### LANDSCAPE ARCHITECTURE

Dexter Bldg.(34), Room 251 Phone: 805.756.1319 https://landscape.calpoly.edu

Department Head: Beverly Bass

### **Academic Program**

Program name	Program type
Landscape Architecture	BLA Minor

The profession of landscape architecture is primarily involved with the design, planning, and protection of the natural and developed environments. The five-year program in landscape architecture is accredited by the Landscape Architectural Accreditation Board and recognized by the Landscape Architects Technical Committee of the California Board of Architectural Examiners.

An emphasis is placed on a process oriented approach to design and planning while developing an awareness and sensitivity to community and human values as they relate to environmental conditions. Students majoring in landscape architecture acquire technical competencies and creative design skills through a range of projects which represent the breadth of the profession.

Graduates of the program are prepared for positions in private practice, consulting, governmental agencies at the national, state or local levels, industry and construction firms. Graduate study is encouraged for those students interested in pursuing advanced studies or academic positions.

Majors who are in their last two years of study and have at least a 3.2 grade point average may have the opportunity to join Theta Chapter of Sigma Lambda Alpha, the national scholastic honor society for landscape architecture.

#### **Laptop Requirement**

The department has a requirement that all freshmen or transfer students have a notebook computer when they enter the program. In the profession of landscape architecture, computing is an integral component, and developing the ability to critically integrate hand and digital tools is a fundamental aspect of landscape architecture education. A notebook computer is the key to having computing capabilities available at all times and all locations. Financial aid may be available to cover the cost of the notebook computer (contact the Financial Aid Office (http://financialaid.calpoly.edu/) for more information).

# **Undergraduate Program Bachelor of Landscape Architecture**

The five-year program in landscape architecture is accredited by the Landscape Architectural Accreditation Board and recognized by the Landscape Architects Technical Committee of the California Board of Architectural Examiners. The program offers transfer students an accelerated curriculum to speed their time to graduation while fulfilling degree requirements. Contact the department for more information.

### **Landscape Architecture Minor**

This minor is designed for students who want to expand their knowledge of the role landscape architecture plays in the planning,

conceptualization, and design of the natural and built environment. The program is structured to expose students to issues facing our society on global and local levels while reinforcing concepts of sustainability. From the perspective of landscape architecture, students will have the opportunity to either explore a variety of environmental issues or examine a specific topic area in greater depth. They will gain a clearer understanding of the interdisciplinary contributions, and leadership role that landscape architects take in addressing societal and environmental concerns.

#### **LA Courses**

#### LA 101. Introduction to Landscape Architecture. 4 units

Term Typically Offered: F

Introduction to the profession of landscape architecture and orientation to the department curriculum and learning processes. 4 lectures.

#### LA 170. Principles of Design Communication. 4 units

Term Typically Offered: F, SP

Overview of design communications for landscape architects incorporating the principles, techniques, skills and tools used in design generation, exploration, review and implementation. 4 laboratories.

#### LA 171. Principles of Digital Communication. 4 units

Term Typically Offered: W

Introduction of digital media applications, software and techniques for landscape architects. Principles, techniques, skills and tools for using digital media in design projects. 4 lectures.

#### LA 202. Design Fundamentals I. 4 units

Term Typically Offered: F, SP

Corequisite: LA 170.

Introduction to the principles, methods and elements of two- and three-dimensional design in order to communicate intended concepts and meanings. Exploration of the basic design elements including composition, design process and the creation of spatial settings. 4 laboratories.

#### LA 203. Design Fundamentals II. 4 units

Term Typically Offered: F, W

Prerequisite: LA 202. Corequisite: LA 241 or LA 243.

Continuation of ideas introduced in LA 202 with the introduction of environmental and visual perception, including three-dimensional site design and landscape architectural design principles. Spatial design and sequencing of space with concern for human behavioral, environmental and natural site factors and generation of program, concept and design development. 4 laboratories.

