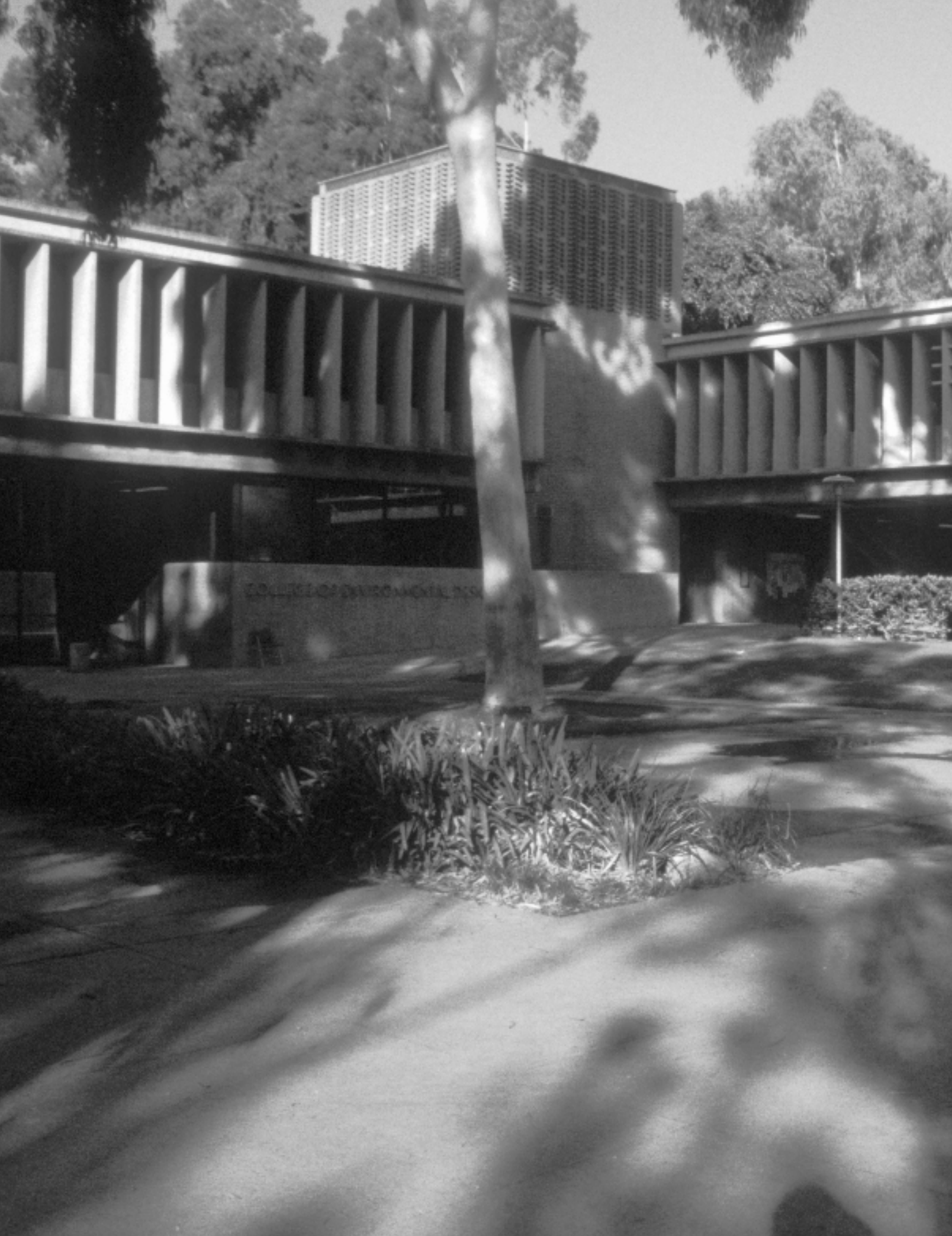

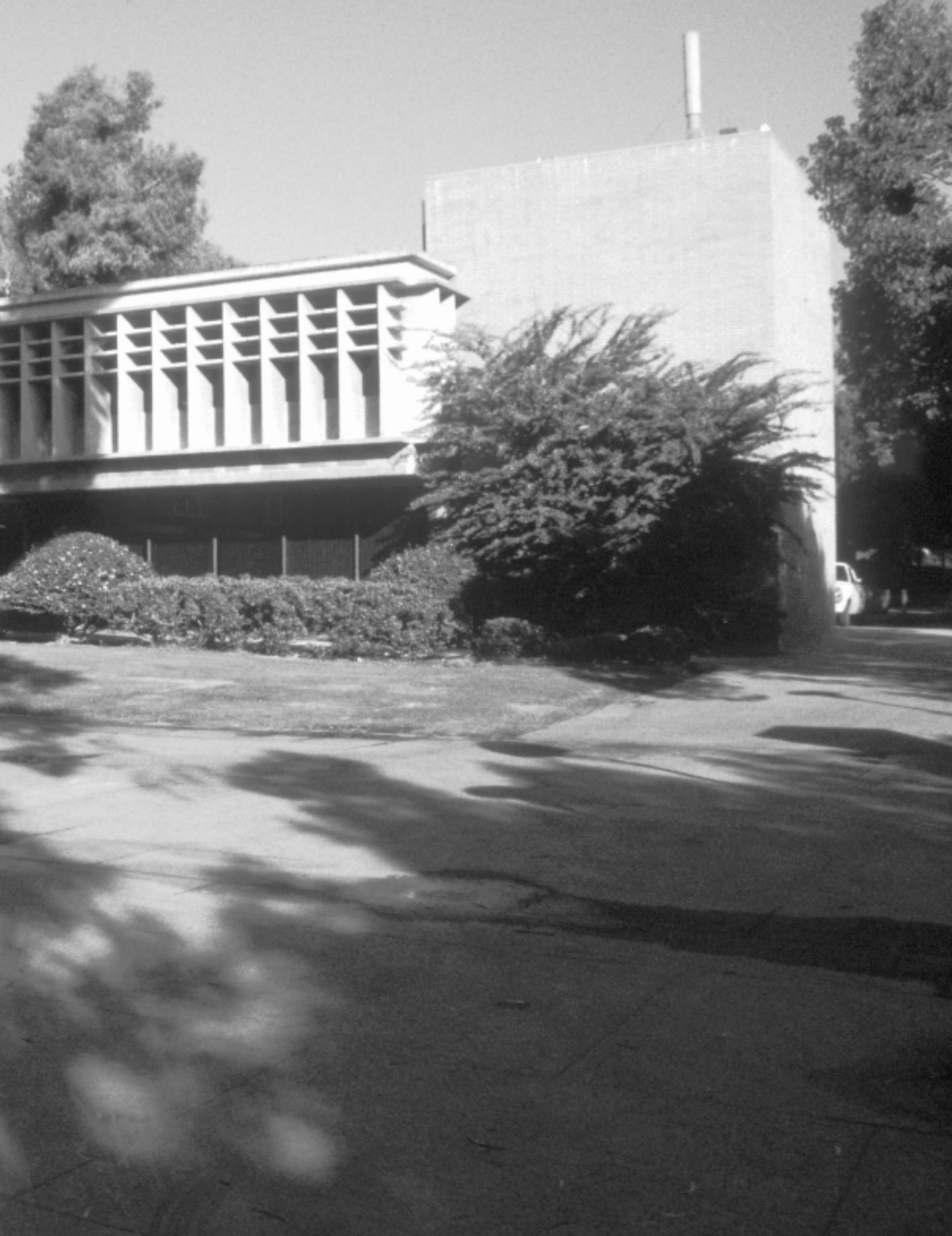

COLLEGE OF ENVIRONMENTAL DESIGN

www.csupomona.edu/~env

Michael Woo, Dean
_____, Associate Dean

The College of Environmental Design (ENV) offers accredited professional degree programs at the graduate and undergraduate level in Architecture, Landscape Architecture, and Urban and Regional Planning. The Art Department offers an accredited bachelor of arts degree, with subplans in Fine Arts and Art History, and a bachelor of fine arts (BFA) degree in Graphic Design. The John T. Lyle Center offers a Master of Science degree in Regenerative Studies. The curricula of the College of Environmental Design are centered within the departments but share a common commitment to discover workable solutions to complex environmental and cultural concerns.

As professional disciplines, the departments also share a commitment to the development of skills for a professional career. These skills are enriched by the support courses taken within the College and the University. The faculty is comprised of professionals involved in research, practice and instruction.

As of fall 2007, all undergraduate and graduate students entering College of Environmental Design majors are required to purchase a computer that meets departmental specifications. All applicants are invited to check with their department office or go to the department's website to obtain these specifications. Financial aid assistance for this computer purchase is available to students qualifying for Federal Student Aid (requested via the FAFSA application). Please contact the University's Office of Financial Aid (909-869-3700) for additional information.

THE JOHN T. LYLE CENTER FOR REGENERATIVE STUDIES

Kyle D. Brown, Director

The mission of the John T. Lyle Center for Regenerative Studies is to advance the principles of environmentally sustainable living through education, research, demonstration and community outreach. The Center uses the term "regenerative" to emphasize the development of systems that restore and revitalize themselves, ensuring a sustainable future. It offers unique interdisciplinary education through its Master of Science degree program, and its undergraduate minor program, which prepare students to integrate regenerative theories and practices into a wide variety of professional fields. Students have the oportunity to reside and/or work at the Center. The Lyle Center has earned an international reputation for its innovative educational programs, and has hosted visiting scholars and students from around the world.

The Lyle Center pursues a comprehensive and ambitious research agenda, focusing on issues of sustainability. It serves as a living laboratory and center for research related to environmental design, sustainable agriculture, renewable energy production, aquaculture, landscape ecology, and human communities.

Situated on 16 acres within the Cal Poly Pomona campus, the Lyle Center is designed to demonstrate regenerative living. Tours are available where students, policy-makers, and the community can observe regenerative design strategies in practice and learn about innovative technologies. The Center showcases a wide array of regenerative principles, including passive-solar building design, solar energy technology, organic agriculture, and native plant community restoration.

The Lyle Center is actively involved in the community, participating in service-learning projects, sustainable community development efforts, and community educational programs. In addition, the Center periodically offers workshops related to regenerative living for community members, professionals, and policy makers.

If you would like to make a reservation for a visit or tour, please contact us at (909) 869-5155 or by email crs@csupomona.edu. For information on current activities, visit our website at www.csupomona. edu/~crs

OFFICE FOR INTERNATIONAL STUDIES

The Institute for International Studies exists within the College to develop, coordinate and promote international academic programs and activities. This includes assisting with visiting students and scholars on campus and monitoring Cal Poly Pomona programs run overseas for the four disciplines of the College. The College encourages students to participate in the CSU International Programs in Italy, Denmark and Canada, as well as in the College-sponsored programs in Greece, France, Germany, Japan, Mexico, and other Latin American countries. An average of 60-80 students participate each year in the various programs. Under existing agreements, a number of foreign students also study each year at the College.

Further information is available from Noel Vernon, Associate Dean, Building 7, Room 107, (909) 869-2663, FAX (909) 869-4355, e-mail: ndvernon@csupomona.edu

RICHARD AND DION NEUTRA VDL RESEARCH HOUSE II

(For further information contact the Resident Director, Assistant Professor Sarah Lorenzen, at (323) 953-0224.)

The Richard and Dion Neutra VDL Research House II was the residence of Richard Neutra. The house stands as an exemplar of Neutra's Belief in "Survival Through Design." Neutra posited "biorealism" as the generative theory for environmental design. 'Bio' referred to the biology of humankind, and the necessity for habitats that promote physiological and emotional well-being. "Realism" follows from the artistic movement, examining how people actually live from day to day. Neutra's architecture facilitated the daily rhythms of activity for the inhabitants of his environment. The Neutra research examined the physiology of the human being as it interacted with the environment, and materials and planning that would promote the health of the environment. Neutra's "Survival by Design" concepts also had a profound impact on John T. Lyle, founder of the Center named in Lyle's honor.

The Neutra Research House (VDL I) on Silverlake Boulevard in Los Angeles was designed and built in 1932. The initials VDL stand for Cornelius H. van de Leeuw, Dutch industrialist and friend of Richard Neutra who offered aid and entrusted the young Neutra to build Research House I. The present home has been completely reconstructed upon the original foundations after an electrical fire destroyed much of it in 1963, utilizing similar room sizes and configuration. Under the direction of Richard Neutra's son, Dion, significant changes were executed in floor plans and appearance, as well as detailing and fenestration, particularly in the entry and on the east facade. The 1938 Garden House (off the south patio) suffered very little damage in the fire, and it was here that Dion and his family lived during the reconstruction, allowing him the opportunity to supervise the work closely. VDL II, as the re-built house was then referred to, served as Mr. and Mrs. Richard Neutra's residence and the base for the Neutra Institute. In 1979, Mrs. Neutra and California State Polytechnic University, Pomona came to an agreement whereby the Richard and Dion Neutra Research House would

become a University facility. In 1999, the house was designated a "World Monument 2000" by the World Monument Watch Society. The structure is one of the youngest buildings to ever receive this designation. Through the generosity of Mrs. Neutra and the entire Neutra family, the University has gained an architectural work of great significance and an invaluable instructional aid. See the website at www.neutravdl.org.

ENV RESOURCE LIBRARY

Christine Johnson, Library Assistant

The ENV Library houses a variety of materials designed to support the college curriculum. These include books, periodicals, technical reports, product information, samples, organizational newsletters, CDs and on-line access to a variety of informational service groups. These materials are available to current faculty, students and staff and, on a limited basis, to off-campus users.

Special Services include:

Faculty Reserves: A service that allows current faculty to place items on limited (hourly) reserve to maximize accessibility by students.

Class Orientation: A brief presentation to students by ENV Library staff on the available services, any particular areas of interest, and the use of reference tools. Depending on the number of students, this presentation may be done either in the classroom or within the ENV Library itself. This service is available by appointment only and requires advance notice.

Computer Search: On-line searches of out-of-state library catalogs are only a few of the services accessible via our student Netscape info-stations.

For further information, call Christine Johnson (909) 869-2665 or e-mail cbjohnson@csupomona.edu.

ENV VISUAL RESOURCES LIBRARY

Kathy Morgan, Visual Resource Specialist

The ENV Visual Resources Library, located in the Environmental Design building, houses a collection of digital images, 35 mm slides, videos, and CD-ROMs which support the curricula of the various departments within the College. The collection is circulated to current faculty, staff and students.

The Specialist provides reference services to users of the collection. Consultation on accessing sources for specific images and WWW searches for images are provided for faculty in support of the curricula.

For further information, contact Kathy Morgan at (909) 869-4746, e-mail kimorgan@csupomona.edu.

The Art Visual Resources Library includes digital images, 35mm slides, videos, CD-ROMS, and reference books that support the arts curricula. The collection encompasses the fine arts from prehistory to the postmodern era, as well as architecture, decorative arts, industrial design, and graphic design. Housed in Building 13, the collection circulates to current faculty, students, and staff. For further information, contact Dr. Therese Mahoney at (909) 869-6793, email tmmahoney @csupomona.edu.

