peer advisors are upper-division students who advise students regarding preparation for the health professions, including information about required coursework, gaining experience in health care, and application strategies.

**INCLUSIVE EXCELLENCE**

W. David Conn, Associate Vice President
Bldg. 01, Room 412, 805 756-6655
http://inclusiveexcellence.calpoly.edu

Developed by the Association of American Colleges & Universities, “Making Excellence Inclusive” is a unifying vision designed to help institutions fully integrate their diversity, equity, and educational quality efforts and embed them into the core of academic mission and institutional operations. Cal Poly’s adoption of Inclusive Excellence (IE) in 2009 was supported by resolutions of the Academic Senate and the ASI Board. Activities and programs are described on the IE website.

**INTERNATIONAL EDUCATION & PROGRAMS**

Raymond Zeuschner, Interim Director
Bldg 38, Room 145, 805 756-1477
http://iep.calpoly.edu

Cal Poly’s International Education & Programs (IEP) supports the vision and mission of the University by providing programs and services for both international students studying on campus and students preparing to study abroad. College graduates in the twenty-first century are citizens of a world in which communicating in other languages and understanding other cultures are requirements for successful careers. Many Cal Poly colleges and departments encourage students to pursue overseas study opportunities.

**Study Abroad Programs**

Students interested in studying abroad should begin by visiting the IEP website (see above) and coming to the Study Abroad office, Cal Poly’s clearinghouse for information on all study abroad programs. A resource center provides students with printed material and web resources on study abroad. A study abroad advisor is available to provide guidance and suggestions.

**Study Abroad and Exchange Eligibility Requirements**

Students must be in good academic and disciplinary standing at Cal Poly in order to be eligible to participate in a study abroad or exchange program. In addition, students must meet the eligibility requirements of their chosen programs. Participants may not study abroad during their first quarter at Cal Poly. Students who are on Academic Probation or Disciplinary Probation (“See Student Conduct and Discipline” on page 55 for more information) at the time of application, or the term prior to studying abroad, must notify the Study Abroad Office. Normally, such students will be considered ineligible to participate in the program unless extenuating circumstances exist, and the Study Abroad Office gives its approval. Pre-approval for courses before departing for a term abroad is strongly recommended.
If a program is located in a country where there is a U.S. Department of State Travel Warning, Cal Poly will NOT provide the approval to participate in the program, nor provide approval for the transfer of credits.

The CSU International Programs
Developing intercultural communication skills and international understanding among its students is a vital mission of the California State University (CSU). International Programs participants earn resident academic credit at their CSU campuses while they pursue full-time study at a host university or special study center abroad for an academic year. The CSU International Programs serves the needs of students in over 100 designated academic majors. Affiliated with more than 70 recognized universities and institutions of higher education in 19 countries, it also offers a wide selection of study locales and learning environments.

Programs
Australia. Griffith University, Macquarie University, Queensland University of Technology, University of Queensland, University of Western Sydney, Victoria University
Canada. Concordia University (Montréal), McGill University (Montréal), Université Laval (Québec City)
Chile. Pontifica Universidad Católica de Chile (Santiago)
China. Peking University (Beijing), Shanghai Jiao Tong University (Shanghai)
Denmark. Danish Institute for Study Abroad (international education affiliate of the University of Copenhagen)
Germany. University of Tübingen and a number of institutions of higher education in the Federal state of Baden-Württemberg
Ghana. University of Ghana, Legon
Israel. Tel Aviv University, The Hebrew University of Jerusalem, University of Haifa
Italy. CSU Study Center (Florence), Università degli Studi di Firenze, Accademia di Belle Arti Firenze
Japan. Waseda University (Tokyo)
Korea. Yonsei University (Seoul)
Mexico. Instituto Tecnológico y de Estudios Superiores de Monterrey, Campus Querétaro
New Zealand. Lincoln University (Christchurch), Massey University (Palmerston North)
South Africa. Nelson Mandela Metropolitan University, Port Elizabeth
Spain. Universidad Complutense de Madrid, Universidad de Granada
Sweden. Uppsala University
Taiwan. National Taiwan University (Taipei), National Tsing Hua University (Hsinchu)

United Kingdom. Bradford University, Bristol University, Hull University, Kingston University, Swansea University

International Programs pays all tuition and administrative costs for participating California resident students to a similar extent that such funds would be expended to support similar costs in California. Participants are responsible for all tuition and program fees, personal costs, such as transportation, room and board, and living expenses. Financial aid, with the exception of Federal Work-Study, is available to qualified students.

