



## SPECIAL UNIVERSITY CENTERS

### W. K. KELLOGG ARABIAN HORSE CENTER ARABIAN HORSE PROGRAM

Calvin N. Kobluk, Director, Equine Sciences

The oldest campus tradition is the Arabian horse show, first started by W. K. Kellogg in 1926, and continued after his ranch became a university campus. Public performances are given on the first Sunday in October through June at 2 p.m. The program, featuring the Arabian as an English, western, stock, trick and jumping horse, is planned and produced by students working with horses they have trained.

The shows are designed to promote interest in the Arabian breed and point out the horse's versatility, beauty, and intelligence, as well as to offer valuable experience for students in handling horses. The Arabians are utilized in the animal science courses related to the ever-expanding field of light horse production, research and training. The Kellogg Ranch has been one of the world's outstanding Arabian horse breeding farms, and the university continues the breeding program today, perpetuating the Arabian and making valuable blood lines available to the public. The Kellogg Arabians are a noted attraction for thousands of Southern Californians and tourists who view the show each year.

### EQUINE RESEARCH CENTER

Steven J. Wickler, Associate Director, Equine Sciences

The Equine Research Center founded in 1980 complements the program of the W. K. Kellogg Arabian Horse Center. The Research Center, unlike the Kellogg Center, deals with all horse breeds and not only the Arabian. The Research Center conducts investigations in the areas of equine nutrition, physiology, and management. The Research Center is a self-support center funded through national donations with the major contributor being the Oak Tree Racing Association of California.

### APPAREL TECHNOLOGY AND RESEARCH CENTER

Jean Gipe, Director

The Apparel Technology and Research Center (ATRC) conducts research, outreach education, and demonstration activities for the apparel industry. The Center houses a model manufacturing plant featuring state-of-the-art equipment and advanced manufacturing systems. The ATRC is the only recipient on the West Coast of a research and demonstration contract from the Department of Defense—Defense Logistics Agency. These contracts provide over \$13 million in funding to expand the capabilities of the ATRC to work with industry. Students in the Apparel Merchandising and Management degree program, as well as various other engineering and business programs, benefit from the ATRC activities.

### INTERNATIONAL CENTER

Jean S. Aigner, Director

The International Center is the focal point for international activities at Cal Poly Pomona. It is located in Building 1, Rooms 101-104. The Center works in cooperation with the colleges, individual faculty, Academic Affairs, student groups and other units on campus. Academic and faculty program initiatives are also encouraged through the Center's Institute for Regional and International Studies. The Center negotiates and administers Cal Poly Pomona overseas collaborative agreements.

The International Center encourages, assists, administers and itself develops international projects in which Cal Poly Pomona faculty and staff transfer their expertise. Cal Poly Pomona's advising, assistance and programming for international students and scholars are a prominent

function of the Center. There is a scholarship and loan program for international students. The university's international student recruiting is organized by the International Center.

Cal Poly Pomona study abroad, exchange and other overseas opportunities for students are offered through the International Center. Programs are available in all disciplines, in English as well as other languages, and worldwide. Program length varies from several weeks to an academic year. Center staff assist colleges and faculty in developing and implementing overseas educational programs and provide student and faculty Fulbright advising and information. The International Center maintains an international opportunity area with VCR, TV, news magazines, and travel and study abroad information. The International Center has need-based scholarships and loans for study-abroad to ensure access to all students.

The Director represents Cal Poly Pomona with the Consortium for International Development and in national and international professional organizations. There are close working relationships with community organizations to further Cal Poly Pomona's international goals and visibility. In the area of international research, training and faculty opportunities, the International Center activities include developing technical workshops for international trainees, managing international technical assistance and development projects. There are a number of faculty development opportunities available through the International Center, including participation in the Council for International Educational Exchange Fulbright seminars, the International Research Forum, the publication *Global Cal Poly Pomona*, and others.

For further information see <<http://www.csupomona.edu/~international>>, call 909-869-3267, or fax 909-869-3282.

### OCEAN STUDIES INSTITUTE

The Ocean Studies Institute (OSI) is the educational and research outlet for the growing marine programs of five state universities in the southern California area. Those participating institutions include Dominguez Hills, Fullerton, Long Beach, Northridge and Pomona. Representatives from each campus, consisting of a teaching and administrative faculty member, along with two community members, make up the OSI Board of Governors. In addition, an advisory board representing a cross-section of disciplines adds to the Institute's community responsiveness.