#### LA 204. Design Fundamentals III. 4 units

Term Typically Offered: SP Sustainability Focused

Prerequisite: LA 203, LA 241. Concurrent: LA 242.

Continuation of ideas introduced in LA 202 and LA 203 with the introduction of the principles of design theory, landscape ecology and technical applications. Problems of increasing complexity incorporate critical and creative problem solving, the relationship of aesthetics, response to human needs and design for sustainable environments. 4 laboratories.

### LA 211. History of Landscape Architecture: Ancient Civilizations through Colonial America. 4 units

Term Typically Offered: W, SU 2020-21 or later catalog: GE Area C1 2019-20 or earlier catalog: GE Area C3

Philosophies and ethics of important personalities and events of landscape architecture explored from recorded time through colonial America. Design theories support projects and individuals of their practice combined with influential events in industry, the arts and sciences, politics, and society. Course may be offered in classroom-based or online format. 4 lectures. Fulfills GE Area C1 (GE Area C3 for students on the 2019-20 or earlier catalogs).

### LA 212. History of Modern and Contemporary Landscape Architecture. 4 units

Term Typically Offered: F, SP, SU 2020-21 or later catalog: GE Area C1 2019-20 or earlier catalog: GE Area C3

Philosophies and ethics of important personalities explored through the twentieth and twenty-first centuries of landscape architecture. Design theories supporting these individuals' projects and the nature of their practice combined with the influential events in industry, the arts and sciences, politics, and society. Course may be offered in classroom-based or online format. 4 lectures. Fulfills GE Area C1 (GE Area C3 for students on the 2019-20 or earlier catalogs).

# LA 218. Introduction to Geographic Information Systems (GIS). 3 units Term Typically Offered: TBD

Learn the fundamental concepts and functions of Geographic Information Systems (GIS) using ArcGIS platform. Create, manage, analyze, and display geographically referenced data. Explore how GIS is applied to analyze environmental, social, and natural resource issues. 1 lecture, 2 laboratories. Crosslisted as LA/NR 218.

## LA 220. Landscape Ecology: Concepts, Issues, and Interrelationships. 4 units

Term Typically Offered: W 2020-21 or later catalog: GE Area B2 Sustainability Focused

Recommended: BIO 114, BOT 121, and LA 101.

Concepts, theories and techniques related to landscape analysis, ecology, planning and design with an emphasis on landscape assessment, sustainability, land health, environmental protection and restoration, and natural resource management. 4 lectures. Fulfills GE Area B2.

#### LA 221. California Plants and Plant Communities. 4 units

Term Typically Offered: SP Prerequisite: BIO 114 or BOT 121.

Introduction to the horticultural characteristics and landscape design potential of California native plants, California plant communities and associated vernacular plants. Includes experience in field identification, basic planting design, installation techniques and maintenance requirements. Required field trips. 2 lectures, 2 laboratories.

#### LA 241. Site Engineering Techniques and Applications. 4 units

Term Typically Offered: W

Prerequisite: LA 243. Corequisite: LA 203; and MATH 118 or MATH 119.

Introduction and application of the techniques, methods, principles and criteria for site engineering and landform design. Includes an introduction to soil science, survey methods, and experiences in the principles, procedures and application of site grading and drainage for landscape architecture. 4 laboratories.

#### LA 242. Implementation Strategies. 4 units

Term Typically Offered: SP

Prerequisite: LA 203, LA 241. Concurrent: LA 204.

Introduction and application of the methods, principles and criteria for landscape implementation. Encompasses fundamental design and technical decisions common to landscape architectural design and construction projects including the development of concept, design development and working drawings, and construction management process. 3 lectures, 1 activity.

#### LA 243. Materials and Techniques of Landscape Construction. 4 units

Term Typically Offered: F Sustainability Focused Corequisite: LA 202.

Introduction to the properties, uses and inherent qualities of the fundamental materials of landscape architectural concerns and associated construction techniques and processes. Materials and techniques explored as a source of design ideas, form and expression in landscape architecture. 3 lectures, 1 activity.

