# 2011-13 Cal Poly Catalog

Administered by the Academic Programs Office

# **UNIV-UNIVERSITY STUDIES**

#### UNIV 125 First Year Seminar (2) (CR/NC)

Issues associated with the successful transition from high school or community college to Cal Poly. Links fostered between student needs and campus resources. Coverage of academic policies and procedures, university study skills, goal setting, career planning, wellness and other topics relevant to student success. Credit/No Credit grading only. 1 lecture, 1 activity.

#### UNIV 321 Undergraduate Research Methods and Practice (4)

Research methods and tools for sciences and humanities, including formulating a research question, designing a study, using the scientific method to conduct and analyze surveys, and analyzing data. Emphasis on working in interdisciplinary research teams. Total credit limited to 8 units. 2 lectures, 2 activities. Prerequisite: Completion of GE Areas A and B1, and consent of instructor. Crosslisted as HNRS/UNIV 321.

### UNIV 330 Cal Poly Land: Nature, Technology and Society (4) GE Area F

Scientific investigation of the natural features of the Cal Poly landscape and their transformations by land management technology. Analysis of the environmental, economic, social, and political effects of agriculture, resource extraction, and construction technology on that landscape. Emphasis on the educational, land-use, and long term planning issues of technology presented by this case study. 4 lectures. Prerequisite: Junior standing and completion of GE Areas A and B. *Crosslisted as AG/HUM/UNIV 330*. Fulfills GE Area F.

### UNIV 333 World Food Systems (4) GE Area

Integrated, interdisciplinary study of the technologies of global food production, environmental, and social issues related to the application of those technologies, and moral and ethical issues associated with global food production and distribution. Emphasis on the politics of change. 4 lectures. Prerequisite: Junior standing and completion of Area B. *Crosslisted as POLS/UNIV 333*. Fulfills GE Area F.

# UNIV 339 Disaster-Resistant Sustainable Communities (4) GE Area F

Creation of safer, more resilient cities through systematic application of urban disaster risk reduction methods that utilize the technology of GIS combined with principles from the engineering and geo-sciences. Emphasis on hazard identification and methods to lower disaster risk. 3 lectures, 1 activity. Prerequisite: Junior standing and completion of GE Area B. Fulfills GE Area F.

### UNIV 350 The Global Environment (4) GE Area I

Interdisciplinary investigation of how human activities impact the Earth's environment on a global scale. Examination of population, resource use, climate change, and biodiversity from scientific/technical and social/economic/ historical/political perspectives. Use of remote sensing maps. Sustainable solutions. 3 4 lectures ,—laetivity. Prerequisite: Junior standing and completion of GE Areas A and B. Crosslisted as AG/BUS/EDES/ENGR/HUM/SCM/UNIV 350. Fulfills GE Area F. Change effective Spring 2012.

# UNIV 361 Modernism (4) GE C4

Interdisciplinary survey of the eighteenth, nineteenth and twentieth-century concepts and cultural movements known as modernism throughout Europe, North America and Latin America. Disciplines may include architecture, art, drama, literature, music, philosophy, and photography. 4 lectures. Prerequisite: Completion of GE Area A and one class from Area C. Recommended: Junior standing. *Crosslisted as HUM/UNIV 361*. Fulfills GE C4.

# UNIV 391 Appropriate Technology for the World's People: Development (4) GE D5

A broad overview of international development and appropriate design for sustainability. Besides traditional classroom work, students work in teams to address problems with technical solutions. Collaboration with mentors from the university, private sector, and nonprofits serves to provide diverse background and project mentorship. 4 lectures. Prerequisite: Junior standing; completion of GE Area A, and two courses from GE D1-D4 and consent of instructor.

\*Crosslisted as HNRS/UNIV 391. Fulfills GE D5. Change effective Winter 2012.

# UNIV 392 Appropriate Technology for the World's People: Design (4) GE Area F

Addresses the needs of international impoverished communities with technological solutions, which are inexpensive, ecologically sustainable, and socially appropriate. Group study of target communities, and design and construction of an appropriate technology prototype. Not open to students with credit in UNIV 492. 3 lectures, 1 laboratory. Prerequisite: Junior standing and completion of GE Area B, or graduate standing. Recommended: UNIV 391, GE Area D2, and GE Area D3. Crosslisted as HNRS/UNIV 392. Fulfills GE Area F.

# UNIV 424 Design of Museum Displays on Science, Engineering, and Technology (4)

The design and creation of educational museum displays that highlight science, engineering, and technology. Projects done by multidisciplinary teams and for clients in the community. Emphasis on design, teamwork, service learning and project management. 3 lectures, 1 laboratory. Prerequisite: GE Area B. Crosslisted as HNRS/UNIV 424.

### UNIV 470 Selected Advanced Topics (1-4)

Directed group study of selected topics for advanced students. Open to undergraduate and graduate students. The Schedule of Classes will list title selected. Total credit limited to 8 units. 1 to 4 lectures. Prerequisite: Consent of instructor.

### UNIV 491 Appropriate Technology for the World's People: Development (4)

A broad overview of international development and appropriate design for sustainability. Besides traditional classroom work, students work in teams to address problems with technical solutions. Collaboration with mentors from the university, private sector, and nonprofits serves to provide diverse background and mentorship. Seminar paper required. Not open to students with credit in UNIV/HNRS 391.4 lectures. Prerequisite: Consent of instructor, and senior or graduate standing. Corequisite: GE Area D5.

# UNIV 492 Appropriate Technology for the World's People: Design (4)

Addresses the needs of international impoverished communities with technological solutions, which are inexpensive, ecologically sustainable, and socially appropriate. Group study of target communities, and design and construction of an appropriate technology prototype. Seminar paper required. Not open to students with credit in UNIV/HNRS 392. 3 lectures, 1 laboratory. Prerequisite: Junior standing and completion of GE Area B, or graduate standing. Recommended: UNIV 391, GE Area D2, and GE Area D3.