The Ocean Studies Institute provides an outlet for shipboard instruction to Institute members, as well as the community, aboard the fully equipped and crewed research vessel, R/V Yellowfin.

Through the Institute's participating intercampus faculty and graduate students, a large reservoir of diverse expertise is coordinated for multidisciplinary projects involving the biological sciences, microbiology, chemistry, geology/earth sciences, economics, geography, archaeology, and engineering.

The five member campuses are located within a 50-mile radius of the Institute's office and the R/V Yellowfin slip in downtown Long Beach. The proximity of the schools allows for easy student accessibility and personal communication between faculty members involved in interdisciplinary projects. For information regarding Cal Poly Pomona's participation in the Institute please contact the Associate Vice President for Academic Programs, Building 98.

### DESERT STUDIES CONSORTIUM

Built in the 1940's as a health resort in the Mojave Desert, the former Zzyzx installation was repossessed by the Bureau of Land Management in 1974 and assigned to the Desert Studies Consortium composed of

seven California state universities including Cal Poly Pomona. The Desert Studies Center is under the direction of a Board of Governors composed of one administrator and one professor from each member campus plus representatives from the Bureau of Land Management, and the general public.

Potentially, the Desert Studies Center can supplement some 110 courses enrolling 4,700 students annually at the seven Consortium universities whose total enrollment approaches 200,000 students. Since the start of the Center, students, faculty, and other users have averaged 1,759 a year.

Biological and ecological studies mix with more practical investigations of desert land utilization and limitations, including issues of special interest to the Bureau of Land Management. Meteorological problems peculiar to the desert environment can be studied readily, including the transport of smog from the Los Angeles basin, 150 miles away, and such practical questions as utilization of power from sun and wind. Desert hydrologic and limnologic studies are conducted, and geology field trips study exposed rocks. Immediately around the study center, as well as farther away, many primitive sites await archeological excavation and investigation.

Besides students and faculty from the seven sponsoring campuses, persons from other universities and groups interested in desert educational activities are welcome to use the Center facilities. For information on Cal Poly Pomona's participation in the Desert Studies Center, contact the Associate Vice President for Academic Programs, Building 98.

#### **FACULTY CENTER FOR PROFESSIONAL DEVELOPMENT**

James Williams, Director

The Faculty Center for Professional Development, established in September 1990 and located in Building 1, Room 227, initiates, coordinates, and supports programs that assist faculty members in achieving their professional goals and improving their teaching abilities. An elected faculty Advisory Committee guides the Center in setting priorities and planning new programs.

The Faculty Center provides individual assistance and sponsors campus discussion groups and workshops on exploring alternative teaching strategies, learning uses of new technologies, improving classroom instruction, student outcomes assessment, and advancing research and scholarly activities. These workshops, offered throughout the year and conducted by Cal Poly Pomona faculty, enhance collegial relations and promote a multidisciplinary exchange of insights and support for efforts at improvement and innovation.

A Computing Support Lab in the Faculty Center provides a place for faculty to learn how new tools can enhance student learning in their courses. The lab offers workshops and tutorials. An Annual Faculty Forum provides an opportunity for faculty to present their research or creative work to colleagues. At the February Symposium on University Teaching, faculty share successful teaching strategies and discuss issues that affect student learning.

The Center also helps faculty prepare proposals and applications for campus and CSU programs and for extramurally supported fellowships and awards. Bulletins from the Center inform faculty of development opportunities—awards and fellowships, conferences and workshops, etc. The Center's resources include books, periodicals, and other publications with information for faculty on teaching, learning, research and writing, and development opportunities.

#### **CENTER FOR COMMUNITY AFFAIRS**

Maria Harris, Director

The goals of the Center for Community Affairs are to support research in communities in the Cal Poly Pomona service area; to support opportunities for faculty and students to participate in community service; to provide workshops and training on leadership and diversity for local officials and community groups.

Community service projects directed by the College of Letters, Arts, and Social Sciences faculty and affiliated with the Center include: the Motor Development Clinic, the Institute for California Women in Politics, the Mobile Clinic for Child and Family Services, and the Social Data Center.