#### LA 270. Selected Topics. 1-4 units

Term Typically Offered: TBD

Prerequisite: Open to undergraduate students and consent of instructor.

Directed group study of selected topics. The Class Schedule will list topic selected. Total credit limited to 8 units. 1 to 4 lectures.

## LA 317. The World of Spatial Data and Geographic Information Technology. 4 units

Term Typically Offered: F, W, SP 2020-21 or later: Upper-Div GE Area B

2019-20 or earlier catalog: GE Area B5, B6, or B7

Prerequisite: Junior standing; completion of GE Area A with grades of C- or better; and completion of GE Areas B1 through B4, with a grade of C- or better in one course in GE Area B4 (GE Area B1 for students on the 2019-20 or earlier catalogs).

Foundation for understanding the world through geographic information as well as the tools available to utilize spatial data. Experience with Geographic Information Systems (GIS) and related technology. Not open to students with credit in GEOG 218 or LA/NR 218. 3 lectures, 1 activity. Crosslisted as LA/NR 317. Fulfills GE Area Upper-Division B (GE Areas B5, B6, or B7 for students on the 2019-20 catalog).

#### LA 320. Design Theory for Landscape Architects. 4 units

Term Typically Offered: F

Prerequisite: LA 211, LA 212, or consent of instructor.

Complements the material and knowledge presented in the history of landscape architecture, architecture and art courses. Design theory and associated concepts as they are related to landscape architecture. Literature research and analysis of completed design projects. The artists/designers, materials and overall expressions of work are related to the social and economic issues of the time as well as their associations with the other arts and sciences. 4 lectures.

# LA 330. Cultural Landscapes: People, Places and Ethical Decisions. 4 units

Term Typically Offered: SP Sustainability Related Prerequisite: LA 212.

Investigation of the complexities and interrelatedness of culture, environment and ethical decisions. Interpretation of personal and cultural values and ethics in terms of decisions made and behaviors and actions expressed in the built landscape. 4 lectures.

#### LA 349. Advanced Planting Design. 4 units

Term Typically Offered: SP

Prerequisite: PLSC 233; PLSC 234; and PLSC 381 or LA 221.

Advanced examination of the theories and applied principles of planting design. Emphasis on connections between art and science in the design of parks, gardens and other landscapes. Case studies and field trips. 2 lectures, 2 activities.

#### LA 350. Advanced Landscape Construction. 4 units

Term Typically Offered: SP Prerequisite: LA 242.

Examination and application of advanced landscape construction techniques. Emphasis on design, development, construction, and testing of contemporary landscape technologies and practices. Field trip may be required. 2 lectures, 2 laboratories.

#### LA 370. Professional Practice. 4 units

Term Typically Offered: W Prerequisite: LA 204.

Issues related to the practice of landscape architecture incorporating processes, procedures and outcomes of professional practice. Topics include professional ethics, business and legal aspects of the profession, relationships to the client and society, personal goal setting, resume and portfolio preparation. 4 lectures.

#### LA 371. Internship. 3 units

Term Typically Offered: F, W, SP

CR/NC

Prerequisite: Third year standing in Landscape Architecture.

Involvement in a work setting related to landscape architecture. Thirty hours work experience per unit of credit. Credit/No Credit grading only.

#### LA 400. Special Problems for Advanced Undergraduates. 1-4 units

Term Typically Offered: F, W, SP Prerequisite: Consent of instructor.

Individual investigation, research, studies, or surveys of selected problems. Total credit limited to 8 units, with a maximum of 4 units per quarter.

#### LA 401. Research Project. 2 units

Term Typically Offered: F, SP

Prerequisite: Completion of four design focus studios (16 units from LA 402 - LA 405).

Research methods in landscape architecture and proposal writing techniques. Students prepare proposal and strategy for fifth year study in area of concentration. 2 seminars.