ENV COLLEGE ARCHIVE

The Archive is an organized physical accounting of the curriculum and history of the College as well as documentation of the evolution of trends in Southern California Architecture. Projects by students, faculty, and outside professionals in the environmental design disciplines are stored at two on-campus locations. Items include models, books, plans, papers, and computer diskettes.

Retention of student work: All work of the students of the College of Environmental Design is considered the property of the College and, as such, may be retained to be displayed, archived, or used in promotional materials or for accreditation purposes at the discretion of the faculty, department chair or other designated representative of the College.

For further information, call (909) 869-2665.

ARCHIVES SPECIAL COLLECTIONS

Dr. Lauren Bricker, Director

The College owns a number of special collections, including the works of Craig Ellwood, Richard Neutra, Raphael Soriano, Donald Wexler, and Francis Dean. As an aid to research, archival materials are available for use by faculty, staff, students, and visiting scholars.

For further information, contact Dr. Lauren Bricker at (909) 869-6837, e-mail envspeccoll@csupomona.edu.

ART SPECIAL COLLECTIONS ARCHIVES

Dr. Therese Mahoney, Collections Curator

The Art special collections include the large Burr and Jones fine art collections, the Jewett collection of Beatrice Wood ceramics, the Don Huntley western art collection, and the Gilson industrial design archive (which includes the Reinecke Collection), as well as a number of smaller collections. Artworks are available on a limited basis for loans and exhibits.

For further information, contact Dr. Therese Mahoney at (909) 869-6793, e-mail tmmahoney@csupomona.edu.

ENV OFFICE OF STUDENT AFFAIRS

Mona Hsieh, Coordinator

Admissions: Prospective students for all programs in the college may obtain admissions information in this office, as well as in the appropriate departmental offices. Copies of articulation agreements with community colleges also are available.

Registration: Information is provided regarding telephone registration, adding and dropping classes, simultaneous enrollment at other colleges, petitions for undergraduate credit in a graduate course, etc.

Records: Files for students currently enrolled in the undergraduate Architecture and Landscape Architecture programs are maintained in this office. All other active student files are maintained in the respective department offices. Students may inquire in this office as to whether or not an instructor has submitted a change of grade; however, blank change-of-grade forms are given to faculty only. Incomplete grade contracts are kept on file in this office. Student files may be checked-out by faculty only. Student addresses and telephone numbers are confidential and will be given only to faculty.

Advising: This office assists the student's faculty advisor in providing undergraduate students with academic advising and information regarding University and College policy and procedure. Graduate students should contact the graduate coordinator in their major department for academic advising and graduate program information. All petitions which require the Dean's signature are submitted to the

Coordinator for approval after the student has obtained all other signatures required on the form.

For further information, contact Mona Hsieh at (909) 869-2670, or e-mail myhsieh@csupomona.edu.

INTERNSHIPS

Marcy Ruiz, Internship Coordinator

Internships enhance the formal educational experience and provide students with the practical training necessary to evaluate career goals and objectives. The internship process serves as a means to a "seamless transition" between education and professional practice. The internship is a developmental process and a period where interns achieve new competencies from a strong foundation of practical knowledge and skill. Students in all four ENV disciplines are encouraged to seek internships.

Students in the architecture program are required to complete five hundred hours of internship prior to graduation. Architecture students should contact this office for information regarding verification of their required internship hours prior to graduation. The Internship office also provides students with assistance in making contact with professional firms seeking interns.

For further information, contact Marcy Ruiz at (909) 869-4504, e-mail marcyruiz@csupomona.edu. Students also can visit the College's job board at www.envjobs.com.

COMPUTER-AIDED INSTRUCTION LABORATORY (CAI LAB)

Paul Tran, Information Technology Consultant

The Computer-Aided Instruction Laboratory, located in the Environmental Design Building, provides a range of work stations for ENV students to explore significant issues in their fields with computers. Classroom computer instruction is supported by the laboratory for a variety of design and planning applications, including Geographic Information Systems, Computer-Aided Design, advanced graphics applications and statistical modeling. Applications research and continuing education for the professional community are also carried out by the laboratory.

For further information, contact Paul Tran at (909) 869-2668, or e-mail ptran@csupomona.edu.

Departments and Majors

ARCHITECTURE

Judith E. Sheine, Chair
Bachelor of Architecture
Master of Architecture

ART

Babette Mayor, Chair
Bachelor of Arts in Art, with subplans in Fine Arts and Art History
Bachelor of Fine Arts in Graphic Design
Minor in Art History

LANDSCAPE ARCHITECTURE

Gerald O. Taylor, Chair
Bachelor of Science in Landscape Architecture
Master of Landscape Architecture

REGENERATIVE STUDIES

Kyle D. Brown, Director
Master of Science in Regenerative Studies
Minor in Regenerative Studies

URBAN AND REGIONAL PLANNING

Jerry V. Mitchell, Chair
Bachelor of Science in Urban and Regional Planning
Master of Urban and Regional Planning

SPECIAL ADMISSIONS CRITERIA FOR ARCHITECTURE

The undergraduate program in Architecture is designated as an impacted program (see earlier section of catalog on "Admissions"). In order to alleviate the pressure of impaction and to better evaluate applicants for the programs in question, a special admission policy has been adopted. Candidates interested in applying to Architecture must do so during the months of October and November to be considered for the following academic year. All candidates must meet regular University admission standards as well as additional standards required by the Department of Architecture. For specific admission information, interested students should contact the College of Environmental Design at (909) 869-2670.

ENVIRONMENTAL DESIGN COURSES

ENV 101/101L Foundations of Design I (2/2)

Studio introducing undergraduate ENV majors to design fundamentals, stressing a basic vocabulary of 2- and 3-D design and design process in an atmosphere of discovery and creativity. Projects will focus on perception, visualization, representation, and expression as well as an introduction to the examination of aesthetic, symbolic, and cultural elements. First studio of a two-studio ENV sequence. 1 two-hour lecture; 2 three-hour laboratories. Prerequisite: ENV majors only.

ENV 112 Design and the Built Environment (4)

Introduction to the tools, techniques, and processes used by design professionals to create the physical world. Experiences with the built environment provides ways to join abstract ideas with practical and creative solutions for living. 4 lectures/problem-solving.

ENV 115/115A History of Art and Environmental Design (3/1)

An interdisciplinary introduction course integrating the history of architecture, art, landscape architecture, and urban planning. Examples drawn from greater Los Angeles illustrate contemporary applications of historic precedent. Examination of the styles, iconography, meaning and cultural context of significant and culturally diverse periods and places in world art and design. Emphasis on fundamental knowledge necessary to further study in the environmental design disciplines, as well as visual, analytical, and verbal skills. 3 hours of lecture, team-taught by faculty representing the four disciplines, and 1 activity session per week.

ENV 200 Special Study for Lower Division Students (1–2)

Individual or group investigation, research, studies, or surveys of selected problems. Total credit limited to 4 units with a maximum of 2 units per quarter.

ENV/EGR/CLS 215/215A Introduction to Interdisciplinary GIS Studies (2/2)

Interdisciplinary overview of applications in geographic information system (GIS) applications. Diagnostic assessment of student skills and development of study plans. Linkage of GIS to various disciplines, hands on applications and GIS problems. Prerequisite: none. 2 hours lecture/2 hours activity (total 4 units).

ENV 299/299A/299L Special Topics for Lower Division Students (1–4)

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

ENV 370 California Designs for Living (4)

The creative interaction of peoples of California with their natural and built environments. The response of culturally unique designs for living to universal human needs and processes. The influence of California environments on the world.

ENV 400 Special Study for Upper Division Students (1–2)

Individual or group investigation, research, studies, or surveys of selected problems. Problems to be initiated by student with guidance from faculty. Total credit limited to 4 units with a maximum of 2 units per quarter.

ENV 401 Take Part Workshop (2)

Instruction and practice in planning participatory workshops; facilitation of the environmental planning process. Prerequisite: concurrent enrollment in environmental design program.

ENV 420 The Designer as Teacher (4)

A course preparing architecture and planning students for communicating issues of design of the built environment to clients, community groups, and students. 4 lecture discussions.

ENV 422 Designing for Elderly and Disabled (4)

Identifies special needs of elderly and disabled adult populations in relation to the physical care, recreation and public facility environments. Addresses design considerations in the built environment which include: housing, work places, public spaces and recreational areas. 4 lectures/problem-solving.

ENV 423 Design for Children and Accessibility (4)

Examines physical environmental issues as they are related to the growth and developmental stages of children and youth (birth-15). Compares urban, suburban and rural settings for care, recreation, learning and shelter of children and youth. Addresses social, ethnic and cultural issues in the planning and design of spaces for children and youth. 4 lecture discussions.

ENV/CLS 430 Liberal Studies: Arts Integration I (4)

Exploration by experience of the fine and performing arts. Connections and relationships among the arts within their diverse historical and cultural contexts. Applications of the creative experience to classroom learning environments. 4 lecture/problem solving. 20 hours of directed fieldwork. Prerequisite: Completion of General Education Area C1.

ENV 470, 471, 472, 473 Cooperative Education (2–4) (2–4) (2–4) (2–4)

Full-time work experience that applies environmental design principles to practice. Prerequisite: junior standing or approval of cooperative education coordinator. Work assignment must have prior approval. Course may be repeated per student's major department limitations. Prerequisite: Architecture students must have fulfilled the 500 hours additional architecture office experience.

ENV 489 Community Design and Social Change (4)

Principles and processes integrating spatial and social relations in the organization and expression of community. Cross-cultural examination of change in "design" of communities; implications for quality of life and role of designer. 4 lecture discussions.

EGR/ENV/CLS 494/A Interdisciplinary Project in Geographic Information Systems I (1/1)

Problem-solving skills using GIS technology in a Fall/Winter/Spring sequence. Students design, manage and develop GIS projects in an interdisciplinary setting. Issue related to ethics, decision making, interdisciplinary applications and the visual display of information are addressed. 1 lecture discussion, 2 hours activity.

EGR/ENV/CLS 495/A Interdisciplinary Project in Geographic Information Systems II (1/1)

Problem-solving skills using GIS technology in a Fall/Winter/Spring sequence. Students design, manage and develop GIS projects in an interdisciplinary setting. Issue related to ethics, decision making, interdisciplinary applications and the visual display of information are addressed. 1 lecture discussion, 2 hours activity. Pre-requisite: EGR/ENV/CLS 494/A.

EGR/ENV/CLS 496/A Interdisciplinary Project in Geographic Information Systems III (1/1)

Problem-solving skills using GIS technology in a Fall/Winter/Spring sequence. Students design, manage and develop GIS projects in an interdisciplinary setting. Issue related to ethics, decision making, interdisciplinary applications and the visual display of information are addressed. 1 lecture discussion, 2 hours activity. Pre-requisite: EGR/ENV/CLS 495/A.

ENV 499/499A/499L Special Topics for Upper Division Students (1–4)

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

ARCHITECTURE

www.csupomona.edu/~arc

Judith Sheine, Chair

William Adams
Spyros Amourgis
Lauren Weiss Bricker
Mitchell De Jarnett
Kip Dickson
Michael A. Fox
Arthur E. Hacker
Paul Helmle
Luis Hoyos
Pablo LaRoche
Denise Lawrence
Juintow Lin
Sarah E. Lorenzen
Gary L. McGavin
Norberto Nardi
Alexander Ortenberg
Axel Prichard Schmitzberger
George Proctor
Irma Ramirez
Hofu Wu

The degree, Bachelor of Architecture, is offered in a five-year curriculum which focuses on the design laboratory. The studio sequence consists of three segments: A three-year basic core, a four-quarter group of topic studios taken jointly by fourth- and fifth-year students, and a culminating senior project. All work becomes the property of the department with superior work retained for display and archival use.

As a result of state impaction requirements, non-resident and foreign students are not eligible to apply to the undergraduate program.

Course work within the Department of Architecture is open only to those students who have been admitted to the Department and are designated Architecture majors.

As of fall 2007, all undergraduate and graduate students entering College of Environmental Design majors are required to purchase a computer that meets departmental specifications. All applicants are invited to check with their department office or go to the department's website to obtain these specifications. Financial aid assistance for this computer purchase is available to students qualifying for Federal Student Aid (requested via the FAFSA application). Please contact the University's Office of Financial Aid (909-869-3700) for additional information.

Prior to graduation, all students are required to fulfill 500 hours of work. A minimum of 250 hours must be with a registered architect and the remaining 250 hours may be with a faculty-approved alternative. This work must be verified by the department coordinator of Professional Practice and Cooperative Education.

The Department of Architecture is a member of the Association of Collegiate Schools of Architecture. Courses are taught by a faculty of professionals engaged in practice, education, and research.

The Bachelor of Architecture as a first professional degree (B.ARCH) is accredited by the National Architecture Accrediting Board. In the United States, most state registration boards require a degree from an accredited professional degree program as a prerequisite for licensure. The National Architectural Accrediting Board (NAAB), which is the sole agency authorized to accredit U.S. professional degree programs in architecture, recognizes three types of degrees: the Bachelor of Architecture, the Master of Architecture, and the Doctor of Architecture. A program may be granted a 6-year, 3-year, or 2-year term of accreditation, depending on the extent of its conformance with established educational standards.

Master's degree programs may consist of a preprofessional undergraduate degree and a professional graduate degree that, when earned, sequentially, constitute an accredited professional education. However, the preprofessional degree is not, by itself, recognized as an accredited degree.

For information regarding the graduate program, refer to the Graduate Studies section of this catalog.

ADMISSION TO THE PROGRAM

Because the program offered by the Department of Architecture is oversubscribed, applications are accepted only during the initial filing period of October 1 – November 30, prior to admission in the following fall quarter.

All candidates must meet regular University admission standards as well as additional standards required by the Department of Architecture. For specific admission information, please contact the College of Environmental Design Office of Student Affairs at (909) 869-2670 or visit the Department of Architecture website at www.csupomona.edu/~arc.

Among other requirements, transfer applicants to Architecture must complete all of their "Golden Four" courses (college-level English composition, speech, critical thinking and mathematics) with a grade of ''C" or better. These courses shall all have been completed by the end of the fall quarter in which the student applies to the program (ex: by the end of fall 2003 for entrance in fall 2004). Spring 2003 enrollment in any of these courses will not be counted as meeting this requirement.

Applicants are notified of their admission status by the Department in late April.

CORE COURSES FOR MAJOR

Required of all students. A 2.0 cumulative GPA is required in core courses, including subplan courses for the major, in order to receive a degree in the major.