To qualify for admission to the International Programs, in most programs students must have upper division or graduate standing at a CSU campus by the time of departure. Students at the sophomore level may, however, participate in the intensive language acquisition programs in Canada, China, France, Germany, Korea, Mexico, Sweden and Taiwan. California Community Colleges transfer students are eligible to apply directly from their community colleges. Students must also possess a current cumulative grade point average of 2.75 or 3.0, depending on the program for which they apply. Some programs also have language study and/or other coursework prerequisites.

Additional information about specific programs and answers to questions regarding the application materials may be obtained from the IP Coordinator at Cal Poly (38-106), or by writing to The California State University International Programs, 401 Golden Shore, 6th Floor, Long Beach, California 90802-4210, or by visiting the following website: www.calstate.edu/ip.

Cal Poly’s Exchange Programs
A number of Cal Poly colleges and departments have individual exchange agreements with a variety of universities around the world. Students in colleges or departments with exchange agreements have an opportunity for a low-cost, easily arranged study abroad experience within their own academic discipline. If students qualify for one of these exchanges, they pay Cal Poly tuition fees and can spend up to one year at an overseas university with all the rights and privileges of regularly enrolled students. For an exchange to take place, there must also be students from the overseas university coming to study at Cal Poly. More information can be found by visiting http://iep.calpoly.edu/programs_study_abroad/exchanges.html.

Exchange Programs in the United States
National Student Exchange (NSE) Consortium........... All Majors
“Trade places” with another student for a quarter, semester or full year at over 40 partner universities in the United States, Canada and Puerto Rico and Guam. Visit the NSE section of the IEP website for details.

Cal Poly Faculty-Led Programs
In addition to The CSU International Programs and agreements for exchange programs, Cal Poly offers faculty-led study programs.
Australia Study Program. A one quarter study program led by Cal Poly faculty at the University of Adelaide campus in Adelaide during Winter Quarter. The study program includes eight weeks of classes with field trips to nearby sites. The University of Adelaide is a stimulating place to study, combining the beauty of a historic campus, the friendly accessible nature of Australian society, and the culture of an established university. Learn more by visiting http://iep.calpoly.edu/facultyled/australiastudy.

Summer Study in London. While the six-week program is planned primarily for general education experiences in the arts, humanities, and social sciences, the program draws students from all majors. Students take numerous field trips visiting London’s concert halls, theaters, museums, cathedrals, and halls of government. The arts, theatre, nightlife, music, and literature are showcased in London. Learn more by visiting http://iep.calpoly.edu/facultyled/londonstudy.

Thai Study and Internship Program. In addition to selected General Education courses, an internship program with U.S. corporations, the American Embassy, and universities is also available. Thailand retains a unique character and charm, with an unusual blend of ancient culture and modern industry. Students study in Chiang Mai, Nong Khai and Bangkok, and may participate in service learning and field trip opportunities. Learn more by visiting http://iep.calpoly.edu/facultyled/thaistudy.

Peru Study Program. One of the most unique study abroad programs offered. The summer program offers students a chance to spend five weeks living in Cuzco, Peru. Students study Spanish and take Cal Poly general education courses that incorporate hands-on community-based development work. Excursions include trips to Machu Picchu, Lake Titicaca, and the Amazon rainforest. Learn more by visiting http://iep.calpoly.edu/facultyled/perustudy.