#### **INSTITUTE FOR ETHICS AND PUBLIC POLICY**

David Adams, Director

The mission of the Institute for Ethics and Public Policy is to sponsor events and activities that will encourage broad community discussion of pressing social problems and more issues; to encourage and support creative and effective ways to teach about diverse moral traditions; to foster a community of scholars and students who will critically examine the moral dimensions of our public policies.

#### **CENTER FOR PROMOTIONAL DEVELOPMENT (CPD)**

Ed Klewer, Director

The Center for Promotional Development (CPD) was originally established in 1993 as the Center for Professional Sales Development. CPD has expanded its focus to include all elements of the promotional mix—advertising, sales promotion, public relations, publicity and direct marketing, in addition to professional selling/sales management.

CPD's mission is to provide Cal Poly graduate and undergraduate students valid experiences in developing promotional strategy through their involvement in a combination of innovative coursework and practicum; to foster opportunities for faculty/student consultancy with emerging Inland Valley businesses regarding the development of promotional strategy. Consultancy includes developing promotional objectives, an appropriate promotional mix, tactics, a written planned timetable for execution, measurement of tactical success, and an appropriate budget. The combination of education, research and outreach to the surrounding business community is the dynamic that fuels CPD's vision of future service to Cal Poly and its students.

CPD is administered by an Executive Board of Directors including Professor Ed Klewer, Ph.D., Chair; Professor Charles Taylor; and Professor Delores Barsellotti, Ph.D. CPD is located in the College of Business Administration. Telephone: (909) 869-2439; E-mail address: edklewer@csupomona.edu; Fax: (909) 869-4353.

#### **CENTER FOR ADVANCED COMPUTER TECHNOLOGY (CACT)**

The Center for Advanced Computer Technology is a cooperative endeavor between the College of Business Administration and the College of the Extended University. The Center's programs target professionals who require in-depth coverage of complex and challenging topics in a broad and intensive series of offerings. For computer professionals, holistic coverage of Internet and client-server technologies and certifications in critical areas of programming, database administration, networking and systems security are provided. For professionals in other fields requiring intensive use of computer software, focused programs supporting specialized certifications in their areas of interest are offered.

The Center and its partners are committed to helping professionals stay abreast of advancing technologies and trends, and to insure that they remain productive members of the next century's workforce. The Center provides on-campus as well as on-site training for its corporate clients.

### REPRODUCTIVE PHYSIOLOGY CENTER

The mission of the Reproductive Physiology Center is to provide an undergraduate teaching and graduate student research laboratory for the investigation of physiological events responsible for reproduction in domestic farm animals. The primary emphasis of the Center is to utilize new biotechnology procedures to manipulate and preserve male and female gametes collected from ruminant and non-ruminant animals. The Center is equipped to collect, analyze and freeze spermatozoa for improving the procedures associated with artificial insemination. In addition, the Center is capable of collecting, culturing and in vitro fertilization of oocytes for embryo manipulation and embryo freezing to improve the reproductive efficiency of the female.

### INSTITUTE FOR CELLULAR AND MOLECULAR BIOLOGY

Jill Adler-Moore, Director

The Institute for Cellular and Molecular Biology (ICMB) is composed of some 25 scientists from the departments of Biological Sciences, Chemistry, Ornamental Horticulture and Animal Science. The Institute is committed to the goal of enhanced communication between scientists, in fields ranging from physiological ecology to viral nucleic acid synthesis. This multidisciplinary scientific exchange is based on shared interest in the various research applications of molecular biological techniques. To achieve this objective, the ICMB has instituted the following activities:

- 1) regular scheduling of informal luncheon meetings and poster displays to familiarize one another with various research projects;
- 2) reviewing current literature by participation in a quarterly Journal Club;
- 3) financially supporting innovative pilot research projects and expansion of ongoing research programs in new directions;
- 4) sponsoring one yearly symposium for ICMB members to summarize the progress made on their research;
- 5) supporting graduate student research by creating a professional research environment.

The ICMB Journal Club activities and Symposia provide students with the opportunity to hear about recent advances in molecular biology presented by researchers who do this kind of work. They learn how to listen and learn from material presented in a seminar-type format rather than a lecture-type format. This is especially important for those students who plan to further their education in a graduate or professional school program.