#### LA 402. Design Theory and Exploration Focus Studio. 4 units

Term Typically Offered: F, W, SU

Prerequisite: Junior standing; LA 204; LA 211; and LA 212; or consent of instructor. Concurrent: Integrated Learning Course (ILC) of student's option.

Exploration and application of design theory, exploratory design process and form exploration to design and planning projects. Emphasis on incorporation of inquiry techniques based on the synthesis of interdisciplinary frameworks of art and design theory with historical and cultural issues. Total credit limited to 12 units. 4 laboratories.

#### LA 403. Natural Environments Design Focus Studio. 4 units

Term Typically Offered: W, SP Sustainability Focused

Prerequisite: Junior standing; LA 204; LA 211; LA 212; LA 220; LA 402; and LA 405; or consent of instructor. Concurrent: Integrated Learning Course (ILC) of student's option.

Assessment, exploration and integration of landscape ecology, sustainability and environmental planning to design and planning projects. Emphasis on interpretation and application of environmental and ecological issues at a range of design scales. Total credit limited to 12 units. 4 laboratories.

#### LA 404. Cultural Environments Design Focus Studio. 4 units

Term Typically Offered: F, W, SP

Prerequisite: Junior standing; LA 204; LA 211; LA 212; LA 402; and LA 405. Concurrent: Integrated Learning Course (ILC) of student's option.

Assessment, exploration and interpretation of cultural values, issues and landscapes to design and planning projects. Emphasis on observation and inquiry of diverse cultural settings, differences in cultural values and personal ethics in the design process. Total credit limited to 12 units. 4 laboratories.

#### LA 405. Project Design and Implementation Focus Studio. 4 units

Term Typically Offered: F, W

Prerequisite: Junior standing; LA 204; LA 243; LA 242; and LA 241; or consent of instructor. Concurrent: Integrated Learning Course (ILC) of student's option.

Development, exploration and integration of project design and implementation strategies to design and planning projects. Emphasis on creative and exploratory problem solving, spatial design, project resolution, and graphic communication. Total credit limited to 12 units. 4 laboratories.

#### LA 406. Interdisciplinary Design Studio. 4 units

Term Typically Offered: W, SP

Prerequisite: Junior standing; LA 402; LA 403; LA 404; and LA 405; or consent of instructor. Concurrent: Integrated Learning Course (ILC) of student's option.

Design studio with focus on interdisciplinary modes of practice and collaborative approaches to design. Interdisciplinary design process may be explored through project program and collaboration with students in allied majors. Field trip required. Total credit limited to 12 units. 4 laboratories.

#### LA 431. CAD and Digital Media Communications (ILC). 4 units

Term Typically Offered: F, W, SP

Prerequisite: Junior standing; LA 170 and LA 204; or consent of instructor.

Integrated Learning Course (ILC) to assist integration and application of computer-aided drafting (CAD) skills in coursework, project planning and design studio courses. Focus on CAD skills and integration of digital media. Total credit limited to 12 units. 4 activities.

#### LA 432. Landscape Ecology Applications (ILC). 4 units

Term Typically Offered: F, W, SP

Sustainability Focused

Prerequisite: Junior standing. Co-requisite: LA 220. Concurrent: Design Focus Studio of student's option.

Integrated Learning Course (ILC) to assist integration and application of landscape ecology principles in project planning and design studio courses. Focus on understanding and developing a framework for ecological planning and design to anticipate consequences of planning and design decisions. Total credit limited to 12 units. 4 activities.

#### LA 433. Cultural Environments (ILC). 4 units

Term Typically Offered: F, W, SP

Prerequisite: Junior Standing and LA 211. Concurrent: Design Focus Studio of student's option.

Integrated Learning Course (ILC) to assist integration and application of culture, environment and personal ethics in coursework, project planning and design studio courses. Focus on skills, distinctions and integration of analyzing the cultural landscape, understanding diverse cultural values and assessing personal ethics. Total credit limited to 12 units. 4 activities.

