Landscape Architecture and Environmental Planning

Overview

The department encourages students to practice critical thinking, creativity, analysis, and practical understanding. As a result, graduates are prepared to serve as design and planning leaders around the world and help communities increase their resilience in a rapidly changing economic, social, and ecological context. The department offers a variety of degrees to meet students’ various educational and career goals, preparing them to be leaders in landscape architectural and environmental planning practice, research, or related fields.

The Department of Landscape Architecture and Environmental Planning (LAEP) offers a Bachelor of Arts (BA) degree in Landscape Architecture. This program offers both a liberal arts oriented and preprofessional education. The Department of Landscape Architecture and Environmental Planning offers a Minor in the History and Theory of Landscape Architecture and Environmental Planning. The department also cosponsors the Sustainable Design Minor with the Department of Architecture.

At the graduate level, the department offers a Master of Landscape Architecture, a professional degree accredited by the Landscape Architecture Accreditation Board (LAAB) of the American Society of Landscape Architects (ASLA), and a PhD in Landscape Architecture and Environmental Planning. The Master of Landscape Architecture requires two or three years depending on the student’s incoming background, and provides the option to specialize in landscape design or environmental planning.

Understanding the need for professionals with the knowledge and skills of more than one discipline, the Department of Landscape Architecture and Environmental Planning offers concurrent master’s degree programs with the other departments in the College of Environmental Design. See the links below for further information:

- Building and Site Design/Ecological Factors (http://ced.berkeley.edu/academics/additional-programs/concurrent-m.arch-mla) (MLA/MArch)
- Environmental Planning Concentration (http://ced.berkeley.edu/academics/additional-programs/concurrent-mcp-mla) (MLA/MCP)
- Urban Design Concentration (http://ced.berkeley.edu/academics/additional-programs/concurrent-mcp-mla) (MLA/MCP)

For questions about any of the concurrent programs, contact the LAEP Graduate Office at laepgrad@berkeley.edu.

Licensure and Accreditation

The BA degree is certified by the State of California and counts as part of the education/experience requirement of the Uniform National Examination (UNE), as well as for the Landscape Architects Registration Examination (LARE) for licensure.

Visit the Landscape Architects Technical Committee (http://www.latc.ca.gov) and the Council of Landscape Architectural Registration Boards (https://www.clarb.org) for more information about licensure in California.

Landscape Architecture and Environmental Planning Lecture Series

The Department of Landscape Architecture and Environmental Planning sponsors a lecture series which offers students the opportunity to hear internationally acclaimed speakers. These speakers often also participate in classes and seminars as part of their visit to campus. For a schedule of speakers and events in this lecture series, see the College of Environmental Design (CED) website (http://ced.berkeley.edu/events-media/lecture-series).

Undergraduate Programs

Landscape Architecture (http://guide.berkeley.edu/undergraduate/degree-programs/landscape-architecture): BA, Minor
Sustainable Design (http://guide.berkeley.edu/undergraduate/degree-programs/sustainable-design): Minor (offered in conjunction with the Department of Architecture)

Graduate Programs

Landscape Architecture and Environmental Planning (http://guide.berkeley.edu/graduate/degree-programs/landscape-architecture-environmental-planning): MLA (Master of Landscape Architecture); PhD
Landscape Architecture and Environmental Planning

LD ARCH 1 Drawing a Green Future: Fundamentals of Visual Representation and Creativity 4 Units
Terms offered: Summer 2018 8 Week Session, Spring 2018, Summer 2017 8 Week Session
This introductory studio course is open to all undergraduate students in the University, who want to investigate the process of drawing as a method to learn how to perceive, observe and represent the environment. This studio will encourage visual thinking as a formative tool for problem solving that provides a means to envision a sustainable future. The focus will be on the critical coordination between hand, mind and idea.