Affiliation Agreements
Cal Poly has a university-wide affiliation agreement with AustraLearn and AsiaLearn. AustraLearn: North American Center for Australia provides direct enrollment study away opportunities in Australia, New Zealand, and Fiji. The 26 Australian and eight New Zealand universities that are working with AustraLearn have unique academic programs with the highest standard of service. AustraLearn serves as the liaison with the host universities and Cal Poly regarding credit transfer, financial aid, and academic issues. Learn more by visiting www.australlearn.org. AsiaLearn brings Asia within reach of students from all academic areas with opportunities for study abroad opportunities at excellent universities in mainland China, Hong Kong, Malaysia, Singapore, and South Korea. Learn more by visiting www.asialearn.org. Cal Poly’s newest affiliation agreement is with Cultural Experiences Abroad (CEA), which was founded in 1996 to provide international education opportunities for U.S. and Canadian college students of all language levels and majors. CEA sends thousands of students on study abroad programs at 36 universities in 15 countries. Learn more by visiting www.GoWithCEA.com.

Cal Poly has a university-wide affiliation agreement with Danish Institute For Study Abroad (DIS) that provides students from any major with the option of enrolling in any of the following academic tracks offered for a semester or summer program: Architecture & Design, European Politics and Society, International Business & Economics, Biotechnology and Biomedicine, and Psychology and Child Development. Learn more by visiting www.dis.dk.

Since its establishment in 1998, the Foundation for International Education (FIE) in London has set high standards in offering study abroad, internship, and service-learning programs. FIE provides academic and student support services within fifteen-week Fall and Spring semester programs. Students are immersed in the arts and humanities in London where theatre, music, history, and literature are showcased. Learn more by visiting www.fie.org.uk.

Cal Poly joins 29 member and associated universities that cooperate within the University Studies Abroad Consortium (USAC). USAC has provided quality programs for over 25 years and currently offers 38 study abroad programs at host universities in 24 countries ranging from summer, semester, and year-long programs. USAC offers two types of programs: (1) the language specialty programs focus on language immersion and cultural studies (beginning through advanced language tracks) and (2) partnership programs offer direct enrollment in partner universities offering a full curriculum of studies. Learn more by visiting www.usac.unr.edu.

International Students and Scholars
International Students and Scholars (ISS) offers a variety of comprehensive programs designed to assist international students and scholars as they pursue their academic goals. ISS is committed to creating an academic environment that supports and emphasizes international and cross-cultural understanding.

ISS provides individual immigration advising for international students and visiting faculty and researchers to facilitate compliance with immigration regulations. This includes providing information on maintaining visa status, timely application processing, transfer of schools, extensions, change of status and employment authorization. Cal Poly is a SEVIS-Certified School which provides electronic updates to the U.S. Citizenship & Immigration Services and the Department of State. Updates include quarterly enrollment, change of address, dates of study, and major, as required by immigration law.

Monthly informational programs are offered on various inter-cultural topics to spur discussion and provide a broad-based educational experience. These meetings are open to the entire Cal Poly and San Luis Obispo community.
Workshops on employment, residency, and work visas are also presented throughout the academic year.

ISS offers the program, “Holistic Approach to Cross-Cultural Adaptation and Reentry.” The main objective is to increase cross-cultural understanding of all segments of the university community with the goal of bringing about more globally aware and committed citizens of the world.

**LIBRARY SERVICES**

*Michael D. Miller, Dean*

Robert E. Kennedy Library (Bldg 35)  
805-756-2598 (Hours); 805-756-2029 (Circulation)  
lib.calpoly.edu

The Kennedy Library supports Cal Poly’s mission by selecting and delivering quality information in all formats, by fostering active learning environments, by promoting the skills that are needed for student success, by enriching the experience of academic community within and across the colleges, and by collecting and preserving unique collections. The Library features a 24-hour study space, a technology-rich collaborative environment with ample student seating and a café. The Library is engaged in planning a major addition to the existing building that will offer greatly expanded student collaboration spaces, electronic presentation rooms, and a Center for Inclusive Excellence bringing together a variety of student and University groups.