#### LA 434. Project Design and Implementation (ILC). 4 units

Term Typically Offered: F, W, SP

Prerequisite: Junior standing; LA 241; LA 242; and LA 243; or consent of instructor. Concurrent: Design Focus Studio of student's option.

Integrated Learning Course (ILC) to assist integration and application of project design principles and implementation strategies in project planning and design studio courses. Focus on skills, techniques and decisions of the design, documentation and construction processes. Total credit limited to 12 units. 4 activities.

#### LA 435. Professional Practice (ILC). 4 units

Term Typically Offered: F, W, SP

Prerequisite: Junior standing. Concurrent: Design Focus Studio of student's option.

Integrated Learning Course (ILC) to assist integration and application of professional practice principles and techniques in planning and design studio and internship courses. Focus on achieving a high level of professional quality, ethical concern, and legal responsibility in project work. Total credit limited to 12 units. 4 activities.

#### LA 436. Traditional and Digital Media Communications (ILC). 4 units

Term Typically Offered: F, W, SP

Prerequisite: Junior standing; LA 170; LA 202; LA 203; and LA 204; or consent of instructor. Concurrent: Design Focus Studio of student's option.

Integrated Learning Course (ILC) to assist integration and application of graphic communication and presentation skills in coursework, project planning and design studio courses. Focus on skills, distinctions and integration of traditional and digital media explorations. Total credit limited to 12 units. 4 activities.

#### LA 437. 3D Digital Design Communications (ILC). 4 units

Term Typically Offered: F, W, SP

Prerequisite: Junior standing; LA 170 and LA 204; or consent of instructor. Concurrent: Design Focus Studio of student's option.

Integrated Learning Course (ILC) to assist integration and application of 3D digital graphic communication and presentation skills in coursework, project planning and design studio courses. Focus on skills and integration of three-dimensional digital media explorations. Total credit limited to 12 units. 4 activities.

#### LA 438. GIS Application to Design Projects (ILC). 4 units

Term Typically Offered: F, W, SP

Prerequisite: Junior standing. Corequisite: LA 220. Concurrent: Design Focus Studio of student's option.

Integrated Learning Course (ILC) to assist integration and application of geographic information systems (GIS) and spatial information into focus design studio courses. Total credit limited to 12 units. 4 activities.

#### LA 439. Planting Design (ILC). 4 units

Term Typically Offered: F, W, SP

Prerequisite: Junior standing; and AEPS 381 or LA 221. Concurrent: Design Focus Studio of student's option.

Integrated Learning Course (ILC) to assist the integration and application of plant selection, use and appropriateness in planning and design studio courses. Focus is on the skills, theories and principles of planting design. Total credit limited to 12 units. 4 activities.

#### LA 461. Senior Design Project Focus Studio. 4 units

Term Typically Offered: F, W, SP

Prerequisite: LA 401; and completion of Design Focus Sequence (20 units from LA 402-LA 406).

Comprehensive landscape architectural design and research project showing professional level competency in the integration of design theory, landscape architectural principles and project resolution. Emphasis on creative resolutions, organization and communication skills and technical abilities in program generation, design process, design and research. Total credit limited to 8 units. 4 laboratories.

#### LA 470. Selected Advanced Topics. 1-4 units

Term Typically Offered: TBD Prerequisite: Consent of instructor.

Directed group study of selected topics for advanced students. Open to undergraduate and graduate students. The Class Schedule will list topic selected. Total credit limited to 8 units. 1 to 4 lectures.

#### LA 471. Selected Advanced Laboratory. 1-4 units

Term Typically Offered: TBD Prerequisite: Consent of instructor.

Directed group laboratory study of selected topics for advanced students. Open to undergraduate and graduate students. The Class Schedule will list topic selected. Total credit limited to 8 units. 1 to 4 laboratories.

### LA 482. Evaluating Social and Behavioral Factors for Open Space Design. 4 units

Term Typically Offered: TBD

Prerequisite: Fourth-year or graduate standing.