Foundations of Design I	ENV	101/101L	(4)
Special Topics: Critical Thinking in Architecture	ARC	299/299A	(4)
Introduction to Architectural Design	ARC	102/102L	(4)
Introduction to Architecture	ARC	103/103L	(4)
Foundation for Digital Design Modeling	ARC	150	(2)
Architectural Design	ARC	201/201L	(6)
Architectural Design	ARC	202/202L	(6)
Architectural Design	ARC	203/203L	(6)
Architectural Design	ARC	301/301L	(6)
Architectural Design	ARC	302/302L	(6)
Architectural Design	ARC	303/303L	(6)
Structures	ARC	321/321A	(4)
Structures	ARC	322/322A	(4)
Structures	ARC	323/323A	(4)
Environmental Controls	ARC	331/331A	(4)
Environmental Controls	ARC	332/332A	(4)
Building Construction	ARC	341/341A	(4)
Building Construction	ARC	342/342A	(4)
Ancient and Medieval Architecture	ARC	361/361A	(4)
Renaissance and Baroque Architecture	ARC	362/362A	(4)
Modern Architecture Since 1750	ARC	363/363A	(4)
Architectural Design	ARC	401/401L	(6)
Architectural Design	ARC	402/402L	(6)
Architectural Design	ARC	403/403L	(6)
Architectural Design	ARC	405/405L	(6)
Architectural Design	ARC	406/406L	(6)

Seismic Design in Architecture	ARC	424/424A	(4)
Digital Design Media for Architects	ARC	450	(4)
American Architecture	ARC	464/464A	(4)
Architectural Practice	ARC	471/471A	(4)
Bachelor's Project Research	ARC	491	(2)
Bachelor's Project Programming	ARC	494	(2)
Bachelor's Degree Project	ARC	495	(8)

Total Core Courses 152

PROFESSIONAL ELECTIVES

Select 16 units from below or from approved supplemental department list:

Energy Conservation	ARC	333	(4)
Asian Architecture	ARC	366	(4)
Advanced Structures	ARC	425	(4)
Advanced Structures	ARC	426	(4)
Sustainable Technology	ARC	431	(4)
Solar Applications	ARC	432	(4)
Advanced Digital Modeling and Rendering	ARC	452	(4)
Interactive Media for Architects	ARC	454	(4)
Animation/Simulation Design Models	ARC	456	(4)
Architecfture and Historic Preservation	ARC	460	(4)
Architecture and Urbanism	ARC	463	(4)
Contemporary Architecture	ARC	465	(4)
California Architecture	ARC	467	(4)
Latin American Architecture	ARC	468	(4)
Topics in Southern California Architecture	ARC	469	(4)
The Architect and the Development Process	ARC	473	(4)
Business Development in Architecture	ARC	476	(4)
Behavioral Factors in Architecture	ARC	481	(4)
Behavioral Factors in Architecture	ARC	482	(4)
Behavioral Factors in Architecture	ARC	483	(4)
Design Issues/Housing	ARC	485	(4)
Institutional Environments	ARC	486	(4)

Total Professional Electives . . . . . (16)

REQUIRED SUPPORT COURSES

The following major support courses should be used to satisfy the indicated GE requirements. If these courses are not used to satisfy GE, the total units to degree may be more than 246 units.

Advocary and Argument (A1)	COM	204	(4)
Freshman English II (A3)	ENG	105	(4)
Trigonometry (B4)	MAT	106	(4)
College Physics/Laboratory (B1, B3)	PHY	121/121L	(3/1)

INTERDISCIPLINARY GENERAL EDUCATION

The Department of Architecture prefers that students starting in the program as freshmen take the Interdisciplinary General Education (IGE) program coursework to partially meet their general education degree requirements. IGE coursework is as follows:

IGE PROGRAM

Consciousness and Community	IGE	120	(4)
Rationalism and Revelation	IGE	121	(4)
Authority and Faith	IGE	122	(4)
Culture and Contact	IGE	220	(4)
Reform and Revolution	IGE	221	(4)
Individualism and Collectivism	IGE	222	(4)
Promise and Crisis	IGE	223	(4)
Connections Seminar	IGE	224	(4)

GENERAL EDUCATION REQUIREMENTS

Students should consult the catalog website www.csupomona.edu/~academic/catalog/ for current information regarding this requirement. Unless specific courses are stated under Support Courses, see the list of approved courses under General Education Requirements, Areas A through E.

Area A, Communication and Critical Thinking (12 units)

1. Oral Communication
2. Written Communication
3. Critical Thinking

Area B. Mathematics and Natural Sciences (16 units)

1. Physical Science
2. Biological Science
3. Laboratory Activity
4. Mathematics/Quantitative Reasoning
5. Science and Technology Synthesis

Area C. Humanities (16 units)

1. Visual and Performing Arts
2. Philosophy and Civilization
3. Literature and Foreign Languages
4. Humanities Synthesis

Area D. Social Sciences (20 units)

1. U.S. History, Constitution, and American Ideals
2. History, Economics, and Political Science
3. Sociology, Anthropology, Ethnic and Gender Studies
4. Social Science Synthesis

Area E. Lifelong Understanding and Self-development (4 units)

UNRESTRICTED ELECTIVES: 10 units

TOTAL UNITS FOR 5-YEAR BACHELOR OF ARCHITECTURE DEGREE: 246

COURSE DESCRIPTIONS

Courses open only to declared ARC Majors unless otherwise specified.

ARC 102/102L Introduction to Architectural Design (1/3)

An introduction to the processes of design through studio projects addressing the role of process in the development of form. The course focuses on drawing and model construction as a means to seeing and understanding. One 1-hour lecture, three 3-hour studios. Prerequisites: undergraduate standing in architecture, and ENV 101/101L.

ARC 103/103L Introduction to Architectural Design (1/3)

Continuing exploration of the design process and the formal and spatial language of architecture; use of case studies. One 1-hour lecture, three 3-hour studios. Prerequisites: undergraduate standing in architecture, and ARC 102/102L. Concurrent enrollment required.

ARC 150 Foundation for Digital Design Modeling (2)

General overview of digital modeling tools, methods and uses. Instruction focuses on general-purpose modeling tools, with directions

for self-instruction and/or access to on-campus aids for general software training. Overview of online ethics, use of online help and FAQs, University and College computing facilities, protocols, Intranet and e-mail accounts. 2-hour laboratory. Prerequisites: undergraduate standing in architecture major.

ARC 200 Special Study for Lower Division Students (1–2)

Individual or group investigation, research, studies or survey of selected problems. Problems to be student-initiated under faculty guidance. Total credit limited to 4 units, with a maximum of 2 units per quarter. Prerequisites: undergraduate standing in architecture major.

ARC 201/201L Architectural Design (3/3)

Exploration of basic design and architectural elements. Continuing development of the process of architectural design with an emphasis on two and three dimensional communication techniques. 3 lectures, 3 three-hour laboratories. Concurrent enrollment required. Prerequisites: undergraduate standing in architecture, and ARC 103.

ARC 202/202L Architectural Design (3/3)

A continuation of basic design exercises focusing on simple buildings and their relationship to the site. 3 lectures, 3 three-hour laboratories. Prerequisites: undergraduate standing in architecture, and ARC 201. Concurrent enrollment required.

ARC 203/203L Architectural Design (3/3)

The design process continued using simple programs and the influence of context. Introduction to sustainability and environmental constraints. (C grade or better required for advancement to ARC 301.) 3 lectures, 3 three-hour laboratories. Prerequisites: undergraduate standing in architecture, and ARC 202. Concurrent enrollment required.

ARC 299/299A/299L Special Topics for Lower Division Students (1–4)

Study of a selected topic, the subject matter and title to be initiated by the faculty in advance. Instruction is by lecture, laboratory, or a combination. Prerequisites: undergraduate standing in architecture major.

ARC 301/301L Architectural Design (3/3)

The design process as it relates to building materials and construction. The interaction of aesthetic, technological, and economic determinants. 3 lectures, 3 three-hour laboratories. Prerequisites: undergraduate standing in architecture major; ARC 203 with a C grade or better; ARC 341, ARC 363, MAT 106, and PHY 121/121L. Concurrent enrollment required.

ARC 302/302L Architectural Design (3/3)

Interaction of construction technology, human behavior and site development in the design of housing in specific context. 3 lectures, 3 three-hour laboratories. Prerequisites: undergraduate standing in architecture major and ARC 301. Concurrent enrollment required.

ARC 303/303L Architectural Design (3/3)

Integration of construction technology, human behavior and site development in the design of institutional buildings; building codes. 3 lectures, 3 three-hour laboratories. Prerequisites: undergraduate standing in architecture, and ARC 302. Concurrent enrollment required.

ARC 321/321A Structures (3/1)

Theories of structural design and the relationship of structure to form, function, and economics. Analysis of structural systems, including the determination of forces and stresses. 3 one-hour lectures, 1 one-hour discussion. Prerequisites: undergraduate in architecture, ARC 203, MAT 106, PHY 121/121L, or graduate standing in architecture. Concurrent enrollment required.

ARC 322/322A Structures (3/1)

Theories of structural designs and the relationship of structure to form, function and economics. Analysis of structure systems including the determination of forces, stresses and deflections. The design of wood and steel structures as a medium for introducing basic concepts of building and construction systems and materials. 3 one-hour lectures, 1 one-hour discussion. Prerequisites: undergraduate standing in architecture, and ARC 321, or graduate standing in architecture. Concurrent enrollment required.

ARC 323/323A Structures (3/1)

Theories of structural design and the relationship of structure to form, function, and economics. Analysis of structural systems, including the determination of forces, stresses, and deflections. The design of concrete and masonry structures as a medium for introducing basic concepts of building and construction systems and materials. 3 one-hour lectures, 1 one-hour discussion. Prerequisites: undergraduate standing in architecture, and ARC 322 or graduate standing in architecture. Concurrent enrollment required.

ARC 331/331A Environmental Controls (3/1)

Principles of sustainability, evaluation and control of environmental systems. 3 one-hour lectures, 1 one-hour lecture discussion. Prerequisites: undergraduate standing in architecture, ARC 203, and MAT 106, or graduate standing in architecture. Concurrent enrollment required.

ARC 332/332A Environmental Controls (3/1)

Integration, conservation and control of environmental systems. 3 one-hour lectures, 1 one-hour discussion. Prerequisites: undergraduate standing in architecture, and ARC 331, or graduate standing in architecture. Concurrent enrollment required.

ARC 333 Energy Conservation (4)

Integration and management of environmental systems in design to minimize energy and costs. 2 two-hour lectures. Prerequisites: undergraduate standing in architecture, and ARC 332, or graduate standing in architecture.

ARC 341/341A Building Construction (3/1)

An overview of construction, building components, and systems investigated through case studies. 3 lectures and a one-hour seminar. Prerequisites: undergraduate standing in architecture, and ARC 202, or graduate standing in architecture.

ARC 342/342A Building Construction (3/1)

Techniques of construction, building components, and systems investigated through case studies and taught as an integral part of ARC 301, Architectural Design. Selected building materials will be discussed. 3 lectures, and one-hour seminar. Prerequisites: undergraduate standing in architecture, ARC 203, and ARC 341, or graduate standing in architecture.

ARC 361/361A Ancient and Medieval Architecture (3/1)

A survey of world architecture including ancient Greece and Rome, the early Christian and Byzantine eras, and the Romanesque and Gothic periods. 3 one-hour lectures, 1 one-hour discussion. Prerequisites: undergraduate standing in architecture, and ENG 104 or 105 or COM 204, or graduate standing in architecture. Concurrent enrollment required.

ARC 362/362A Renaissance and Baroque Architecture (3/1)

The theory and design of architecture and city planning from 1400 to 1750 with an emphasis on Italy, France, and England. 3 one-hour lectures, 1 one-hour discussion. Prerequisites: undergraduate standing in architecture, and ARC 361, or graduate standing in architecture. Concurrent enrollment required.

ARC 363/363A Modern Architecture Since 1750 (3/1)

A survey of modern architecture from the late eighteenth century to the late twentieth century including stylistic revivals, technological changes, and achievements of major architects. 3 one-hour lectures, 1 one-hour discussion. Prerequisites: undergraduate standing in architecture, and ARC 362, or graduate standing in architecture. Concurrent enrollment required.

ARC 366 Asian Architecture (4)

Examination of selected topics in the history of Asian architecture from ancient times to the present. 2 two-hour lectures. Prerequisite: ARC 363.

ARC 400 Special Study for Upper Division Students (1–2)

Individual or group investigation, research, studies or surveys of selected problems. Problems to be initiated by student with guidance from faculty. Total credit limited to 4 units with a maximum of 2 units per quarter. Prerequisites: undergraduate standing in architecture and ARC 303.

ARC 401/401L Topics in Architectural Design (3/3)

Topics in Advanced Architectural Design. See Department Office for list of topics offered. 3 lectures, 3 three-hour laboratories. Prerequisites: undergraduate standing in architecture, ARC 303, ARC 323, ARC 332, ARC 342. Concurrent enrollment required.

ARC 402/402L Topics in Architectural Design (3/3)

Topics in Advanced Architectural Design. See Department Office for list of topics offered. 3 lectures, 3 three-hour laboratories. Prerequisites: undergraduate standing in architecture, and ARC 401. Concurrent enrollment required.

ARC 403/403L Architectural Design (3/3)

An exploration of urban design issues including research and analysis of the topics associated with mixed use projects. 3 lectures, 3 three-hour laboratories. Prerequisites: undergraduate standing in architecture, and ARC 402. Concurrent enrollment required.

ARC 405/405L Topics in Architectural Design (3/3)

Topics in Advanced Architectural Design. See Department Office for list of topics offered. 3 lectures, 3 three-hour laboratories. Prerequisites: undergraduate or graduate standing in architecture, and ARC 403. Concurrent enrollment required.

ARC 406/406L Topics in Architectural Design (3/3)

Topics in Advanced Architectural Design. See Department Office for list of topics offered. 3 lectures, 3 three-hour laboratories. Prerequisites: undergraduate or graduate standing in architecture, and ARC 405. Concurrent enrollment required.

ARC 424/424A Seismic Design in Architecture (4)

A study of the fundamental characteristics of lateral loads in architecture. A survey of building codes, case studies of building performance and calculations relative to lateral load design. 3 one-hour lectures, 1 one-hour discussion. Prerequisites: undergraduate standing in architecture, and ARC 323, or graduate standing in architecture.

ARC 425 Advanced Structures (4)

Topics of importance conducted in seminar addressing particular issues, such as seismic design, tensile structures and case studies in structural performance. 2 two-hour lectures. Prerequisites: undergraduate standing in architecture, and ARC 424, or graduate standing in architecture.

ARC 426 Advanced Structures (4)

The structural analysis of a building. The calculation of vertical and horizontal loads on a wood frame or steel structure, and the design and selection of the structural elements and connectors. 2 two-hour lectures. Prerequisites: undergraduate standing in architecture, and ARC 424, or graduate standing in architecture.

ARC 431 Sustainable Technology (4)

Integration and management of buildings systems to minimize environmental impact. Sustainable materials, green building design criteria, passive heating and cooling systems, active solar systems, sustainable building and energy technologies, green building rating systems. Seminar-discussion course with emphasis on student research in selected topics. Prerequisites: undergraduate standing in architecture, and ARC 331, or graduate standing in architecture.

ARC 432 Solar Design Applications in Architecture (4)

Advanced study of building with respect to solar design. The study of passive and active solar design, building orientation, materials and site-planning. A review of historical applications of solar design. The study of solar design as an alternate energy source. 2 two-hour lectures. Prerequisites: undergraduate standing in architecture, and ARC 332, or graduate standing in architecture.