**Services**

The Kennedy Library is open until 2 am Sunday through Thursday and opens at 7 am on weekdays. The Library offers a full suite of traditional and digital library services, including print and electronic course reserves, an active interlibrary borrowing service that offers rapid access to over 7 million titles held in California libraries; reference assistance both on-demand at service desks and through instant messaging 24 hours a day; and consultative and instructional services delivered by expert library faculty based in each of Cal Poly’s colleges.

**Instruction**

Kennedy librarians are active partners with faculty in helping students develop lifelong learning skills. Librarians work directly with faculty to ensure that students have the opportunity to practice the specialized information skills that contribute to student success in their majors. Kennedy librarians teach these skills in nearly 400 courses each year and provide web-based resources to supplement in-class teaching.

**Technology**

In partnership with campus Information Technology Services, the Library offers a high-speed free wireless network, laptops available for check-out; 300 open computing workstations, all equipped with standard and specialized software that includes Geographic Information Systems and statistical packages. Other media and computing facilities include adaptive software and hardware and access to international broadcasting via satellite. Oversized and specialty (CAD) printing services and scanners are also available. Student technicians provide on-demand assistance to technology users.

**Assistive Technology.** The Kennedy Library provides 10+ general use assistive technology/collaboration stations, and five instructor stations throughout the building, featuring a range of assistive software applications and peripheral hardware, dual displays, and height-adjustable tables. The Kennedy Library partners with the Campus Disability Resource Center to provide consultation as needed for assistive technology users.

**Collections**

**Print and Electronic Resources.** The Kennedy Library hosts a physical collection of nearly 3.5 million items, including books, journals, government documents, maps, senior projects and master’s theses. The Library licenses more than 7,000 electronic resources, including major indexes and full text databases, and provides access to 32,000 electronic scholarly journal titles. These electronic resources are available to Cal Poly students, faculty and staff anytime and anywhere on or off campus.

**Special Collections and University Archives.** The Kennedy Library’s Special Collections include more than a hundred unique collections in many formats, including manuscripts, correspondence, business records, architectural drawings, photographs and online collections. Collection strengths include architectural records and drawings, fine printing and graphic arts, regional and California history. Among its holdings are the Julia Morgan papers, the San Luis Obispo Environmental Archives, and the Central Coast Farm Labor Organizing Collection. The University Archives houses materials that document the history, growth and development of Cal Poly, including campus records, publications, photographs, plans, blueprints, and ephemera dating from the founding of the university in 1901 to the present.

**DigitalCommons@Cal Poly.** As one of the first programs of its kind in the California State University system, the DigitalCommons@CalPoly promotes discovery, research, cross-disciplinary collaboration and instruction by collecting, preserving and providing online access to scholarly work created at Cal Poly. This program enhances the availability of research, scholarship and creative work created at Cal Poly by digitally archiving faculty research and student-generated scholarship including theses, graduate internship reports and senior projects. The service also provides access to relevant documents created by administrative offices, departments and programs at Cal Poly. Members of the Cal Poly academic community are invited to contribute completed scholarship for long-term preservation and worldwide electronic accessibility through the DigitalCommons@CalPoly.
Osher Lifelong Learning Institute (OLLI).
Established through a gift from the Bernard Osher Foundation, the Institute offers classes and field trips for retired and semi-retired adults. Programs change each term and are led by Cal Poly faculty and community experts on a wide variety of subjects. Information on membership and current programs is available at www.OLLI.calpoly.edu.

Partners
The Kennedy Library is proud to partner with program units that support student learning. Among these partners located in the Library are the Academic Skills Center; the Center for Teaching and Learning; Julian’s Café and Patisserie; Student Ombuds Services; Cal Poly Print and Copy; Research Scholars in Residence; and the University Honors Program.

Facilities
Featuring ample natural light, an open-air atrium, and study balconies; five floors with 20+ collaboration rooms, including a dedicated graduate student study room, over 1400 student seats, 300 computer workstations, on-site printing and copying services and an on-site café, the Kennedy Library is visited over 1.25 million times a year and has been regularly voted “Best Study Spot” at Cal Poly for many years.