Stroke a Green Future: Fundamentals of Visual Representation and Creativity: Read More [+]
Hours & Format
Fall and/or spring: 15 weeks - 2 hours of lecture and 6 hours of studio per week
Summer: 8 weeks - 4 hours of lecture and 6 hours of studio per week
Additional Details
Subject/Course Level: Landscape Architecture/Undergraduate
Grading/Final exam status: Letter grade. Alternative to final exam.
Instructor: Sullivan
Drawing a Green Future: Fundamentals of Visual Representation and Creativity: Read Less [-]

LD ARCH 12 Environmental Science for Sustainable Development 4 Units
Terms offered: Fall 2018, Summer 2018 8 Week Session, Fall 2017
The scientific basis of sustainability, explored through study of energy, water, food, natural resources, and built environment. Physical/ecological processes and systems, and human impacts from the global scale to local energy/resource use. Energy and water audits, opportunities to increase sustainability of processes/practices. Discussion/lab section involves field data collection/analysis (e.g., habitat characteristics and macroinvertebrate communities in local streams, measurement of atmospheric particulate matter concentrations, measurement of water savings from updated irrigation technologies) and a final, integrative sustainability assessment project.
Environmental Science for Sustainable Development: Read More [+]
Hours & Format
Fall and/or spring: 15 weeks - 3 hours of lecture and 2 hours of laboratory per week
Summer: 8 weeks - 6 hours of lecture and 2 hours of laboratory per week
Additional Details
Subject/Course Level: Landscape Architecture/Undergraduate
Grading/Final exam status: Offered for pass/not pass grade only. Final exam not required.
Instructor: Sullivan
Environmental Science for Sustainable Development: Read Less [-]

LD ARCH 98 Directed Group Study for Freshmen and Sophomores 1 - 4 Units
Terms offered: Fall 2015, Spring 2013, Spring 2012
Supervised group studies of various topics relevant to department that are not covered in depth by other courses. Topics may be initiated by students. Open to students in good standing who, in consultation with a faculty sponsor, present a proposal with clearly formulated objectives and means of implementation. Intended for exceptional students. Topics vary from semester to semester.
Directed Group Study for Freshmen and Sophomores: Read More [+]
Rules & Requirements
Prerequisites: Department chair must approve written proposal
Credit Restrictions: Enrollment is restricted; see the Introduction to Courses and Curricula section of this catalog.
Repeat rules: Course may be repeated for credit without restriction.
Hours & Format
Fall and/or spring: 15 weeks - 1-4 hours of directed group study per week
Summer: 6 weeks - 2.5-10 hours of directed group study per week
8 weeks - 1.5-7.5 hours of directed group study per week
10 weeks - 1.5-6 hours of directed group study per week
Additional Details
Subject/Course Level: Landscape Architecture/Undergraduate
Grading/Final exam status: Letter grade. Final exam not required.
Directed Group Study for Freshmen and Sophomores: Read Less [-]

LD ARCH 101 Fundamentals of Landscape Design 5 Units
Terms offered: Fall 2018, Fall 2017, Fall 2016
This studio introduces students to the programmatic, artistic, and technical aspects of land form and topographic adjustments to accommodate human use. Topics include pedestrian and vehicular circulation, conservation and addition of plant materials, movement of water, recreation use, and creation of views. Sculptural land forms will be emphasized through the use of topographic plans, sections, and contour models.
Fundamentals of Landscape Design: Read More [+]
Rules & Requirements
Prerequisites: Environmental Design 11A-11B or consent of instructor
Hours & Format
Fall and/or spring: 15 weeks - 2 hours of lecture and 6 hours of studio per week
Additional Details
Subject/Course Level: Landscape Architecture/Undergraduate
Grading/Final exam status: Letter grade. Final exam not required.
Fundamentals of Landscape Design: Read Less [-]
LD ARCH 102 Case Studies in Landscape Design 5 Units
This studio stresses the shaping and coordination of ideas from initial concept to complete design product. A product(s) of intermediate scale and complexity (such as a garden, small park, plaza, or campus courtyard) will be developed in detail including the selection of planting, selection of construction materials, and topographic design. Lecture modules on selected professional topics are integrated into this course. Case Studies in Landscape Design: Read More [+]
Rules & Requirements
Prerequisites: 101 or consent of instructor
Hours & Format
Fall and/or spring: 15 weeks - 2 hours of lecture and 6 hours of studio per week
Additional Details
Subject/Course Level: Landscape Architecture/Undergraduate
Grading/Final exam status: Letter grade. Final exam not required.
Instructor: Kullmann
Case Studies in Landscape Design: Read Less [-]