Students interested in participating in the activities of the Institute should contact the director, Dr. Jill Adler.

### INSTITUTE FOR ADVANCED SYSTEMS STUDIES

Len Troncale, Director

This Institute sponsors educational and research programs in the new field of the Systems Sciences. This transdisciplinary field unifies the new sciences of complexity with advanced approaches to systems from many specialties.

The Institute is staffed by 20-25 faculty and associate fellows selected for their outstanding accomplishments in their home departments

combined with their demonstrated ability for and interest in crossing disciplinary lines. The Fellows are authorized to offer a 32-unit Minor in Comparative Systems Analysis (see description in this catalog at the end of the College of Science entries) and a Certificate in Comparative Systems Analysis through the Office of Continuing Education. Also offered are interdisciplinary courses for on-campus credit such as those planned for the new Integrated Science General Education Program.

The Fellows of the Institute conduct both basic and applied research on both natural and social systems. Students are organized into research Task Forces under the supervision of one or more Fellows and can receive credit from their home department (at the 200 and 400 level) for working on Institute projects. This encourages and accomplishes significant cross-fertilization across the colleges and departments. Examples of ongoing projects in the domain of basic systems research include: (1) computer analysis of natural hierarchical levels using clustering analysis; (2) systems allometry across physical, biological, and sociological systems; (3) systems analysis of symmetry and duality across the natural sciences; (4) linkage propositions between 80 systems isomorphies; (5) design and testing of cooperation equations in ecology and economics. Examples of ongoing projects in the domain of applied systems research include: (1) fractal analysis of solid tumors for cancer diagnostics and prognosis; (2) ecohouse research for optimized interaction and cooperation among the sub-systems of American homes; (3) design of a knowledge-based computer system on general systems theory for education and design. Another function of the Institute is to attract funding to our university. Its Fellows have received grants from a diverse set of sources including the National Science Foundation, the U.S. Office of Education, the Chancellor's Office, the U.S. Department of Housing and Urban Development, and various Foundations.

Students interested in earning a Minor in Comparative Systems Analysis must declare their interest and intended start and completion dates by obtaining a form from Dr. Len Troncale, Building 3, Room 106 of the Biological Sciences Department, Phone: (909) 869-4040.

### INSTITUTE FOR REGIONAL AND INTERNATIONAL STUDIES

Jean Aigner, Director  
International Center

The Institute for Regional and International Studies (IRIS) was established in 1994 as the academic (faculty) component of the International Center. It is an organizational mechanism through which the faculty may promote interdisciplinary teaching and research about the world regions and issues. It is an advocate for second language proficiency as a means to better understand global diversity. It is a scholarly forum for faculty, staff and students, and publishes Global Cal Poly Pomona annually. The Institute organizes and sponsors international conferences and internationally recognized scholars on campus. Visiting scholars share IRIS offices with CPP faculty in the International Center, Building 1, Rooms 101-104.

For further information see <<http://www.csupomona.edu/~international>>, call 909-869-3267, or fax 909-869-3282.

### CENTER FOR EDUCATION AND EQUITY IN MATHEMATICS, SCIENCE, AND TECHNOLOGY (CEEMaST)

Jodye I. Selco, Director

CEEMaST has been established in the College of Science to meet the needs of Pre K-12 teachers in local school districts. The Center conducts workshops and courses for teachers, consults with local schools and districts, and maintains an instructional materials library for K-12 teachers' use. It works with local schools and districts to develop

programs and obtain funding to implement innovative programs, improve teaching techniques, and provide professional development opportunities for teachers of mathematics and science from preschool through grade 12.

For information contact Dr. Jodye I. Selco in Building 3, Room 243, visit <<http://www.ceemast.csupomona.edu/>> or contact the CEEMaST office at (909) 869-4063.

### **CENTER FOR ECONOMIC EDUCATION AND RESEARCH**

Robert T. Bray, Director

The mission of this center is to initiate programs which will increase the understanding of economics with an emphasis on incorporating economics in K-12 curricula; to encourage research in economics and economic education; to encourage interdisciplinary research involving economics.