LOUIS STOKES ALLIANCE FOR MINORITY PARTICIPATION (LSAMP)
Mary Whiteford, Coordinator
Bldg. 01, Room 315, 805 756-5475
http://lsamp.calpoly.edu

The CSU Louis Stokes Alliance for Minority Participation (CSU-LSAMP) Program is dedicated to increasing the number of students from underrepresented groups graduating from the CSU with baccalaureate degrees in science, technology, engineering, and mathematics (STEM) disciplines. The LSAMP program emphasizes activities designed to enhance graduate school preparedness, including undergraduate research experiences, interventions for community college transfer students, and expanding opportunities for student engagement in international activities.

The program is for undergraduate students who face or have faced social, cultural, educational or economic barriers to careers in STEM; are U.S. citizens or permanent residents; are enrolled at Cal Poly in a major in the College of Engineering, College of Science and Mathematics, Architectural Engineering, Architecture, BioResource and Agricultural Engineering, Animal Science, Food Science, Nutrition, Crop Science, Environmental Horticultural Science, Forestry and Natural Resources or Soil Sciences.

RESEARCH AND PROJECT INVOLVEMENT
Susan Opava, Dean, Research and Graduate Programs
Bldg. 38, Room 154, 805 756-1508

Faculty actively seek grants and contracts for research and development activities. These sponsored projects enhance the educational program by bringing to the campus state-of-the-art equipment and financial support for undergraduate and graduate student research. Students who wish to become involved in significant applied research and development activities on the leading edge of their disciplines are encouraged to contact faculty members in their programs who have ongoing projects, to explore becoming part of the project team.

SERVICE LEARNING AND CIVIC ENGAGEMENT
Student Life, University Union, Bldg 65, Room 217, 805 756-6749, www.studentlife.calpoly.edu/csv and www.civic.calpoly.edu

Service learning provides students an opportunity to participate in a structured learning experience that combines service to the community with explicit learning objectives, preparation, reflection, and evaluation. Students enrolled in service learning courses provide direct service in areas identified by the community. The students learn about the context in which the service is provided, the connection between the service and their academic coursework, and their roles as citizens. Each quarter, hundreds of students participate in service learning classes and volunteer to provide thousands of hours of service to homeless shelters, low-income families, youth, and disabled individuals.

Service learning workshops are offered quarterly through the Center for Teaching and Learning to support faculty development of service learning classes. As part of the strategic plan supported by the Chancellor’s Office of Community Service Learning, Cal Poly is working towards extending the influence and resources of the University beyond the campus through quality service learning opportunities.

Each year, the University President awards the President’s Community Service Award to outstanding students, clubs, and faculty.

STUDENT LEARNING ASSESSMENT
Cal Poly has adopted University Learning Objectives (ULO) that describe what all students who complete an undergraduate or graduate program should be able to do (see page 300). Academic programs are designed to provide students with opportunities to achieve program objectives that relate to the ULOs. Other opportunities for learning are provided outside the classroom, such as internships, residence hall programming, and co-curricular activities.

To determine the effectiveness of these educational opportunities, students are asked to participate in learning assessments at the course, program, and university levels. These efforts provide a measure of students’ progress and achievement of the ULOs over the course of their academic careers. The assessments may include the review, using standardized rubrics, of students’ assignments, exams,
projects, or theses, as well as surveys and other indirect methods of assessment.

While grades may measure individual student progress, course-, program-, and university-level assessments provide information on the effectiveness of educational opportunities for groups of students. The information is intended primarily as the basis for program improvement, although it may also be used for accountability purposes, e.g., for documenting educational effectiveness to accreditation agencies.

Students at Cal Poly should expect that their academic work may be used for assessment purposes.

STUDENT OMBUDS SERVICES
Patricia Ponce, Associate Ombuds,
Robert E. Kennedy Library (35), Room 113,
805 756-1380, http://ombuds.calpoly.edu

The Office of Student Ombuds Services provides students with a confidential, informal, impartial and independent resource to assist in the resolution of university-related complaints or concerns. The ombuds staff are committed to hearing about students’ experiences, assisting them in understanding applicable university policies and procedures, and - as appropriate - helping them to resolve informally any university-related concerns. The staff adhere to the Code of Ethics and Standards of Practice of the International Ombudsman Association.