LD ARCH 103 Energy, Fantasy, and Form 5 Units
Terms offered: Fall 2018, Fall 2017, Fall 2016
This is an undergraduate studio with a central focus on climate modification for energy conservation. We will research historical precedents in order to develop new garden forms for passive green designs. We will also explore how past cultures integrated metaphysics into their gardens as an adjunct to microclimate and habitat design. The contemporary landscape should be a balanced interweaving of proportion, function, comfort, energy conservation, and enlightenment. Additionally, we will study the choreography of space and investigate how to animate the landscape through the creative interpretation of text and film. Many new and exciting opportunities lie ahead for the creation of garden forms that not only conserve energy, but are also works of art and places of spiritual renewal.
Energy, Fantasy, and Form: Read More [+]
Rules & Requirements
Prerequisites: 101, 102, Environmental Design 11A-11B, (Arch 100A or 100B for Architecture students) or by consent of instructor
Repeat rules: Course may be repeated for credit up to a total of 8 units.
Hours & Format
Fall and/or spring: 15 weeks - 3 hours of lecture and 6 hours of studio per week
Additional Details
Subject/Course Level: Landscape Architecture/Undergraduate
Grading/Final exam status: Letter grade. Final exam not required.
Instructor: Sullivan
Energy, Fantasy, and Form: Read Less [-]

LD ARCH 110 Ecological Analysis 3 Units
Terms offered: Fall 2018, Fall 2017, Fall 2016
Analysis of environmental factors, ecosystem functions, and ecosystem dynamics, as related to decision-making for landscape planning and design.
Ecological Analysis: Read More [+]
Hours & Format
Fall and/or spring: 15 weeks - 3 hours of lecture per week
Additional Details
Subject/Course Level: Landscape Architecture/Undergraduate
Grading/Final exam status: Letter grade. Final exam required.
Instructor: McBride
Ecological Analysis: Read Less [-]
LD ARCH 110L Ecological Analysis Laboratory 2 Units
Terms offered: Fall 2018, Fall 2017, Fall 2016
Introduction to field techniques for assessment of landscape factors. Factors include topography, geology, climate, soil, hydrology, flora, vegetation, and wildlife.
Ecological Analysis Laboratory: Read More [+]

Rules & Requirements
Prerequisites: Landscape Architecture 110 (may be taken concurrently)

Hours & Format
Fall and/or spring: 15 weeks - 4 hours of laboratory per week

Additional Details
Subject/Course Level: Landscape Architecture/Undergraduate
Grading/Final exam status: Letter grade. Final exam required.
Instructor: McBride

Ecological Analysis Laboratory: Read Less [-]

LD ARCH 111 Plants in Design 3 Units
Terms offered: Fall 2018, Fall 2017, Fall 2016
Through lecture, research, and studio assignments, this course introduces the use of plants as design elements in the landscape, from the urban scale to the site-specific scale, focusing on the public open space. By analyzing historic, contemporary, and Bay Area examples, the course examines the spatial, visual, and sensory qualities of vegetation, as well as the interplay with ecological functions and engineering uses of plants.
Plants in Design: Read More [+]

Hours & Format
Fall and/or spring: 15 weeks - 3 hours of lecture per week

Additional Details
Subject/Course Level: Landscape Architecture/Undergraduate
Grading/Final exam status: Letter grade. Final exam required.
Instructor: McBride