User oriented approach to open space design. Interview and survey techniques, behavioral trace mapping and systematic observation, post occupancy evaluation and similar methods are used to generate user input and feedback in the design process. Understanding the behavioral implications of designed environments. 2 lectures, 2 activities.

#### LA 483. Special Studies in Landscape Architecture. 1-12 units Term Typically Offered: TBD

Prerequisite: Fourth or fifth-year standing or graduate standing.

Special issues and problems through research, field trips, seminars and other forms of investigation and involvement. Course requirements are determined prior to each individual project through a contractual agreement between students and department. Departmental Off Campus Study Program guidelines apply. Total credit limited to 36 units. 1-12 activities.

#### LA 485. Cooperative Education Experience. 6 units

Term Typically Offered: TBD

CR/NC

Prerequisite: Fourth or fifth-year standing or graduate standing, or consent of instructor.

Part-time work experience in business, industry, government, and other areas of student career interest. Positions are paid and usually require relocation and registration in course for two consecutive quarters. Formal report and evaluation by work supervisor required. Major credit limited to 6 units; total credit limited to 18 units. Credit/No Credit grading only.

#### LA 495. Cooperative Education Experience. 12 units

Term Typically Offered: TBD

CR/NC

Prerequisite: Fourth or fifth-year standing or graduate standing, and consent of instructor.

Full-time work experience in business, industry, government, and other areas of student career interest. Positions are paid and usually require relocation and registration in course for two consecutive quarters. Formal report and evaluation by work supervisor required. Major credit limited to 12 units; total credit limited to 24 units. Credit/No Credit grading only.

#### LA 520. Design with Cultural Landscapes. 4 units

Term Typically Offered: W Sustainability Related

Prerequisite: LA 330 and LA 404; or graduate standing.

Examination of the designed landscape as a representation of culture. Analysis of historic and contemporary sites. Investigation of the value and interpretation of both rural and urban landscapes, broadening an understanding of cultural landscapes. Field trip required. 2 lectures, 2 laboratories.

#### LA 521. Ecological Urban Design. 4 units

Term Typically Offered: W Sustainability Focused

Prerequisite: LA 403, LA 432, or graduate standing.

Examination of cities as ecosystems, urban ecology theories, concepts, and techniques at the site scale. History and theory of ecological urban design, ecosystem services, and how they are implemented for resilience. Field trip required. 2 lectures, 2 laboratories.

#### LA 531. Information Graphics for Landscape and Urban Studies. 4 units

Term Typically Offered: W, SP

Prerequisite: CRP 512; or LA 436 and LA 437; or graduate standing.

Conversion of raw sets of data into compelling narrative presentations that are communicated visually and effectively to specific design and planning audiences. Development of strategies for interpreting, packaging and shaping data for data storytelling, data visualization and effective communication. 2 lectures, 2 laboratories.

#### LA 538. Advanced GIS Application to Projects. 4 units

Term Typically Offered: W

Prerequisite: CRP 457, CRP 512, LA 438, or graduate standing.

Integration and application of GIS skills to planning and design projects. Emphasis on the analytical thinking process, visualization of various GIS data, and site analysis development for projects. 2 lectures, 2 laboratories.

#### LA 585. Cooperative Education Experience. 6 units

Term Typically Offered: TBD

CR/NC

Prerequisite: Graduate standing and consent of instructor.

Advanced study analysis and part-time work experience in student's career field; current innovations, practices, and problems in administration, supervision, and organization of business, industry, and government. Must have demonstrated ability to do independent work and research in career field. Total credit limited to 9 units. Credit/No Credit grading only.

#### LA 595. Cooperative Education Experience. 12 units

Term Typically Offered: TBD

CR/NC

Prerequisite: Graduate standing and consent of instructor.

Advanced study analysis and full-time work experience in student's career field; current innovations, practices, and problems in administration, supervision, and organization of business, industry, and government. Must have demonstrated ability to do independent work and research in career field. Credit/No Credit grading only.