SUSTAINABILITY PRACTICES
Cal Poly has been a signatory of the Talloires Declaration, a 10-point action plan, since April 2004. This plan commits Cal Poly to sustainability and environmental literacy in teaching, theory, and practice, and is summarized below.

1. Increase Awareness of Environmentally Sustainable Development: In 2008 Cal Poly began SUSTAIN (Sino-US Strategic Alliance for Innovation), a partnership among faculty from Tongji University, Cal Poly and Stanford University. SUSTAIN (www.sustainnow.org) was formed as an institute committed to innovating for sustainable design in China and San Luis Obispo.

2. Create an Institutional Culture of Sustainability: In 2010 the College of Agriculture, Food and Environmental Sciences created the CAFES Center for Sustainability which joined other sustainability-related centers in the College of Engineering and the College of Architecture and Environmental Design.

3. Educate for Environmentally Responsible Citizenship: At Cal Poly, literacy in sustainability begins with a student’s first on-campus experience through presentations and modeled sustainable activities such as zero waste meals. Students may elect to fulfill general education and major requirements by enrolling in courses that focus in sustainability. Over 170 courses are available to fulfill GE and major requirements (see suscat.calpoly.edu). For students wishing to specialize in a specific aspect of sustainability, there are currently twelve minors.

4. Foster Environmental Literacy For All: In 2009 the Academic Senate proposed and the University accepted the addition of Sustainability Learning Objectives to Cal Poly’s University Learning Objectives. As a result all faculty are encouraged to systematically incorporate sustainability into their courses.

5. Practice Institutional Ecology: Cal Poly has taken significant steps to reduce its environmental footprint. In 2009 Cal Poly opened Poly Canyon Village - a 1.4-million-square-foot mixed-use complex, which provides apartment-style housing for over 2,600 students – the largest LEED Gold project in the region and in the CSU. LEED certification is being achieved in all new buildings as well as selected retrofits.

6. Involve All Stakeholders: Cal Poly has reached out to others interested in learning how to contribute to a sustainable future. Cal Poly hosted the statewide 2008 UC/CSU/CCC Sustainability Conference, attended by some 1,100 people. The Graphic Communication Institute at Cal Poly partnered with SustainCommWorld in 2008 and 2009 to host the Business of Green Media Conference at Cal Poly. In partnership with California Certified Organic Farmers (CCOF), Cal Poly also hosts the annual Sustainable Agriculture Pest Management Conference which provides agriculture industry professionals with innovative strategies for controlling pests using sustainable agricultural practices.

7. Collaborate for Interdisciplinary Approaches: Several of the UNIV courses (university-level, co-taught by faculty from different colleges) address a wide range of sustainability issues. Numerous senior projects and courses reach across academic disciplines to engage students in learn-by-doing projects that address issues of sustainability and of meeting the needs of those less fortunate.

8. Enhance Capacity of Primary and Secondary Schools: Cal Poly’s STRIDE Program has worked with schools and government agencies to design and assess novel, comprehensive community-based education and intervention programs for promoting healthy living.

9. Broaden Service and Outreach Nationally and Internationally: Empower Poly Coalition serves as the center for student engagement and unifies the voice of over 27 sustainability-related clubs and groups on campus.

10. Maintain the Movement: Cal Poly became the 13th California campus to found a chapter of the Alliance to Save Energy's "Green Campus Program". In 2010 the

Through the combined work of the President’s Sustainability Advisory Committee, the Academic Senate’s Sustainability Committee and the numerous faculty, staff and students involved with sustainability, the University’s commitment to sustainability grows at all levels.