ARC 450 Digital Design Media for Architects (4)

A laboratory exploration of the principles governing the use of computers in architectural practice. This introductory CAD/BIM course is designed to give students a working knowledge of the CAD/BIM systems. 2 two-hour lectures. Prerequisites: undergraduate standing in architecture, ARC 150, and ARC 203, or graduate standing in architecture.

ARC 452 Advanced Digital Design Media (4)

Advanced study in the use of computers in the architectural design process emphasizing advanced modeling and imaging skills through the use of digital media. 2 two-hour lectures. Prerequisites: undergraduate standing in architecture, and ARC 450, or graduate standing in architecture.

ARC 454 Interactive Media for Architects (4)

Exploration and development of the conceptual and technical skills needed to create digital interactive media for use in architecture design

and practice. 2 two-hour lectures. Prerequisites: undergraduate standing in architecture, and ARC 450,or graduate standing in architecture.

ARC 456 Animation and Simulation Design Methods (4)

Exploration and development of the conceptual and technical skills needed to create animation and simulation specifically for use in architecture design and practice. 2 two-hour lectures. Prerequisites: undergraduate standing in architecture, and ARC 452, or graduate standing in architecture. Students must arrive with a complete digital model.

ARC 460 Architecture and Historic Preservation (4)

Survey of the relationship between new design and the preservation of historic buildings, structures and landscapes, from antiquity to the present. Among the issues to be discussed are the theories and practices associated with the historic preservation movement, the impact that historical values, aesthetics, culture, politics, and economic factors have in the preservation process. 2 two-hour lectures. Prerequisite: Upper division standing.

ARC 463 Architecture and Urbanism (4)

Examination of theories which form the basis for the design of buildings in the modern urban and suburban settings. 2 two-hour lectures. Prerequisites: ARC 363, 464.

ARC 464/464A American Architecture (3/1)

English, Spanish, and French Colonial American architecture and city planning of the new republic. Nineteenth-century technical innovation and historicism, and the formulation of a modern architectural theory and practice. 3 one-hour lectures, 1 one-hour discussion. Prerequisites: undergraduate standing in architecture, and ARC 363, or graduate standing in architecture. Concurrent enrollment required.

ARC 465 Contemporary Architecture (4)

A study of the development of post-Bauhaus architecture in England, France, United States, Japan and South America. 2 two-hour lectures. Prerequisites: undergraduate standing in architecture, and ARC 363, or graduate standing in architecture.

ARC 467 California Architecture (4)

California examined from the vantage of its architectural elements, its houses, workplaces, civic spaces, and roads, and their history. The influences, events, values, technologies, and processes which interact in the making of architecture and which result in human patterns upon the landscape of California will be surveyed. Field trips. 2 two-hour lectures. Prerequisites: undergraduate standing in architecture, and ARC 363, or graduate standing in architecture.

ARC 468 Latin American Architecture (4)

A survey of architecture and urbanism in Latin America from the Pre-Columbian era to the present. Identification of design issues is addressed through case studies and design exercises. 2 two-hour lectures. Prerequisites: undergraduate standing in architecture, and ARC 363, or graduate standing in architecture.

ARC 469 Topics in Southern California Architecture (4)

Focus on the career of one or more architects with significant works in Southern California; or on a particular period, place, or other special topic in Southern California architecture history. Lectures, readings and discussions address issues of theory, practice, and historical and cultural context. 2 two-hour lectures. Prerequisites: Upper division standing or graduate student in architecture.

ARC 471/471A Architectural Practice (3/1)

The administrative, legal, ethical aspects of the architectural profession and the relationship between the profession and the construction industry. 3 hours lecture and a one-hour discussion. Prerequisites: undergraduate standing in architecture, and ARC 203, or graduate standing in architecture.

ARC 473 The Architect and the Development Process (4)

The potential roles of the architect in the development process discussed. Issues include goals, appraisal of needs, economics, and market analysis feasibility studies, appraisal procedures, cash flow methods, financing options, decisions, design and delivery processes, involvement at levels of design decisions and project administration. 2 two-hour lectures. Prerequisites: undergraduate standing in architecture, and ARC 471, or graduate standing in architecture.

ARC 476 Business Development in Architecture (4)

The study of the relationship between the architect, employee, client, and contractor; including a study of new business development strategies, winning a commission, marketing, and client communications. 2 two-hour lectures. Prerequisites: undergraduate standing in architecture, and ARC 471, or graduate standing in architecture.

ARC 481 Behavioral Factors in Architecture (4)

Relationship of the concepts of psychology, social anthropology and sociology to the design of the built environment. The effects of architecture on its users. The relationship of social patterns and cultural mores to urban patterns. 4 hours lecture. Prerequisites: upper division standing or graduate student in architecture.

ARC 482 Behavioral Factors in Architecture (4)

A course designed to study methods of programming and project evaluation in the development of architectural design work. 4 hours lecture. Prerequisites: upper division standing or graduate student in architecture.

ARC 483 Behavioral Factors in Architecture (4)

A course designed to study in a seminar format case studies of the application of behavioral factors in the design process. 4 hours lecture. Prerequisites: upper division standing or graduate student in architecture.

ARC 485 Design Issues in Housing (4)

Current behavioral, social and cultural issues in housing design as they relate to domestic organization, life cycle, class and ethnicity. Considerations of function and meaning in form-making, design adaptations in light of change, and evaluation procedures. 4 hours lecture/problem-solving.

ARC 486 Institutional Environments (4)

Design research on the history and theory of total institutions including hospitals, hospices, mental institutions, prisons and other totalizing environments such as space stations. Design and programming issues such as safety and security, surveillance, home-like qualities, privacy

and community, and relation to exterior spaces. 4 hours lecture/ discussion.

ARC 491 Bachelor's Project Research (2)

Identification, development of bibliography and initial research for bachelor's degree project. 2 hours seminar. Prerequisites: upper division standing in architecture, and ARC 405.

ARC 494 Bachelor's Project Programming (2)

Continuation of ARC 491. Research and programming of the bachelor's degree project. 2 hours seminar. Prerequisites: upper division standing in architecture and ARC 491.

ARC 495 Bachelor's Degree Project (8)

Comprehensive architectural design project illustrating the individual student's proficiency in the design process. The independent design projects are meant to reveal an understanding of programming, human behavior, context, conceptual design, integration of structural and environmental systems, design development, and verbal and visual presentation. Prerequisites: upper division standing in architecture, ARC 406, and ARC 494.

ARC 499/499A/499L Special Topics for Upper Division Students (1–4)

Study of a selected topic, the subject matter and title to be initiated by the faculty in advance. Instruction is by lecture, laboratory, or a combination. Prerequisites: undergraduate standing in architecture and ARC 203 or graduate standing in architecture.

Graduate courses are listed in the Graduate Studies section of this catalog.

ART

www.csupomona.edu/~art

Babette Mayor, Chair and Graphic Design Coordinator

Eileen M. Fears	Raymond Kampf
Melissa Flicker	Alyssa Lang
Charles D. Fredrick	Crystal Lee
Joe Hannibal	Sarah A. Meyer
Maren H. Henderson	Alison Pearlman
David A. Hylton	Chari Pradel

The Art Department offers two majors: Art, leading to a Bachelor of Arts degree; and Graphic Design, leading to a Bachelor of Fine Arts degree. The B.A. program includes two subplans, one in Fine Arts and one in Art History. A minor in Art History is also offered through the B. A. program.

The Bachelor of Fine Arts in Graphic Design focuses on intensive work in art and design supported by a program of general studies while the Bachelor of Arts in Art focuses on art and design in the context of a broad program of general studies.

The Art Department is an accredited institutional member of the National Association of Schools of Art and Design. Total curriculum must include 60 units of upper division courses. A minimum grade of C- is required in major courses. Many courses are available for the general university student.

All undergraduate and graduate students entering College of Environmental Design majors are required to purchase a computer that meets departmental specifications. All applicants are invited to check with their department office or go to the department's website to obtain these specifications. Financial aid assistance for this computer purchase is available to students qualifying for Federal Student Aid (requested via the FAFSA application). Please contact the University's Office of Financial Aid (909-869-3700) for additional information.

ART SUBPLANS: FINE ARTS AND ART HISTORY

The Fine Arts Subplan provides introductory courses in drawing, design, and an art history survey to establish a solid foundation. The Fine Arts students advance to classes in sculpture, ceramics, printmaking, painting, and photography. This program offers courses in traditional disciplines as well as inquiry into contemporary issues in installation, digital media and video.

The Art History Subplan includes global art from antiquity to the present. Students develop skills in visual analysis, analysis of cultural context, and in scholarly research.

GRAPHIC DESIGN

The graphic design degree offers students the opportunity to study and understand visual communication problems of every kind for every sector of society. We teach students to work creatively within the areas of typography, print, identity, illustration, packaging, web design, motion graphics, and environmental graphic design. Support courses in communications, advertising, and marketing are recommended.

The department trains students to keep abreast of the rapidly changing technology. Because of our unique location, a wide variety of internships in Southern California studios and industries are available for upper division students.

BACHELOR OF ARTS IN ART

REQUIRED CORE COURSES FOR FINE ARTS SUBPLAN

Introduction to Drawing	ART	140A	(3)
Introduction to Design	ART	150A	(3)
History of Western Art	ART	212	(4)
History of Western Art	ART	213	(4)
History of Western Art	ART	214	(4)
Senior Project	ART	461	(2)
Senior Project	ART	462	(2)
Required Core Units			27

REQUIRED SUBPLAN/OPTION COURSES

Introduction to Clay	ART	130A	(3)
Foundations of Drawing	ART	141A	(3)
Introduction to Crafts	ART	190A	(3)
Arts of Africa, Oceania, and Native America	ART	211	(4)
or History of Asian Art	ART	216	(4)
Introduction to Painting	ART	220A	(3)
Intermediate Drawing	ART	242A	(3)
Life Drawing	ART	244A	(3)
Printmaking	ART	260A	(3)
Fundamentals of Sculpture	ART	280A	(3)
Visual Arts in the 20th Century	ART	312	(4)
Contemporary Art	ART	313	(4)
3-D Design	ART	387A	(3)
Undergraduate Seminar	ART	463	(2)
Minimum of 17 upper division units in Art with consent of advisor			(17)
Required Subplan/Option Units			49

REQUIRED SUPPORT COURSES

Intermediate Painting	ART	324A	(3)
or Transparent Watercolor	ART	325A	(3)
Life Drawing	ART	344A	(3)
Expressive Drawing	ART	345A	(3)
Multimedia Painting	ART	327A	(3)
or Intermediate Sculpture	ART	381A	(3)
Required Support Units			12

ELECTIVE SUPPORT COURSES

Approved electives chosen in consultation with advisor, which may include ENV 101, Foundations of Design I (4).

Elective Support Units . . . . . (12)

UNRESTRICTED ELECTIVES

Unrestricted Electives Units . . . . . (12)

CORE COURSES FOR ART HISTORY SUBPLAN

Introduction to Drawing	ART	140A	(3)
Introduction to Design	ART	150A	(3)
History of Western Art	ART	212	(4)
History of Western Art	ART	213	(4)
History of Western Art	ART	214	(4)
Senior Project	ART	461	(2)

Senior Project	ART	462	(2)
Subtotal			(26)

ART HISTORY SUBPLAN COURSES

Students in the Art History Subplan should choose 8 of the following. (Selection must include two non-European art history courses: ART 211, ART 216, ART 309, ART 314, ART 315, ART 407.)

Arts of Africa, Oceania, and Native America	ART	211	(4)
History of Asian Art	ART	216	(4)
Japanese Art History	ART	309	(4)
Art of the United States	ART	310	(4)
History of Design	ART	311	(4)
Visual Arts in the 20th Century	ART	312	(4)
Contemporary Art	ART	313	(4)
Art of Mexico, Central and South America	ART	314	(4)
Art of Ancient Egypt and the Near East	ART	315	(4)
Art of the Classical World	ART	316	(4)
Art of the Middle Ages	ART	317	(4)
Art of the Italian Renaissance	ART	318	(4)
Art of the Baroque Period	ART	320	(4)
Art and Architecture of India	ART	407	(4)
Art History Seminar	ART	418	(4)

ART HISTORY SUPPORT COURSES

History of World Civilization (C2)	HST	101	(4)
History of World Civilization (C2)	HST	102	(4)
History of World Civilization (D2)	HST	103	(4)
History Methods	HST	300	(4)

ART HISTORY ELECTIVES

Foreign language (three consecutive courses of either Geman or French) . . . (12)
Approved electives must be chosen in consultation with advisor . . . . (8)
Students are advised to take courses in history, literature, music, theater, philosophy, anthropology, etc., that coordinate with their areas of interest in art history.

Unrestricted electives . . . (18)

BACHELOR OF FINE ARTS (BFA) IN GRAPHIC DESIGN

CORE COURSES FOR BFA GRAPHIC DESIGN

Introduction to Drawing	ART	140A	(3)
Foundations of Drawing	ART	141A	(3)
Introduction to Design	ART	150A	(3)
Introduction to the Computer as a Medium	ART	155A	(3)
History of Western Art	ART	212	(4)
History of Western Art	ART	213	(4)
History of Western Art	ART	214	(4)
Intermediate Drawing	ART	242A	(3)
or Life Drawing	ART	244A	(3)
Lettering & Typography	ART	251A	(3)
Graphic Design I	ART	252A	(3)
2-D Design	ART	253A	(3)
Typography II	ART	254A	(3)
Digital Image Design	ART	255A	(3)
Printmaking	ART	260A	(3)
History of Design	ART	311	(4)
Technical Illustration	ART	342A	(3)
Illustration	ART	346A	(3)
Graphic Media & Production	ART	351A	(3)
Graphic Design II	ART	352A	(3)
Web Design I	ART	355A	(3)
Web Design II	ART	356A	(3)
Graphic Design III	ART	452A	(3)
Motion Graphics I	ART	455A	(3)
Graphic Design Seminar	ART	457	(2)
Professional Practices in Graphic Design	ART	464	(4)

SUPPORT COURSES FOR BFA GRAPHIC DESIGN

Visual Arts in the 20th Century	ART	312	(4)
or Contemporary Art	ART	313	(4)
Photography	COM	131/131L	(2/2)
Principles of Marketing	IBM	301	(4)
Promotional Strategies	IBM	307	(4)

ELECTIVE COURSES FOR BFA GRAPHIC DESIGN

Fine Art or Art History Electives . . . (9)
Approved electives in graphic design . . . (8)

GENERAL EDUCATION REQUIREMENTS

Students should consult the catalog website www.csupomona.edu/~academic/catalog/ for current information regarding this requirement. Unless specific courses are stated under Support Courses, see the list of approved courses under General Education Requirements, Areas A through E.