### **LANDLAB—A Center for Education and Research in the Sustainable Use of Resources**

Edwin A. Barnes III

In 1985, the Spadra Landfill and Resource Conservation Project was established as a joint project of the California State University, the County Sanitation Districts of Los Angeles County, and the County of Los Angeles. This agreement authorized the creation of a 339-acre landfill and land resource laboratory (LandLab) combined with lands adjoining the Cal Poly Pomona campus.

Most of the LandLab site is being shaped by the 197 acre Spadra sanitary landfill which was established in 1957 to serve the disposal needs of the Pomona and San Gabriel valleys. The Spadra landfill currently operates as a class III landfill accepting only nonhazardous solid and liquid wastes. The landfill is scheduled to close in Spring, 2000. Under the terms of the agreement, this active sanitary landfill provides unique opportunities and funding for the university to conduct research on landfill, refuse recycling, and refuse to energy processes and their effects on the environment. The university receives more than \$200,000 annually for research and master plan implementation activities and will continue to receive these funds as long as the landfill is operational.

Planning and implementation of the Spadra Landfill and Resource Conservation Project are being carried out jointly. The Districts manage the landfill operation until it is completed. As each portion of the landfill is completed, the Districts will finish grading it, prepare the soil as necessary, and assist in planting the finished surface according to an agreed-upon planting plan. The Districts will also install an irrigation system and provide reclaimed water for landscape irrigation before turning the land over to the university.

As an active laboratory for experimenting with and demonstrating ways of using and sustaining resources, LandLab supports a diverse range of activities designed to serve the educational, research, and leisure needs of the university and the community.

Among the public areas created under the LandLab master plan is the Center for Regenerative Studies and another project, AGRIScapes, is planned for the future.

### **THE JOHN T. LYLE CENTER FOR REGENERATIVE STUDIES**

Joan M. Safford, Director

The John T. Lyle Center for Regenerative Studies (The Lyle Center) is an interdisciplinary university-based setting for education, demonstration and research in regenerative and sustainable systems. Students from all

disciplines on campus can participate in courses, and a community of 20 residents lives on the site working with regenerative systems as part of their daily lives. The term "regenerative" has been chosen to emphasize the intention of design to restore natural systems, not merely sustain them, while integrating the needs of the human community. The comprehensive design of the 16 acre site provides a living laboratory for people to study passive solar designed buildings, solar and wind energy capture, water recycling, nutrient cycling, food growing systems, aquaculture ponds, native walnut woodlands and human communities. All of these have implications for human society.

Courses are taught by faculty from different disciplines on campus and students from any major at Cal Poly, Pomona or the Public (through the College of the Extended University) may take courses or complete a 30-unit resident or non-resident minor program. Classroom lectures address issues of regenerative and sustainable systems at many scales ranging from local to global: hands-on laboratories provide the opportunities to "learn by doing". Lectures and labs focus on integrated systems, emphasizing the critical relationships between community building, energy, water, shelter, food production, waste and other essential functions while determining appropriate levels of human intervention in the environment.

The John T. Lyle Center for Regenerative Studies currently offers classes during the academic year to students enrolled in the university or to the public (through the College of the Extended University). Summer outreach programs, workshops, and seminars are also available. The Lyle Center's setting provides an excellent opportunity to learn more about regenerative living systems and integrating people into environments.

The John T. Lyle Center for Regenerative Studies offers informative tours to interested individuals or groups. Tours are led by staff, residents, or faculty and must be scheduled in advance. If you would like to make a reservation for a visit or tour, please call us at (909) 869-5155. For information on current activities visit our website at <<http://www.csupomona.edu/~crs>>

### **LEARNING RESOURCE CENTER**

Frank Torres, Director

The Learning Resource Center, located in the University Library, provides a university-wide student service devoted to developing students' academic achievement through a variety of methods. It is a facility which provides students with dedicated personnel and individualized instruction. Programs at the Center emphasize developmental and critical reading (including speed reading), study skills, writing preparation, and basic math preparation. Tutoring in most areas is available by arrangement, and workshops in math and GWT preparation are provided each quarter.

The Center encourages students to refine their academic performance through the use of programs designed to meet individual needs. Students proceed at their own pace and receive periodic evaluation of their progress. The Center also provides an extension of academic programs by placing in the Center materials prepared by faculty: language guides, literature guides, advanced language cassettes. Test proctoring, another service provided by the Center, sometimes includes critical essays on articles prepared by faculty. For further information contact Dr. Frank Torres.