UNIVERSITY HONORS PROGRAM
Sema Alptekin, Director
Robert E. Kennedy Library, Bldg. 35, Room 510
805 756-7029; http://honors.calpoly.edu

The University Honors Program provides academically motivated students with the opportunity to develop their potential by fully exploring the resources at Cal Poly. Intellectual creativity, civic engagement, and research are the hallmarks of the program. In particular, it builds relationships among all colleges on campus and seeks to educate students in the connections between the disciplines, from engineering to English, agriculture to art, or business to biology. Honors students have the opportunity to enjoy a varied educational experience, including courses in specially designed honors seminars as well as undergraduate research opportunities.

Following Cal Poly's distinctive "hands-on" approach to education, students are encouraged to participate in community projects and international programs to enhance their global awareness. Most Honors courses offer smaller class sizes, where students work closely with faculty in a challenging, stimulating and supportive learning environment. Analytical and interpretive study is encouraged and communication skills, written and oral, are developed. Most courses fulfill graduation requirements.

UNIVERSITY LEARNING OBJECTIVES

The University Learning Objectives are the knowledge and the skills that every Cal Poly student should have by the time of graduation. They are what every student needs for success in a career and in life, particularly within the context of a changing, global society. Mastering these objectives will empower students with core knowledge and transferable skills, and prepare them to encounter challenging issues as leaders in the twenty-first century.

All students who complete an undergraduate or graduate program at Cal Poly should be able to:

- Think critically and creatively
- Communicate effectively
- Demonstrate expertise in a scholarly discipline and understand that discipline in relation to the larger world of the arts, sciences, and technology
- Work productively as individuals and in groups
- Use their knowledge and skills to make a positive contribution to society
- Make reasoned decisions based on an understanding of ethics, a respect for diversity, and an awareness of issues related to sustainability
- Engage in lifelong learning

Diversity Learning Objectives

All students who complete an undergraduate or graduate program at Cal Poly should be able to make reasoned decisions based on a respect and appreciation for diversity as defined in the Cal Poly Statement on Diversity, included in the catalog on page 14. They should be able to:

- Demonstrate an understanding of relationships between diversity, inequality, and social, economic, and political power both in the United States and globally
- Demonstrate knowledge of contributions made by individuals from diverse and/or underrepresented groups to our local, national, and global communities
- Consider perspectives of diverse groups when making decisions
- Function as members of society and as professionals with people who have ideas, beliefs, attitudes, and behaviors that are different from their own

Sustainability Learning Objectives

Cal Poly defines sustainability as the ability of the natural and social systems to survive and thrive together to meet current and future needs. In order to consider sustainability when making reasoned decisions, all graduating students should be able to:

- Define and apply sustainability principles within their academic programs
- Explain how natural, economic, and social systems interact to foster or prevent sustainability
- Analyze and explain local, national, and global sustainability using a multidisciplinary approach
- Consider sustainability principles while developing personal and professional values

UNIVERSITY STUDIES (UNIV) COURSES

Academic Programs
Administration Bldg (01), Room 315, 805 756-2246
www.academicprograms.calpoly.edu/academicpolicies/univ-policies.htm

University Studies (UNIV) courses provide an opportunity for interdisciplinary study, addressing university-wide learning objectives (such as diversity, environmental literacy, sustainability, etc.). UNIV courses are to be offered across college boundaries, typically team-taught by two or more faculty, and carry GE and/or USCP credit. Proposals are solicited annually for new and existing courses. UNIV courses are administered by the Academic Programs office for the first three offerings, then moved to
the colleges for funding and administration. The offerings are subject to available funding, which may be sufficient to offer two or three UNIV courses each quarter.

**WRITING SKILLS PROGRAM**

*Dawn Janke, Director*

*Bldg 10, Room 130, 805 756-2067*

*www.writingskills.calpoly.edu*

The Writing Skills Program is a free service for Cal Poly students, faculty, and staff designed to support writing and writing education across campus. The University Writing and Rhetoric Center, a division of the Writing Skills Program, offers one-to-one consultations to all Cal Poly students on any writing task. The CSU system-wide Graduation Writing Requirement (GWR) is administered through this program, including the upper-division Writing Proficiency Examination (WPE). The Writing Skills Office also oversees the placement of students into the appropriate first-year writing courses based on their English Placement Test (EPT) scores.
Support Services

ALUMNI ASSOCIATION
Alumni Relations
Albert B. Smith Alumni and Conference Center
805 756-2586

Cal Poly’s Alumni Association (CPAA) provides a link between alumni and their alma mater by providing a variety of programs and services including newsletters, e-mail updates, continuing education opportunities, travel programs, POLY REPS (a student ambassador group), GOLD programs for Graduates Of the Last Decade, Homecoming and a host of regional events and activities both in the state of California and beyond.