Area A, Communication and Critical Thinking (12 units)

1. Oral Communication
2. Written Communication
3. Critical Thinking

Area B. Mathematics and Natural Sciences (16 units)

1. Physical Science
2. Biological Science
3. Laboratory Activity
4. Mathematics/Quantitative Reasoning
5. Science and Technology Synthesis

Area C. Humanities (16 units)

1. Visual and Performing Arts
2. Philosophy and Civilization
3. Literature and Foreign Languages
4. Humanities Synthesis

Area D. Social Sciences (20 units)

1. U.S. History, Constitution, and American Ideals
2. History, Economics, and Political Science
3. Sociology, Anthropology, Ethnic and Gender Studies
4. Social Science Synthesis

Area E. Lifelong Understanding and Self-development (4 units)

NOTE: The total curriculum for the bachelor's degree must include 60 units of upper division courses.

ART HISTORY MINOR

Required courses:

History of Western Art	ART	212	(4)
History of Western Art	ART	213	(4)
History of Western Art	ART	214	(4)

Students in the Art History Minor must take 4 of the following. Selection must include one non-European art history course (211, 216, 309, 314, 315, or 407) and at least 3 upper division courses.

Arts of Africa, Oceania, and Native America	ART	211	(4)
History of Asian Art	ART	216	(4)
Japanese Art History	ART	309	(4)
Art in the United States	ART	310	(4)
History of Design	ART	311	(4)
Visual Arts in the 20th Century	ART	312	(4)
Contemporary Art	ART	313	(4)
Art of Mexico, Central and South America	ART	314	(4)
Art of Ancient Egypt and the Near East	ART	315	(4)
Art of the Classical World	ART	316	(4)
Art of the Middle Ages	ART	317	(4)
Art of the Italian Renaissance	ART	318	(4)
Art of the Baroque	ART	320	(4)
Art and Architecture of India	ART	407	(4)
Art History Seminar	ART	418	(4)

COURSE DESCRIPTIONS

Courses in Graphic Design are open only to declared art majors. Courses should be taken sequentially whenever possible.

ART 110 The Visual Arts (4)

Introduction to the interpretation of basic forms and functions of the visual arts. Includes Western and non-Western cultures. 4 lecture discussions.

ART 130A Introduction to Clay (3)

Exploration of fundamentals of ceramic materials utilizing slab, coil, and mold-making. Emphasis on developing creative ability. 6 hours activity.

ART 140A Introduction to Drawing (3)

Analysis and practice of drawing. Problems involving development of perception. Emphasis on concepts and methods. 6 hours activity.

ART 141A Foundations of Drawing (3)

Study of drawing with emphasis on depictive concepts, materials, tools and techniques. 6 hours activity. Prerequisite: ART 140A.

ART 150A Introduction to Design (3)

Development of appreciative and creative skills. Variety of materials used, with an emphasis on two-dimensional design concepts. 6 hours activity.

ART 155A Introduction to the Computer as a Medium (3)

An introduction to the use of personal computers in graphic design, visual communication and fine arts. Emphasis on aesthetics and creative expression in computer generated images created through the use of industry-standard software and a variety of input devices. 6 hours activity. Prerequisite: ART 150A.

ART 190A Introduction to Crafts (3)

Basic projects with various craft materials. Development of two- and three-dimensional skills and concepts through the materials and their properties. Criteria applied to craft materials. 6 hours activity.

ART 200 Special Study for Lower Division Students (1–2)

Individual or group investigation, research, studies or surveys of selected problems. Total credit limited to 4 units, with a maximum of 2 units per quarter. Prerequisite: Instructor permission.

ART 211 Arts of Africa, Oceania, and Native America (4)

Study of the visual and material culture of selected civilizations and cultures within Africa, Oceania, and the Americas in relation to belief systems and social functions. 4 lectures.

ART 212 History of Western Art (4)

Comprehensive survey and analysis of the development of art in Western civilization from prehistoric times to the Middle Ages. 4 lectures.

ART 213 History of Western Art (4)

Comprehensive survey and analysis of the development of art in Western civilization from the Renaissance to the 18th century. 4 lectures.

ART 214 History of Western Art (4)

Comprehensive survey and analysis of the development of art in Western civilization from the 18th to the 20th centuries. 4 lectures.

ART 216 History of Asian Art (4)

Survey of art, architecture, and material culture of India, Southeast Asia, China, Korea and Japan from prehistory to the 12th century. Emphasis on historical and religious contexts. 4 lectures.

ART 220A Introduction to Painting (3)

Image as painting. Varied projects designed to foster development of visual equivalents for ideas and emotions using basic painting skills. 6 hours activity.

ART 225A Fundamentals of Watercolor Painting (3)

Methods and techniques with transparent watercolor. Outdoor sketching and studio projects. 6 hours activity. Prerequisite: ART 140A and 150A.

ART 242A Intermediate Drawing (3)

A synthesis of the basic drawing elements (line, value, texture, composition) and perspective with an imaginative and self-expressive use of material. 6 hours activity. Prerequisite: ART 140A and ART 141A.

ART 244A Beginning Life Drawing (3)

Skills and techniques in drawing the human figure from studio models. 6 hours activity. Prerequisite: ART 140A and ART 141A.

ART 251A Lettering and Typography (3)

Development of appreciative and skillful usage of alphabets. Techniques of forming and spacing letters. 6 hours activity. Prerequisite: ART 150A or ENV 101.

ART 252A Graphic Design I (3)

Application of design principles of visual communication with an introduction to design process, methodology/theory and problem solving. 6 hours activity. Prerequisites: ART 251A.

ART 253A Two-Dimensional Design (3)

Elements and principles of two-dimensional design, especially color theory and visual perception. 6 hours activity. Prerequisite: ART 150A.

ART 254A Typography II: Normative to Expressive (3)

An in-depth exploration of typographic nomenclature and its application to live copy, grid systems, and complex hierarchy. Composition is explored, from simple to complex text type, as an avenue for expressive typography. 6 hours activity. May be repeated for a total of 6 units. Prerequisites: ART 155A and ART 251A.

ART 255A Digital Image Design (3)

Continued study and use of personal computers in graphic design and visual communication. Emphasis on aesthetics in computer-generated design. 6 hours activity. Prerequisites: ART 155A. May be repeated for a total of 6 units.

ART 260A Printmaking (3)

Method and techniques of printmaking. Relief and intaglio processes. 6 hours activity. Prerequisites: ART 140A and ART 150A.

ART 261A Monotype Printmaking (3)

Exploration of materials and processes in Mono printing including: additive, subtractive, multicolor, viscosity and cardboard. Prerequisites: ART 260.

ART 262A Screen Printing (3)

Screen printing as an art form using paper, glue, lacquer film stencils and photo techniques. 6 hours activity. Prerequisites: ART 140A and ART 150A.

ART 280A Fundamentals of Sculpture (3)

Fundamentals of sculpture involving modeling, carving or forming clay, plaster, wood, stone and metal. 6 hours activity. Prerequisites: ART 140A and ART 150A.

ART 288A Exhibition Design (3)

Practices and projects in exhibition design and display. Includes wall display and gallery installation. 6 hours activity. Prerequisites: ART 140A and ART 150A.

ART 299/299A 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. Instruction is by lecture or activity or a combination. Corequisites may be required.

ART 305 Gender and Western Art (4)

This course explores the intersection of gender theory, art history, and feminist discourses to examine the role of women artists and images of women in the history of Western art from the Renaissance to the Twentieth Century. Fulfills GE Area C4. Prerequisites: Completion of lower division courses in Area C. ART 213 or ART 214 recommended.

ART 309 Japanese Art History (4)

A survey of the arts of Japan from Neolithic times to the 19th century. Emphasis on Buddhist art. 4 lectures. Prerequisite: junior or senior standing.

ART 310 Art of the United States (4)

Survey of the art of the United States from the provincial art of the colonies to the key role of American artists in the development of modern art. 4 lectures.

ART 311 History of Design (4)

Survey of the great periods of design from ancient to modern with emphasis on the modern period. Includes both western and non-Western civilizations. Analysis of principles and methods. 4 lectures. Prerequisite: ART 214.

ART 312 Visual Arts in the Twentieth Century (4)

Comprehensive survey and analysis of the founding movements and key developments in the history of modern art in Europe and the United States and other centers from 1900 to the present. 4 lectures.

ART 313 Contemporary Art (4)

Analysis of the visual arts in the last quarter century with emphasis on international trends. 4 lectures. Prerequisite: ART 214.

ART 314 Art of Mexico, Central and South America (4)

Arts of pre-Columbian civilizations and the colonial period to the present. 4 lecture discussions. Prerequisite: ART 212, ART 213, or ART 214.

ART 315 Art of Ancient Egypt and the Near East (4)

Survey of the arts of ancient civilizations, primarily Egypt and Mesopotamia, showing the interrelations and cultural exchanges of the ancient world. 4 lectures. Prerequisite: ART 212, ART 213, or ART 214.

ART 316 Art of the Classical World (4)

Survey of the arts of the classical world; the development of Greek, Etruscan, and Roman art. 4 lectures. Prerequisite: ART 212, ART 213, or ART 214.

ART 317 Art of the Middle Ages (4)

Survey of art and architecture of the European Middle Ages, from early Christian art through late Gothic. 4 lectures. Prerequisite: ART 212, ART 213, or ART 214.

ART 318 Art of the Italian Renaissance (4)

Survey of art and architecture of Italy of the 14th through 16th centuries. 4 lectures. Prerequisite: ART 212, ART 213, or ART 214.

ART 320 Art of the Baroque Period (4)

Survey of art and architecture of the 17th and 18th centuries in both Northern and Southern Europe. 4 lecture discussions. Prerequisite: ART 212, ART 213, or ART 214.

ART 324A Intermediate Painting (3)

Painting methods and techniques with emphasis on form and composition. 6 hours activity. May be repeated for total of 9 units. Prerequisite: ART 220A.

ART 325A Transparent Watercolor (3)

Methods and techniques with transparent watercolor. Outdoor sketching and studio projects. 6 hours activity. May be repeated for total of 9 units. Prerequisite: ART 225A.

ART 327A Multimedia Painting (3)

Painting projects in mixed media. Discovering visual effects by combining traditional and nontraditional methods and techniques. 6 hours activity. May be repeated for total of 9 units.

ART 332A Pottery (3)

Basic methods of forming, decorating, glazing and firing pottery forms with an emphasis on use of the potter's wheel. 6 hours activity. May be repeated for a total of 9 units. Prerequisite: ART 130A.

ART 334A Ceramics (3)

Intensified study of ceramic and sculptural forms; study of glaze calculation and firing processes. 6 hours activity. Prerequisite: ART 130A or permission of instructor. May be repeated for a total of 9 units. Prerequisite: ART 130A.

ART 335A Raku (3)

Introduction to asymmetrical forms with an emphasis on low-fire glaze calculations. Aspects of primitive kiln construction with concentration on reduction firings. 6 hours activity. May be repeated for a total of 6 units. Prerequisite: ART 130A.

ART 338A Ceramics: Glaze Calculations (3)

Analytical approach to the development of glazes; working knowledge of the empirical formula; understanding of glaze materials. 6 hours activity. Prerequisite: ART 130A. May be repeated for a total of 9 units.

ART 342A Technical Illustration (3)

Basic mechanical drawing techniques and interpretations; architectural drafting, furniture detailing, blueprint reading, and graphic communication. 6 hours activity. Prerequisites: ART 140A, ART 141A, and ART 242A or ART 244A. May be repeated for a total of 6 units.

ART 344A Life Drawing (3)

Drawing for creative expression from studio models using variety of drawing materials. 6 hours activity. Prerequisite: ART 244A. May be repeated for a total of 9 units.

ART 345A Expressive Drawing (3)

Advanced problems in draftsmanship with special emphasis on linear and textural expression. 6 hours activity. Prerequisite: ART 242A. May be repeated for a total of 9 units.

ART 346A Illustration (3)

Developing graphic images with an individual voice; emphasis on innovation and conceptual thinking through varied illustrative media and techniques. 6 hours activity. Prerequisites: ART 140A, ART 141A, and ART 241A or ART 242A. May be repeated for a total of 9 units.

ART 347A Digital Illustration (3)

An exploration of the computer as illustrative medium. Idea development within real-word parameters, originality, aesthetics and technical proficiency are emphasized. Prerequisites: ART 140A, ART 141A, ART 150A, ART 242A and/or 244A, 255A and 346A. May be repeated for a total of 9 units.

ART 351A Graphic Media and Production (3)

Advanced study of the graphic media and their practical applications. Methods and procedures for preparing two-dimensional design for reproduction. 6 hours activity. Prerequisites: ART 252A, ART 254, and ART 255A.

ART 352A Graphic Design II (3)

Continued study of visual communications with emphasis on complex problem solving within the context of identity systems. 6 hours activity. May be repeated for a total of 6 units. Prerequisite: ART 351A .

ART 355A Web Design I (3)

Introduction to design for screen based media. Emphasis will be on learning HTML, web development software, and non linear sequencing. 6 hours activity. May be repeated for a total of 6 units. Prerequisite: ART 255A.

ART 356A Web Design II (3)

Continued study of design for screen based media. Advanced scripting with emphasis on interactivity. 6 hours activity. May be repeated for a total of 6 units. Prerequisite: ART 355A.

ART 361A Relief Printmaking (3)

Exploration of materials and processes in relief printing including block carving, collage and assemblage techniques. 6 hours activity. May be repeated for a total of 9 units. Prerequisite: ART 260A.

ART 362A Advanced Screen Printing (3)

Advanced projects in screen printing. 6 hours activity. May be repeated for a total of 9 units. Prerequisite: ART 262A.

ART 363A Intaglio Printmaking (3)

Techniques and skills in intaglio methods of printmaking including drypoint, etching, aquatint, mezzotint, and engraving. 6 hours activity. May be repeated for a total of 9 units. Prerequisite: ART 260A.

ART 364A Lithography (3)

Techniques and skills in lithographic methods of printmaking on metal plates. Recommended preparation ART 345A. 6 hours activity. May be repeated for a total of 9 units. Prerequisites: ART 242A and ART 260A.

ART 375A Photography as an Expressive Art Form (3)

Explores the technical and aesthetic aspects of photography for creative expression in the fine arts and design. 6 hours activity. May be repeated for a total of 9 units.

ART 381A Intermediate Sculpture (3)

Work in sculpture using variety of techniques and materials. 6 hours activity. May be repeated for a total of 9 units. Prerequisite: ART 280A.

ART 387A Three-Dimensional Design (3)

Theory and application of aesthetic elements in three-dimensional forms. 6 hours activity. May be repeated for a total of 9 units. Prerequisite: ART 280A.

ART 388A Gallery and Exhibition Design (3)

Professional practices in gallery exhibition design and installation. 6 hours activity. May be repeated for a total of 9 units. Prerequisite: ART 280A and ART 288A.

ART 395A Crafts Design (3)

Development of concepts, methods, and skills in basic craft media such as clay, wood, metal, and fiber construction. 6 hours activity. May be repeated for a total of 9 units. Prerequisite: ART 190A.

ART 400 Special Study for Upper Division Students (1–2)

Individual or group investigation, research, studies or surveys of selected problems. Total credit limited to 4 units, maximum of 2 units per quarter. Prerequisite: Instructor permission.

ART 405 Art and the Child (4)

Understanding the development of visual language and perception through study of children and their art. 4 lecture discussions.