### **Learning Resource Center Courses:**

#### **LRC 090 College Reading Skills (1)**

Beginning course in reading skills development for students in the College Reading Skills Program. Diagnosis of reading skills; individual



placement in developmental reading materials; individual tutorial programs; workshops. 1 independent study/supervised activities. Does not count toward the bachelor's degree. Prerequisites: see the director of the College Reading Skills Program.

#### **LRC 091 College Reading Skills (1)**

Continued work in developmental reading for students in the College Reading Skills Program. Evaluation of reading strengths and weaknesses; individual placement in developmental reading materials; individual tutorial programs; workshops. 1 independent study/supervised activities. Does not count toward the bachelor's degree. Prerequisite: see the director of the College Reading Skills Program.

#### **LRC 092 College Reading Skills (1)**

Developmental reading for students in the College Reading Skills Program who wish to augment the reading skills developed in SA 091. Evaluation of reading strengths and weaknesses; individual placement in developmental reading materials; individual tutorial programs; workshops. 1 independent study/supervised activities. Does not count toward the bachelor's degree. Prerequisite: see the director of the College Reading Skills Program.

#### **LRC 093 College Reading Skills (1)**

Developmental reading for students in the College Reading Skills Program who wish to augment the reading skills developed in SA 090, SA 091, and SA 092. Evaluation of reading strengths and weaknesses; individual placement in developmental reading materials; individual tutorial programs; workshops. 1 independent study/supervised activities. Does not count toward the bachelor's degree. Prerequisite: see the director of the College Reading Skills Program.

#### **LRC 299/299A/299L Special Topics for Lower Division Students (1-4)**

Group study of a selected topic, the title to be specified in advance. Total credit limited to 8 units with a maximum of 4 units per quarter. Prerequisite: permission of instructor. Instruction is by lecture, laboratory, activity, or a combination.

### **CULTURAL CENTERS**

The Cultural Centers are committed to the recognition, promotion and support of the rich diversity in the campus community. Presently there are five centers that represent the major cultural groups on campus: The African American Student Center (AASC), The Asian and Pacific Islander Student Center (APISC), The Cesar E. Chavez Center for Higher Education, The Native American Student Center (NASC), and the Pride Center (Gay, Lesbian, Bisexual and Transgender Student Center).

Each center implements a variety of programs which enhance cross-cultural communication and experiences for all Cal Poly Pomona students and provides a network of support services which addresses the needs of traditionally underrepresented students. Each center is dedicated to promoting the education, celebration and appreciation of a multi-ethnic, multicultural campus community.

**The African American Student Center (AASC)** provides peer and retention support and programs, workshops, social and cultural events to enhance the educational experience and knowledge of the African American community. AASC is located in Building 95, (909) 869-5007.

**The Asian and Pacific Islander Student Center (APISC)** coordinates projects, resources and services designed to meet the needs of Cal Poly Pomona's Asian and Pacific Islander students. APISC is located in Building 95, (909) 869-5025.

**The Cesar E. Chavez Center for Higher Education** strives to increase the outreach, recruitment, retention, graduation, and cultural pride of Chicano, Latino and Hispanic students at Cal Poly Pomona. The Cesar E. Chavez Center for Higher Education is located in Building 95, (909) 869-5035.

**The Pride Center (Gay, Lesbian, Bisexual and Transgender Student Center)** provides resources, referrals, support, and programs about lesbian, gay, bisexual and transgender issues, heterosexism, and homophobia. The Pride Center is located in Building 1, Room 206, (909) 869-3064. Website: <[http://www.csupomona.edu/~pride\\_center](http://www.csupomona.edu/~pride_center)>.

### **MOTOR DEVELOPMENT CLINIC**

Priscilla Stromer, Director

The clinic serves children with disabilities between the ages of 3 and 13 by providing the children with a movement therapy program and assisting parents by enabling them to supplement the clinic's program at home. The clinic, staffed by undergraduate and graduate students, provides a valuable learning experience.

### **OTHER PROGRAMS**

Other special centers exist in the various colleges of the university. Information on these special programs is listed in the college sections of this catalog.