The CPAA is governed by a volunteer Board of Directors. The Office of Alumni Relations coordinates the activities of the association. With nearly 30 alumni chapters, the association sponsors alumni events in numerous locations throughout the state of California and assists special interest alumni chapters such as FANS, Graphic Communication, Rugby, ENVE and WOW.

Members of the CPAA enjoy unique benefits such as access to all CSU libraries, access to Cal Poly recreational facilities, group insurance programs, SLO merchant discounts, and special invitations and member pricing for alumni events.

CAL POLY CORPORATION
Corporation Administration Bldg. (15); 805 756-1131

The Cal Poly Corporation is a separate, but closely linked auxiliary organization serving the University across several key support functions:

- Retail Operations – El Corral Bookstore, Cal Poly Downtown, Campus Dining, and Cal Poly Print & Copy
- Business Services – Sponsored Research and Grants, Conferences and Workshops
- Advancement Support – Gifts, Endowment and Trust Management Services
- Student Aid to Instruction – University Graphic Systems and Student Enterprise Projects
- Technology Transfer and Innovation – Administration

A Board of Directors comprising faculty, students, community leaders and university administrators oversees Cal Poly Corporation operations.

PERFORMING ARTS CENTER
Ticket hotline: 805 756-2787, Toll-free in California: 888 233-2787
Administrative office: 805 756-7222; www.pacslo.org/
The Christopher Cohan Center is the result of a partnership and cooperation between Cal Poly, the City of San Luis Obispo, and the community's Foundation for the Performing Arts Center. Located on the campus, it features three performance venues: Sidney J. Harman Hall, Philips Electronics Recital Hall, and the Pavilion.

The Cohan Center and the 500-seat Spanos Theatre comprise the Performing Arts Center San Luis Obispo. The Center accommodates all types of cultural events, from student and local performances to major touring artists.

UNIVERSITY ADVANCEMENT
Administration Bldg. (01), Room 413
805 756-1445, www.giving.calpoly.edu

The University Advancement staff is responsible for Cal Poly’s relations with alumni, donors, industry partners, government officials and the news media.

The staff’s primary activity is to secure philanthropic support for the benefit of students through collaborative efforts with key volunteers and the Cal Poly Foundation Board of Directors. Comprised of more than 20 prominent alumni and friends, many whom give generously to Cal Poly, the Foundation Board spearheads the fundraising effort to ensure that Cal Poly – and its renowned learn-by-doing methodology – continues to be a high-value, first-choice educational experience for future students.

Generous gifts from alumni, friends, parents, industry partners and foundations help support and enrich the renowned hands-on learning experiences that Cal Poly offers to its students.

Indeed, private support is indispensable to Cal Poly’s unique ability to transform students into resourceful professionals and innovative leaders, people able to help solve some of the most challenging problems confronting California, the nation, indeed, the world.

For more information about Cal Poly’s Advancement programs, please visit www.giving.calpoly.edu.

UNIVERSITY POLICE
Building 74, 805 756-2281
www.Police.calpoly.edu

Cal Poly’s Police Department is a full service police agency certified by the California Department of Justice. It has the same responsibilities and authorities as municipal, county or other state law enforcement agencies and has state-wide authority. It includes a 9-1-1 emergency dispatch center.

Parking, a major function of the University Police, includes the management of 8,800 parking spaces, three parking structures, parking and event planning and traffic flow.

Commuter and Access Services provide resources for alternative transportation in partnership with local transit, regional RideShare, and bicycle organizations. The Escort Van Service provides free transportation for students, faculty and staff on campus and close vicinity of Cal Poly during evening hours.