ART 407 Art and Architecture of India (4)

Survey of the art and architecture of the Indian subcontinent. Focuses on the religious traditions of India and their role in the production of architecture and visual imagery from the Indus Valley Civilization to the Mughal Empire. 4 lectures. Prerequisite: Junior or senior standing. ART 216 recommended.

ART 418 Art History Seminar (4)

Intensive study of selected issues and topics in the history of art, with emphasis on developing skills in research and writing. Each seminar will have a sub-title describing its focus. 4 lecture discussions. Prerequisites: ART 212, ART 213, and ART 214.

ART 424A Advanced Painting/Acrylic (3)

Advanced methods and techniques in acrylic media and compositional development. 6 hours activity. May be repeated for a total of 9 units. Prerequisite: ART 220A and ART 324A.

ART 425A Advanced Watercolor (3)

Advanced techniques in wet, cross wash and compositional development. 6 hours activity. Prerequisite: ART 225A and ART 325A.

ART 428A Advanced Painting (3)

Advanced work in relationship of form to idea. Greater development of personal imagery and paint materials. 6 hours activity. May be repeated for a total of 9 units. Prerequisite: ART 220A.

ART 430A Advanced Ceramics (3)

Advanced work in ceramic sculpture and design in clay. 6 hours activity. May be repeated for a total of 9 units. Prerequisite: ART 332A or ART 334A.

ART 450A Book Arts I (3)

An exploration of the book as a visual object. A study of visual communication through the integration of art, design, authorship, and visual experience in the artist book. 6 hours activity. Some studio experience is advised. May be repeated for a total of 6 units. Prerequisites: ART 150A or ENV 101, or permission of the instructor via portfolio.

ART 452A Graphic Design III (3)

Advanced study of visual communications with emphasis in analyzing complex, serial and topical problems. 6 hours activity. May be repeated for a total of 6 units. Prerequisite: ART 352A.

ART 453A Package Design (3)

An exploration of the area of package design. Visual staging and prototype development will be emphasized. 6 hours activity. May be repeated for a total of 6 units. Prerequisites: ART 352A.

ART 454A Environmental Graphic Design (3)

A study of visual communications with emphasis on complex problem solving within the context of graphic design in the built environment. May be repeated for a total of 6 units. Prerequisites: ART 352A.

ART 455A Motion Graphics I (3)

Introduction to time based media and motion graphics. Emphasis is on developing visual acuity to scripting, storyboarding, composition, and editing. 6 hours activity. May be repeated for a total of 6 units. Prerequisite: ART 355A.

ART 456A Motion Graphics II (3)

Continued study of time based media and motion graphics. Emphasis is on creating a message with important visual impact in contexual applications. 6 hours activity. May be repeated for a total of 6 units. Prerequisite: ART 455A.

ART 457 Graphic Design Seminar (2)

Advanced study of selected topics in Graphic Design. Emphasis will be on current issues and developments in the field, issues of creativity, process, methodology, technical advances and leading artists. Each seminar will have a sub-title describing its focus. 2 hour lecture once a week. May be repeated for a total of 6 units. Prerequisite: ART 352A.

ART 458 Internships in the Fine Arts and Graphic Design (1–2)

On-the-job training involving learning and production. Department guidelines must be followed, and internships must be approved in advance by department internship coordinator. One unit of credit given for each 50 or more hours of training with artist or design professional. Total credit limited to 4 units with a maximum of 2 per quarter. Prerequisites: Art or Graphic Design majors in junior or senior standing, permission of instructor required.

ART 461, 462 Senior Project (2) (2)

Selection and completion of a project under faculty supervision and culminating in a public exhibit or presentation of research. Minimum 120 hours total time. Prerequisites: Art majors, senior standing, and instructor permission.

ART 463 Undergraduate Seminar (2)

An open forum of senior students in which the latest developments and practices in art criticism, education, and professional studio and gallery management are discussed. 2-hour lecture. Prerequisites: Fine Art majors, senior standing, and instructor permission.

ART 464 Professional Practices in Graphic Design (4)

A capstone course for senior graphic design students in which a professional portfolio is developed. Professional business practices are thoroughly discussed and reviewed. 4 hours discussion/problem-solving. May be repeated for a total of 6 units. Prerequisite: Graphic Design major, senior standing, ART 351A, ART 352A, and ART 452A.

ART 477A Video (3)

Introduction to video practice, emphasizing the image-making process and proficiency with video equipment, and exploring strategies for using video as a medium for artistic expression and social inquiry. 6 hours activity. May be repeated for a total of 9 units. Recommended: ART 456A. Prerequisite: ART 455A.

ART 478A Time-based Media (3)

An intermedia approach to creative application in video, film, sound, and multi-image, with emphasis on conceptual and project development, and a special awareness for the shifting paradigm of time-based media. 6 hours activity. May be repeated for a total of 9 units. Prerequisites: ART 455A, ART 477A.

ART 482A Installation, an Introduction to Conceptual Art (3)

Installation art, as a vehicle for 3-dimensional, conceptual self-expression, explores concept, content, format, technique, and documentation in the manipulation of hybrid materials and methods in both gallery and site-specific/public context. 6 hours activity. May be repeated for a total of 9 units. Prerequisites: ART 280A.

ART 484A Advanced Sculpture (3)

Intensified study of sculpture with emphasis on new developments in sculptural media. 6 hours activity. May be repeated for a total of 9 units. Prerequisite: ART 381A.

ART 499/499A Special Topics for Upper 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. Instruction is by lecture or activity or a combination. Corequisites may be required.

LANDSCAPE ARCHITECTURE

www.csupomona.edu/~la

Gerald O. Taylor, Interim Chair

Christopher Aykanian
Kyle D. Brown
Karen C. Hanna
Weimin Li
Susan Mulley
Kenneth S. Nakaba
Philip N. Pregill
Rodney Tapp
Noel Dorsey Vernon
Andrew O. Wilcox
Joan Woodward

Landscape architects are professionally concerned with the design, management, preservation, and use of the land. The curriculum in Landscape Architecture provides a foundation in all of these areas with particular emphasis on design, along with the cultural and technical subjects that support it. Coursework includes study of the elements and principles of art, design and planning processes, graphic communication, plants and planting design, construction methods and environmental history. Instruction fosters the development of creative and problem-solving abilities, communication skills, technical knowledge, environmental awareness and professional attitudes. In most courses, students develop design proposals or technical solutions for actual sites with instruction, guidance, and critiques from faculty members. In the final year of study, students may choose to emphasize urban or regional landscape issues.

The Bachelor of Science in Landscape Architecture is a professional degree, nationally accredited by the Landscape Architectural Accreditation Board and approved by the California Board of Landscape Architects. Holders of this degree find career opportunities in private practice; with municipal, county and state departments of planning and of parks and recreation; with corporate organizations; and with federal agencies such as the United States National Forest Service and Park Service. The student organization is affiliated with the American Society of Landscape Architects.

As of fall 2007, all undergraduate and graduate students entering College of Environmental Design majors are required to purchase a computer that meets departmental specifications. All applicants are invited to check with their department office or go to the department's website to obtain these specifications. Financial aid assistance for this computer purchase is available to students qualifying for Federal Student Aid (requested via the FAFSA application). Please contact the University's Office of Financial Aid (909-869-3700) for additional information.

The curriculum requires a minimum of four years. New students must begin the program in the fall quarter. Students may enter the program directly from high school or as transfers from other institutions. In order to enter the four-year design sequence at the second year level, a portfolio review is required. Students must achieve a grade of "C" or better in all core courses in order to advance in the program. Concurrent enrollment in core courses is required for each year within the curriculum.

Students who maintain a grade point average of 3.2 or higher are eligible for membership in Sigma Lambda Alpha, a national honorary society for students of landscape architecture.

CORE COURSES FOR MAJOR

Required of all students. A 2.0 cumulative GPA is required in core courses, including subplan courses for the major, in order to receive a degree in the major.

Foundations of Design I	ENV	101/L	(4)
Introduction to Landscape Architecture Design	LA	102/L	(3)
Landscape Design Methods	LA	103/L	(3)
Introduction to the History of Landscape Architecture	LA	121	(3)
Basic Landscape Design	LA	201/L	(3)
Basic Landscape Design	LA	202/L	(3)
Basic Landscape Design	LA	203/L	(4)
Landscape Graphics	LA	251/L	(3)
Computer Applications	LA	252/L	(3)
Plants and Design	LA	241/L	(3)
Plants and Design	LA	242/L	(3)
Plants and Design	LA	243/L	(3)
Intermediate Landscape Design	LA	301/L	(5)
Intermediate Landscape Design	LA	302/L	(5)
Intermediate Landscape Design	LA	303/L	(5)
Landscape Construction	LA	331/L	(4)
Landscape Construction	LA	332/L	(4)
Landscape Construction	LA	333/L	(5)
Plant Design	LA	341/L	(3)
Plant Design	LA	342/L	(3)
Advanced Landscape Design	LA	401/L	(5)
Advanced Landscape Design	LA	402/L	(5)
Advanced Landscape Design	LA	403/L	(5)
#Regional Landscape History	LA	322/L	(3)
#The Urban Landscape	LA	423/L	(3)
#World Gardens	LA	424/L	(3)
#Asian Gardens	LA	425	(3)
Senior Seminar	LA	463	(2)
Landscape Architecture Practice	LA	464	(2)
Landscape Architecture Project	LA	465	(2)

#Select 2 of the four courses above.

SUPPORT COURSES

(Required of all Students)

History of Art and Environmental Design (C1)	ENV	115/A	(4)
General Surveying	PLT	245/L	(2/1)
Introduction to Drawing	ART	140A	(3)
##Trigonometry (B4)	MAT	106	(4)
Landscape Horticultural Principles	PLT	131/L	(4)
Basic Soil Science	PLT	231/L	(4)
###General Chemistry (B1/B3)	CHM	121/L	(4)

##Prerequisite for General Surveying
###Prerequisite for Basic Soil Science

GENERAL EDUCATION REQUIREMENTS

Students should consult the catalog website www.csupomona.edu/~academic/catalog/ for current information regarding this requirement. See the list of approved courses under General Education Requirements, Areas A through E.

Area A. Communication and Critical Thinking (12 units)

1. Oral Communication
2. Written Communication
3. Critical Thinking

Area B. Mathematics and Natural Sciences (16 units)

1. Physical Science
2. Biological Science
3. Laboratory Activity
4. Mathematics/Quantitative Reasoning
5. Science and Technology Synthesis

Area C. Humanities (16 units)

1. Visual and Performing Arts
2. Philosophy and Civilization
3. Literature and Foreign Languages
4. Humanities Synthesis

Area D. Social Sciences (20 units)

1. U.S. History, Constitution, and American Ideals
2. History, Economics, and Political Science
3. Sociology, Anthropology, Ethnic and Gender Studies
4. Social Science Synthesis

Area E. Lifelong Understanding and Self-development (4 units)

DIRECTED ELECTIVES

See Department for approved list . . . . . (6)

COURSE DESCRIPTIONS

Open to LA majors only unless otherwise specified.

LA 102/102L Introduction to Landscape Design (1/2)

Principles of basic design and their application in the development of design concepts; use of creative problem-solving techniques in landscape design; sensory exploration and interpretation of factors that shape natural, physical, and cultural (man-made) landscapes. The course is site- and site-user-related, with an emphasis upon contextualism and the determinants of design and form. 1 one-hour lecture, 2 three-hour laboratories. Prerequisite: ENV 101/L with a grade of "C" or better.

LA 103/103L Landscape Design Methods (1/2)

Techniques for organizing and synthesizing varied elements in the shaping of landscape form; recognition of major design determinants and the role of landscape architects and other professionals in dealing with diverse aspects of design, stressing application of ideas through construction of full-scale experimental projects. 1 one-hour lecture, 2 three-hour laboratories. Prerequisite: LA 102, with a grade of C or better.

LA 121 Introduction to the History of Landscape Architecture (3)

Study of human efforts to create and control the physical environment, emphasizing major historical landscapes in their relationships with cities and buildings, and in terms of their cultural, social, political and economic contexts. 3 lectures. May be taken by non-LA majors with permission of instructor.

LA 200 Special Study for Lower Division Students (1–2)

Individual or group investigation, research, studies or surveys of selected problems. Total credit limited to 4 units, with a maximum of 2 units per quarter.

LA 201/201L, 202/202L, 203/203L Basic Landscape Design (1/2) (1/2) (2/2)

Fundamental concepts of site-planning and design and their application to basic landscape problems, with particular emphasis on varying conditions of climate, plant communities, land forms and orientation. LA 201, 202: 1 lecture, 2 three-hour laboratories. LA 203: 2 lectures, 2 three-hour laboratories. Prerequisite: LA 103, with a grade of C or better. A grade of C or better is required to advance within the sequence. Concurrent enrollment in corresponding lecture and laboratory is required.

LA 241/241L, 242/242L, 243/243L Plants and Design (1/2) (1/2) (1/2)

An introduction to planting design issues based upon ecological, functional and aesthetic design principles. Instruction includes the identification of plant materials appropriate for use in California including trees, shrubs, vines and herbaceous plants. 1 lecture, 2 three-hour laboratories. A grade of C or better is required to advance within the sequence. Prerequisite: LA 103 with a grade of C or better. To be taken concurrently as follows: LA 201/L with 241/L, LA 202/L with 242/L, LA 203/L with 243/L.

LA 251/251L Landscape Graphics (1/2)

Development of communication skills emphasizing perspective and delineation techniques as they relate to landscape architecture. May be repeated once for credit. Laboratory course; 1 lecture, 2 three-hour laboratories. To be taken concurrently with LA 102. Prerequisite: ENV 101, with a grade of C or better. Concurrent enrollment required.

LA 252/252L Computer Application in Landscape Architecture (1/2)

The process of computers as applied to projects in landscape architecture design, including AutoCAD, LandCADD, presentation techniques, Internet technology applications and computer protocol conventions. 1 one-hour lecture, 2 three-hour laboratories. Prerequisites: LA 102/L, 251/L with a grade of "C" or better.

LA 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. Instruction is by lecture, laboratory, or a combination. Prerequisite: permission of instructor. Corequisites may be required.

LA 301/301L, 302/302L, 303/303L Intermediate Landscape Design (2/3) (2/3) (2/3)

Application of design concepts and principles to more difficult problems involving a wide range of conditions in the physical environment. 2 lectures, 3 three-hour laboratories. Prerequisites: LA 203, 243, 252, with a grade of C or better; ENG 104, 105 or equivalent. A grade of C or better is required to advance within the sequence. Concurrent enrollment required.

LA 322/322L Regional Landscape History (2/1)

How the landscape has guided human activity and habitat patterns on the regional and global scales, and how these patterns have in turn changed the natural landscape. Emphasis on major periods of urbanization, agricultural expansion, and development of recreation, conservation and open space systems, along with projections for the future. 2 lectures, 1 three-hour laboratory. Prerequisite: LA 121. May be taken by non-LA majors with instructor's permission.

LA 331/331L, 332/332L, 333/333L Landscape Construction (2/2) (2/2) (3/2)

Landscape construction problems involving the formulation and preparation of plans for grading, drainage, staking, reference and lighting, planting, irrigation, construction details, structures, and other working drawings; relationship to specifications and contract

documents. For LA 331, 332: 2 lectures, 2 three-hour laboratories. For LA 333: 3 lectures, 2 three-hour laboratories. Prerequisites: MAT 106; LA 203, PLT 245. A grade of C or better is required to advance within the sequence. Concurrent enrollment required.

LA 341/341L, 342/342L Planting Design (1/2) (1/2)

A continuation of LA 241, 242, 243 with greater emphasis given to the organization and composition of plant materials towards solving design problems. Instruction includes development of planting plans, details, cost estimates, and specifications. 1 lecture, 2 three-hour laboratories. Prerequisites: LA 203, 241, 242, 243. A grade of C or better is required to advance within the sequence. Concurrent enrollment required.

LA 400 Special Study for Upper Division Students (1–2)

Individual group investigation, research, studies or surveys of selected problems. Total credit limited to 4 units, with a maximum of 2 units per quarter.

LA 401/401L, 402/402L, 403/403L Advanced Landscape Design (2/3) (2/3) (2/3)

Processes of design as applied to complex projects in landscape architecture, including proposal, programming, analysis, concept development and presentation. Each student selects an area of concentration: urban, rural, regional, or Special Study. 2 lectures, 3 three-hour laboratories. Prerequisites: LA 303, LA 333, LA 342, with a grade of C or better. A grade of C or better is required to advance within the sequence. Concurrent enrollment required.

LA 423/423L The Urban Landscape (2/1)

Urban space as traced through history, concentrating primarily on the development of the square and the park from the classic agora to the complexities of public space in modern western cities. The design of the city park is traced from the industrial era to present. Innovations and changing concepts in leisure and recreation are noted. 2 lectures, 1 three-hour laboratory. Prerequisite: LA 121. May be taken by non-LA majors with instructor's permission. Concurrent enrollment required.

LA 424/424L World Gardens (2/1)

History of garden design emphasizing Italian Renaissance, 17th century France and the English Natural period. Primary development of American gardens from colonial times to present. Oriental, Moorish, Hindu and Mogul gardens. 2 lectures, 1 three-hour laboratory. Prerequisite: LA 121. Concurrent enrollment required. May be taken by non-LA majors with consent of instructor.

LA 425 Asian Gardens (3)

Development of an understanding of planning and design in the gardens of East-Asia including China, Korea, and Japan, with greater emphasis on history, culture, and arts. Indian and South-East Asian influences are also included. Garden concept to form is discussed in the comparative approaches to garden designs of the regions. 3 lectures. Prerequisite: LA 121. May be taken by non-LA majors with permission of instructor.

LA 441 Internship (1–2)

On-the-job training in the profession dealing with some aspect of landscape architecture. The experience must involve learning as well as production. Internships must be approved in advance by the departmental internship coordinator. One unit of credit is granted for each 50 hours of training under a licensed professional. May be repeated for a maximum of 6 units. Prerequisites: LA 303, LA 333, LA 342, with a grade of C or better, and approval of instructor.

LA 454 Seminar on Landscape Architecture Research (2)

Discussion and analysis of basic research methods; investigation of contemporary research issues in landscape architecture. Seminar, 2 hours. Prerequisites: LA 303, LA 333, LA 342, with a grade of C or better, and approval of instructor.

LA 463 Senior Seminar (2)

Discussions of environmental design problems. The role of the landscape architect in society. Seminar, 2 hours. Prerequisites: LA 303, LA 333, LA 342, with a grade of C or better, and approval of instructor.

LA 464 Landscape Architectural Practice (2)

The practice of landscape architecture, covering professional responsibilities and ethics, client and contractor relationships. Lecture, 2 hours. Prerequisites: LA 303, LA 333, LA 342, with a grade of C or better, and approval of instructor.

LA 465 Landscape Architectural Project (2)

Selection and completion of a project with formal report done under faculty supervision. Projects typical of problems which graduates must solve in their field of employment. Minimum of 120 hours. Prerequisites: LA 303, LA 333, LA 342, with a grade of C or better, and approval of instructor.

LA 499/499A/499L Special Topics for Upper 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. Instruction is by lecture, laboratory, or a combination. Prerequisite: permission of instructor. Corequisites may be required.

Graduate courses are listed in the Graduate Studies section of this catalog.

URBAN AND REGIONAL PLANNING

www.csupomona.edu/urp

Jerry V. Mitchell, Chair

Felix R. Barreto
Julianna Delgado
Herschel Farberow
Do-Hyung Kim
Gwendolyn H. Urey
Richard W. Willson

Professionals in Urban and Regional Planning work to guide change in the natural and built environment. They address a wide range of issues ranging from habitat conservation to historic preservation, from transportation to recreation, from neighborhood housing to regional shopping centers. Planning students learn about economic, legal, political, ecological, and social aspects of urban problems as well as urban design, land use, and the growth of human settlements. Throughout the program, students study real-life issues and develop solutions to them, using cutting-edge technology such as Geographic Information Systems (GIS). By the time they graduate, planning students are ready to apply current planning theories and methods to improve communities around California, the nation, and the world.

As of fall 2007, all undergraduate and graduate students entering College of Environmental Design majors are required to purchase a computer that meets departmental specifications. All applicants are invited to check with their department office or go to the department's website to obtain these specifications. Financial aid assistance for this computer purchase is available to students qualifying for Federal Student Aid (requested via the FAFSA application). Please contact the University's Office of Financial Aid (909-869-3700) for additional information.

The Bachelor of Science in Urban and Regional Planning is accredited by the Planning Accreditation Board. For information about the graduate program in Urban and Regional Planning, see the Graduate Studies section of this catalog.

INTERDISCIPLINARY GEOGRAPHIC INFORMATION SYSTEMS MINOR

The Interdisciplinary GIS minor can be taken by students majoring in engineering, business, environmental design, science, education, agriculture, or geography. The minor provides students with knowledge and skills required to utilize GIS applications in their respective fields. Components of the program include data acquisition and management, spatial thinking and visualization, modeling and analytic methods and problem-solving using applied GIS technology. The minor is well-suited for students majoring in Urban and Regional Planning. A full description of this minor is included in the University Programs section of this catalog.

CORE COURSES FOR MAJOR

A 2.0 cumulative GPA is required, including subplan courses for the major, in order to receive a degree in the major. A minimum grade of C- is required in all prerequisites for core courses.

Foundations of Design I	ENV	101/101L	(4)
Introduction to Cities and Planning	URP	101/101A	(4)
Process and Theory of Planning	URP	102/102A	(4)
Information Systems for Planners	URP	120/120L	(4)
Planning Design Awareness	URP	202/202L	(4)
Communication Graphics for Planning	URP	203/203L	(4)
Research Design for Planning	URP	331/331L	(4)
Applied Quantitative Methods for Planning	URP	332/332L	(4)
Planning Policy Analysis	URP	334/334A	(4)
Urban Land Use Planning and Theory	URP	335/335A	(4)
Planning Public Infrastructure	URP	337/337L	(4)
Institutional Framework for Planning	URP	351	(4)
Intergovernmental Framework for Planning	URP	352	(4)
Community Planning Studio I	URP	431/431L	(4)
Community Planning Studio II	URP	432/432L	(4)
Senior Project	URP	461	(2)
Senior Project	URP	462	(2)
Undergraduate Seminar	URP	463	(4)

Choose a minimum of 32 units with approval of advisor from courses listed below:

Special Study for Upper Division Students	URP	400	(1-2)
Evolution of American Cities and Planning Movement	URP	411	(4)
Planning and Urban Design in Europe	URP	412	(4)
Community Development Theory and Practice	URP	434/434A	(4)
Field Work	URP	441	(2-3)
Urban Growth Management	URP	466	(4)
Cities in a Global Economy	URP	475	(4)
Rural and Small Town Planning	URP	481/481A	(4)
California Water	URP	482	(4)
The Urban Development Process	URP	483/483A	(4)
Neighborhood Revitalization	URP	484/484A	(4)
Urban Design Seminar	URP	485/485L	(4)
Planning Information Systems	URP	486/486L	(4)
Environmental Factors in Regional Planning	URP	487	(4)
Local Transportation Planning	URP	488/488L	(4)
Transportation Methods and Analysis	URP	489/489L	(4)
Advanced Applications in GIS	URP	490/490L	(4)
Advanced Planning Studio	URP	498/498L	(4)
Special Topics for Upper Division Students	URP	499	(1-4)

SUPPORT COURSES

The following major support courses should be used to satisfy the indicated GE requirements. If these courses are not used to satisfy GE, the total units to degree may be more than 180 units.

Advocacy and Argument (A2)	COM	204	(4)
Freshman English II (A3)	ENG	105	(4)
History of Art and Design (C1)	ENV	115/115A	(4)
Evolution of Cities (C1)	URP	104	(4)
Principles of Economics (D2)	EC	201	(4)
Urban Geography	GEO	315	(4)

GENERAL EDUCATION REQUIREMENTS

Students should consult the catalog website www.csupomona.edu/~academic/catalog/ for current information regarding this requirement. Unless specific courses are stated under Support Courses, see the list of approved courses under General Education Requirements, Areas A through E.

Area A, Communication and Critical Thinking (12 units)

1. Oral Communication
2. Written Communication
3. Critical Thinking

Area B. Mathematics and Natural Sciences (16 units)

1. Physical Science
2. Biological Science
3. Laboratory Activity
4. Mathematics/Quantitative Reasoning
5. Science and Technology Synthesis

Area C. Humanities (16 units)

1. Visual and Performing Arts
2. Philosophy and Civilization
3. Literature and Foreign Languages
4. Humanities Synthesis

Area D. Social Sciences (20 units)

1. U.S. History, Constitution, and American Ideals
2. History, Economics, and Political Science
3. Sociology, Anthropology, Ethnic and Gender Studies
4. Social Science Synthesis

Area E. Lifelong Understanding and Self-development (4 units)

COURSE DESCRIPTIONS

URP 101/101A Introduction to Cities and Planning (3/1)

Study of the contemporary American city, with emphasis on observing and understanding urban phenomena. Uses examples from Southern California, with field trips. This course, required of all incoming planning majors, includes orientation to the planning curriculum and the profession. 3 lectures, 1 two-hour activity. Concurrent enrollment required.

URP 102/102A Process and Theory of Planning (3/1)

Study of urban and metropolitan development, theories of urban change, and the role of planning. Issues include planning in a pluralistic, multicultural society; the role of planning in government and the private sector; and the environmental and ethical responsibilities of planners. 3 lectures, 1 two-hour activity. Prerequisites: URP 101. Concurrent enrollment required. Prerequisite: URP major.

URP 104 Evolution of Cities (4)

Historical review of cities from antiquity to modern times. The origins and development of cities in Europe, Asia, Africa, and America. Critical examination of social, economic, political, cultural and technological interrelationships that have determined city location, form, growth and decline over time. The relationships of those factors to modern urban planning. 2 two-hour lectures.

URP 120/120L Information Systems for Planners (3/1)

Methods and techniques of collection, organization, synthesis and presentation of qualitative, quantitative, and spatial information in the natural and built environment. Focused on survey research, database development, with critical examination of the spatial context and effective presentation styles. 3 lectures, 1 three-hour laboratory. Concurrent enrollment required.

URP 202/202L Planning Design Awareness (2/2)

Studio/lecture introducing undergraduate URP majors to basic skills and concepts for planning. Lectures and assignments explore professional approaches to observation, documentation, communication, and presentation. 2 lectures, 2 three-hour laboratories. Lab must be taken concurrently. Prerequisite: ENV 101 with a minimum grade of C- or permission of instructor.

URP 203/203L Communications Graphics For Planning (2/2)

Examination and experimentation in graphic techniques as a communicative tool for planners. 2 lectures, 2 three-hour laboratories. Prerequisites: URP 202 with a minimum grade of C- or permission of instructor. Concurrent enrollment required.

URP 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. Instruction is by lecture, laboratory, or a combination.

URP 301 Principles of Urban Planning (4)

The planning function in government. The planning process. Principles for projecting land requirements and locations for various urban land uses. Ways of implementing the plans. Not open to URP majors. 4 lectures.

URP 302 Understanding Rationality Through Urban Planning (4)

Explores how major issues in rationality are manifested in city planning. Focus on processes of paradigm shift, alternative conceptions of rationality, and implications for ethical professional behavior. 4 lecture/discussions. Prerequisite: one course from each of the following Sub-areas: A1, A2, A3 and C1, C2 (PHL 201, 204 or 205), C3 and; ENV 115 or equivalent knowledge about cities.

URP 331/331L Research Design for Planning (3/1)

Research design in the context of investigating planning problems and situations. Focus on empirical ways of knowing, introducing qualitative and quantitative methods. Conceptualizing variables, posing appropriate questions, and articulating hypothesis. Types and sources of basic planning data. Collection and organization of data in tables, graphs, and figures. Analysis and interpretation. 3 lecture/discussions; 1 three-hour laboratory. Prerequisites: C- or better in URP 102 and URP 120, GE course fulfilling Area B4. Concurrent enrollment required.

URP 332/332L Applied Quantitative Methods for Planning (3/1)

Statistical analysis, synthesis, and organization of quantitative information, with emphasis on U.S. Census and planning data. Review of descriptive and inferential statistics in the context of municipal and regional demographic trends. Types and sources of basic planning data. Collection, organization and synthesis of data tables, graphs, spreadsheets and computerized presentation methods. Analysis and interpretation of quantitative information in a policy and planning analytic framework. 3 lecture/discussions; 1 three-hour laboratory. Prerequisite: C- or better in URP 331. Concurrent enrollment required.

URP 334/334A Planning Policy Analysis (2/2)

Theories and methods for evaluating planning proposals and projects. Use of analysis techniques drawn from the social sciences dealing with urban planning policies and programs. 2 lectures, 2 seminars. Prerequisites: URP 332 with a minimum grade of C-, EC 201, ENG 105. Concurrent enrollment required.

URP 335/335A Urban Land Use Planning and Theory (3/1)

Reviews macro-level land use shifts in metropolitan areas, focusing on problems of housing, transportation and the environment. Emphasis on spatio-economic/demographic patterns and dynamics between urban centers and suburbs as well as between metropolitan and non-metropolitan areas in the United States during the 20th century. 3

lectures, 1 two-hour activity. Prerequisite: URP 331 with a minimum grade of C- or permission of instructor. Concurrent enrollment required.

URP 337/337L Planning Public Infrastructure (3/1)

Examines how infrastructure systems such as transportation, energy, water, and public facilities serve people and their activities. Teaches skills for infrastructure planning, evaluation, and implementation. 3 lecture discussions, 3 hours of laboratory. Prerequisite URP 335 with a minimum grade of C- or permission of instructor. Concurrent enrollment required.

URP 351 Institutional Framework for Planning (4)

Introduces the institutional framework for planning. Reviews the development of the General Plan, zoning, and the legal basis for modern planning. Emphasis is placed on gaining an understanding of the legal process that planners work within and applicable constitutional rights. 4 lecture discussions. Prerequisites: C- or better in both URP 101 and URP 102.

URP 352 Intergovernmental Framework for Planning (4)

Introduces the modern intergovernmental framework for planning. Reviews the development of national, state, and regional land use policy, environmental controls and intergovernmental financing that provides the basis for modern land use planning and growth management. 4 lecture-discussions. Prerequisite: C- or better in URP 351.

URP 400 Special Study for Upper Division Students (1–2)

Individual or group investigation, research, studies or surveys of selected problems. Total credit limited to 4 units, with a maximum of 2 units per quarter.

URP 411 Evolution of American Cities and the Planning Movement (4)

Evolution of American development patterns. Emphasis on how location and form reflect the needs of changing multicultural communities. Planning as a social reform movement. Growth in California and the Los Angeles metropolitan region. Not open to graduate students. 4 lectures. Prerequisite: URP 351 or permission of instructor or graduate standing.

URP 412 Planning and Urban Design in Europe (4)

Illustrated lectures on contemporary planning and urban design theory and practice currently in evidence in Western Europe. Contemporary theories and concepts as related to present social concerns. Relevance of the European experience to the solution of America's urban problems. 4 lecture/seminars. Prerequisite: upper division standing or graduate standing.

URP 431/431L Community Planning Studio I (2/2)

Theory, process, design, and method for strategic planning demonstrated by studio problems based on field and archival studies. The major focus of the course is on applied research, analysis, and community planning procedures. Programming a planning activity and evaluating policy. Using teamwork and communications in project design, research design and project implementation. 2 one-hour lecture/discussions and 2 three-hour studios. Prerequisites: Completion of all three-hundred level planning courses, C- or better in URP 332. Concurrent enrollment required.

URP 432/432L Community Planning Studio II (2/2)

Analysis and synthesis of planning and community design topics interpreted from problems or sub-issues emphasized in URP 431. 2 hours lecture, 6 hours laboratory. Prerequisite: URP 431 with a minimum grade of C- or permission of instructor. Concurrent enrollment required.

URP 434/434A Community Development Theory and Practice (3/1)

Evolving theory and process of economic and community development. The course explores social and economic theories in the regional development process. Research into regional, national, and global influences on urban communities. Exploration of long-range self-sufficiency and sustainability processes. Presentation of California Redevelopment Law. One three-hour lecture/discussion and one two-hour activity. Prerequisite: C- or better in URP 332 or graduate standing. Concurrent enrollment required.

URP 441 Field Work (2–3)

Practical application of urban and regional planning techniques through supervised field work. Written report and evaluation of experience required. (One unit of credit will be allowed for each 60 hours of field work.) May be repeated for a maximum of 6 units for undergraduates, maximum of 3 units for graduate credit. 1 lecture and 6 to 12 hours of field work. Prerequisite: permission of instructor.

URP 461, 462 Senior Project (2) (2)

Selection and completion of a project under faculty supervision. Projects typical of problems which graduates must solve in urban and regional planning field. Project results presented in a formal report. Minimum 60 hours total time per two-unit course. Prerequisite: All required URP 300-level courses, ENG 105, and successful completion of GWT. Enrollment in URP 462 requires a grade of C- or better in URP 461.

URP 463 Undergraduate Seminar (4)

Intensive study of the legal, ethical, and professional aspects of urban and regional planning in public and private practice. Review of planning problems with regard to planning theory. 4 seminars. Prerequisite: all required URP 300-level courses.

URP 466 Urban Growth Management (4)

The impact of urban growth on the environment. Preparation of Environmental Impact Reports. Current methods, procedures and trends for managing urban growth. 4 lecture discussions. Prerequisite: URP 332 or graduate standing.

URP 475 Cities in a Global Economy (4)

Major issues confronting residents, planners and other professionals working in developing nations. Introduces theory and practice of development planning. Explores spatial, cultural and economic factors associated with major problems and examines policies and programs used to address urban change in a development context. Study of alternative approaches for achieving developmental aims. 4 lecture/discussions. Prerequisites: graduate standing or one GE course from each of the following Sub-areas: A1, A2, A3, and D1, D2, D3. This course fulfills GE Sub-area D4, Social Science.

URP 481/481A Rural and Small Town Planning (3/1)

Theories and methods of planning in small towns and rural communities. The changing role of the traditional small town and agricultural trade center in rural development. Conflicts and contradictions of various development strategies. Rural resettlement programs. 3 lectures, 1 two-hour activity. Prerequisite: URP 434 or graduate standing. Concurrent enrollment required.

URP 482 California Water (4)

Review of the history of the water system and water policy in California,

including the major social, political, and environmental issues. Introduces water law for non-lawyers and applies concepts of sustainability to water policy. 4 lecture discussions.

URP 483/483A The Urban Development Process (3/1)

Introduction to the roles of the many participants in the design and development of urban projects. Procedural aspects of development, requests for proposals, methods of finance, project feasibility analysis, program evaluation and review, and government incentives. 3 lectures, 1 two-hour activity. Prerequisite: URP 332 or graduate standing. Concurrent enrollment required.

URP 484/484A Neighborhood Revitalization (3/1)

Delimiting the urban neighborhood. Traditional functions and life cycle of urban neighborhoods. Revitalization policy options and strategies. Public and private sector involvement in neighborhood revitalization. Citizen-initiated revitalization programs. 3 lectures, 1 two-hour activity. Prerequisite: URP 434 with a minimum grade of C- or permission of instructor or graduate standing. Concurrent enrollment required.

URP 485/485L Urban Design Seminar (3/1)

Design in the planning process, with emphasis on research, analysis and programming for the context of design decisions. Methods of understanding human interaction with the built environment. Prerequisite: URP 203. 3 lectures, 1 three-hour laboratory. Concurrent enrollment required. May be repeated up to a total of 8 units.

URP 486/486L Planning Information Systems (3/1)

Introduction to geographic information systems, models, and visualization tools used in the field of urban and regional planning. Students will learn how to use GIS to present information and will be introduced to more advanced uses of GIS and related computer applications in making planning decisions. 3 lectures; 1 three-hour laboratory. Prerequisite: C- or better in URP 335 or permission of instructor. Concurrent enrollment required.

URP 487 Environmental Factors in Regional Planning (4)

Analysis of environmental problems and the regional planning institutions that work to solve them. Review of contemporary planning practices and their application to emerging environmental issues. 4 lectures. Prerequisite: URP 332 or graduate standing.

URP 488/488L Local Transportation Planning (3/1)

Supply and demand management approaches to local transportation planning. Land use/transportation relationships. Improving local accessibility and transportation options. Finance, politics and equity in local transportation planning. 3 lecture-discussions, 1 three-hour laboratory. Prerequisite: URP 337 or graduate standing.

URP 489/489L Transportation Methods and Analysis (3/1)

This course introduces transportation modeling and travel analysis methods and software. Emphasis is placed on the four-step transportation modeling approach and the fundamentals of travel behavior. Introduction to the history and regulatory framework of transportation planning in the U.S. The course employs transportation modeling software and Geographic Information Systems (GIS). 3 lectures, 1 three-hour laboratory. Prerequisite: URP 332, or another quantitative methods course (URP 488), or permission of instructor.

URP 490/490L Advanced Applications in GIS (3/1)

Advanced application of Geographic Information Systems (GIS) to solving urban and regional problems in a studio format. Students work on real-world projects that integrate use of raster based spatial analysis, network analysis, data modeling, and graphic presentation. Emphasis is placed on scenario development and 3-dimensional visualization techniques. 3 lectures, 1 three-hour laboratory. Prerequisite: URP 486, or introductory sequence of GIS Minor, or permission of instructor.

URP 498/498L Advanced Planning Studio (3/1)

Study of a selected topic through advanced studio, subject matter to be specified in advance. Total credit limited to 8 units, with a maximum of 4 units per quarter. 3 seminars, 1 three-hour laboratory.

URP 499/499A/499L Special Topics for Upper 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. Instruction is by lecture, laboratory, or a combination.

Graduate courses are listed in the Graduate Studies section of this catalog.

JOHN T. LYLE CENTER FOR REGENERATIVE STUDIES

www.csupomona.edu/~crs

Kyle D. Brown, Director

Juan Araya, Lyle Center
Pablo La Roche, Architecture
Denise Lawrence, Architecture
Jerry Mitchell, Urban and Regional Planning
Lisa Nelson, Political Science
Ronald D. Quinn, Biological Sciences
Charles Ritz, Mechanical Engineering
Gerald O. Taylor, Landscape Architecture
Dorothy Wills, Anthropology
Hofu Wu, Architecture
Lin Wu, Geography and Anthropology
Terry Young, Geography and Anthropology

The mission of the John T. Lyle Center for Regenerative Studies is to advance the principles of environmentally sustainable living through education, research, demonstration and community outreach. The Lyle Center uses the term "regenerative" to emphasize the development of systems that restore and revitalize themselves, ensuring a sustainable future. Students in regenerative studies courses are challenged to assess the impact of society on the environment, and consider how communities can be supported by healthy, functioning natural systems that are improved, rather than degraded by our presence.

Situated on 16 acres within the Cal Poly Pomona campus, the Lyle Center is designed to serve as a living laboratory and center for teaching and research related to environmentally sustainable living. The Center showcases a wide array of regenerative principles, including passive-solar building design, solar energy technology, organic agriculture, and native plant community restoration. Students have the oportunity to reside and/or work at the Center. The Lyle Center has earned an international reputation for its innovative educational programs that focus on hands-on activities, and has hosted visiting scholars and students from around the world.

The Lyle Center offers unique interdisciplinary education through its undergraduate minor program, which prepares students to integrate regenerative theories and practices into a wide variety of professional fields. A series of 300-level courses provides a basic introduction to regenerative principles and can be used by all undergraduate students in the University to fulfill a number of general education requirements. More advanced 400 level courses can be used as directed electives. Please check with faculty regarding prerequisites: these can be waived based on previous experience or knowledge of the individual student.

COURSES IN MINOR

The Minor in Regenerative Studies requires a total of 24 units. In consultation with the program advisor, each student will select from the following courses a total of at least 24 units:

Introduction to Regenerative Studies	RS	111	(4)
Life Support Processes	RS	301	(4)
Global Regenerative Systems	RS	302	(4)
Shaping A Sustainable Future	RS	303	(4)
Regenerative Principles and Processes	RS	311/311L	(3/2)
Regenerative Practices and Technologies	RS	312/312L	3/2)
Regenerative Practices and Technologies	RS	313/313L	(3/2)
Current Applications in Regenerative Studies	RS	414/414L	(3/1)
Sustainable Communities	RS	450	(4)
Ecological Patterns and Practices	RS	465	(4)
Directed Study in Regenerative Practices	RS	400	(2-4)
Special Topics in Regenerative Studies	RS	499	(1-4)

COURSE DESCRIPTIONS

RS 111 Introduction to Regenerative Studies (4)

A survey of the global physical, biological, and social systems used to provide for basic human needs, including food, water, shelter, energy and waste management. Emphasis will be on systems that will sustain humans into the long term future without resource depletion or permanent environmental damage. 2 two-hour lecture discussions.

RS 301 Life Support Processes (4)

Understanding the complex physical and biological systems, and the social context within which they occur, which provide resources and processes to meet the basic needs of human communities. These systems and processes provide water, food, energy, shelter, atmosphere, and a functional landscape. 4 lecture discussions. Open to all majors. Prerequisites: one GE course from each of the following Sub-areas: A1, A2, A3 and B1, B2, B4 or equivalent. GE Synthesis course for Sub-area B4.

RS 302 Global Regenerative Systems (4)

Study of the institutional factors affecting the implementation of regenerative practices needed to meet the challenges of limited resources. Investigations of the global effects of human activities in the pursuit of food, water, energy, shelter, and waste sinks. 4 lecture discussions. Open to all majors. Prerequisites: One GE course from each of the following Sub-areas: A1, A2, A3 (ENG 105) and D1, D2, D3 and junior standing. GE Synthesis course for Sub-area D4.

RS 303 Organization for Regenerative Practices (4)

Investigation of sustainable organizing processes for regenerative practices. The cultural and institutional organizing processes are examined at the global, multi-national, national, regional, local, family, and individual levels. These processes are analyzed in relation to population, food production, resource and waste management, energy systems and shelter. GE Interdisciplinary Synthesis course for Area C4 or D4. 2 two-hour lecture discussions. Prerequisites: junior standing; completion of GE Area A and 2 lower division sub-areas in Area C or Area D.

RS 311/311L Regenerative Principles and Processes (3/2)

Introduction to regenerative principles and practices to support daily life: providing food, energy, shelter and water and managing wastes. Concepts of recycling and self-renewal applied to the human environment and their ethical and social implications. Practical application of regenerative practices within the residential setting. 1 three-hour lecture/problem-solving, 2 three-hour laboratories. Prerequisites: junior standing and one G.E. course from each of the following subareas, A1, A2, A3, and B1, B2, B4 or equivalent.

RS 312/312L, 313/313L Regenerative Practices and Technologies (3/2), (3/2)

Learning through experience the tasks involved in applying regenerative practices and technologies: produce and prepare food and manage energy, water, wastes and shelter. Exploration and discussion of scientific and social concepts underlying these activities. 1 three-hour lecture/problem-solving, 2 three-hour laboratories. Prerequisite: RS 311 or RS 303.

RS 400 Directed Study in Regenerative Practices (2–4)

Individual study by the student on a subject agreed upon by student and advisor. Total credit limited to 4 units, with a maximum of 2 units per quarter. Prerequisites: permission of instructor.

RS 414/414L Current Applications in Regenerative Studies (3/1)

Application of regenerative processes and technologies to contemporary community, energy, food, water, waste, and biotic systems. Includes laboratory component for hands-on learning. Specific topics vary by term. See Lyle Center office for topics offered. 1 three-hour lecture and 1 three-hour laboratory. Concurrent enrollment required. May be repeated for a maximum of 12 units.

RS 450 Sustainable Communities (4)

Historical survey and cross cultural study of sustainable communities in relation to their particular built form. Examination and analysis of intentional communities as models of traditional and/or alternative patterns. Exploration of legal and economic organization of land holding patterns, housing and community design features and values inhibiting or facilitating experimentation. 4 lecture discussions. Prerequisites: One GE course from each of the following Sub-areas: A1, A2, A3, and C1, C2, C3 and D1, D2, D3. Interdisciplinary GE Synthesis course for Sub-area C4 or D4.

RS 465 Ecological Patterns and processes (4)

Investigation of principles in the emerging field of landscape ecology, and their relationship to planning, design and management decisions upon the land. Course covers landscape-scale structure, function and change in the environment, and the implications for environmental sustainability. 2 two-hour lecture-discussions. Prerequisite: RS 301 or RS 501 or permission of instructor.

RS 499 Special Topics in Regenerative Studies (1–4)

Explorations of topics of current interest related to regenerative practices or technologies or their roles in society. May include lectures, seminars and/or laboratories on a schedule to be determined by the instructor. Total credit limited to 8 units, with a maximum of 4 units per quarter. Prerequisites: permission of instructor.

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