Plants in Design: Read Less [-]

LD ARCH 112 Landscape Plants: Identification and Use 4 Units
This course is an introduction to the identification and recognition, as well as design applications and uses, of plants in the landscape. Through lectures, assignments, and fieldwork, the course provides class participants with an appreciation of the importance of vertical vegetation as a design element. Students will be introduced to a variety of built projects and plants commonly used in Bay Area landscapes.
Landscape Plants: Identification and Use: Read More [+]

Hours & Format
Fall and/or spring: 15 weeks - 2 hours of lecture and 6 hours of fieldwork per week

Additional Details
Subject/Course Level: Landscape Architecture/Undergraduate
Grading/Final exam status: Letter grade. Alternative to final exam.
Instructor: Jewell

Landscape Plants: Identification and Use: Read Less [-]

LD ARCH 120 Topographic Form and Design Technology 3 Units
Terms offered: Fall 2018, Fall 2017, Fall 2016
Technical, graphic and computational exercises, and studio problems in topographic site design and the shaping of the site for surface drainage.
Topographic Form and Design Technology: Read More [+]

Rules & Requirements
Prerequisites: 102 or consent of instructor

Hours & Format
Fall and/or spring: 15 weeks - 2 hours of lecture and 2 hours of studio per week

Additional Details
Subject/Course Level: Landscape Architecture/Undergraduate
Grading/Final exam status: Letter grade. Final exam not required.
Instructor: Jewell

Topographic Form and Design Technology: Read Less [-]
LD ARCH 121 Design in Detail: Introduction to Landscape Materials and Construction 4 Units
This course introduces the visual and physical characteristics of landscape construction materials including, but not limited to, stone, brick, concrete, metal, asphalt, and wood. Additionally, lectures cover the production and availability of these materials, any existing evaluations on their sustainability, and their potential impact on the immediate environment. Students also learn to utilize standard sources of information on building materials and the terminology typically utilized when choosing and specifying construction materials. They become familiar with dimensional standards for landscape structures, including pavements, stairs, furnishings, retaining walls, freestanding walls, fences, decks, and small overhead structures.
Design in Detail: Introduction to Landscape Materials and Construction: Read More [+]

Rules & Requirements

Prerequisites: 101, Architecture 100A, or consent of instructor

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture and 1.5 hours of laboratory per week

Additional Details

Subject/Course Level: Landscape Architecture/Undergraduate
Grading/Final exam status: Letter grade. Final exam required.
Instructor: Jewell

Design in Detail: Introduction to Landscape Materials and Construction: Read Less [-]

LD ARCH 122 Hydrology for Planners 4 Units
Terms offered: Spring 2018, Spring 2017
This course presents an overview of relevant hydrologic, hydraulic, and geomorphic processes, to provide the planner and ecologist with insight to incorporate these processes into the planning process and coordinate with specialists in the field of hydrology. Relevant government regulations and policies are also reviewed. The course is not intended to duplicate more specialized courses offered in such fields as engineering hydrology, coastal engineering, or geology, but rather to provide an integrated understanding. The course takes a process- and field-based approach to hydrology, and emphasizes interdisciplinary perspectives.
Hydrology for Planners: Read More [+]

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture and 2 hours of laboratory per week

Additional Details

Subject/Course Level: Landscape Architecture/Undergraduate
Grading/Final exam status: Letter grade. Final exam not required.
Instructor: Kondolf

Hydrology for Planners: Read Less [-]

LD ARCH 130 Sustainable Landscapes and Cities 4 Units
Terms offered: Summer 2018 8 Week Session, Spring 2018, Summer 2017 8 Week Session
This course is an introduction to issues of sustainability in the designed landscape and in our cities. It includes environmental history as well as contemporary social, environmental and political issues surrounding sustainable design and activism. The course stresses motives and values expressed through environmental design at various scales – from neighborhood to global and examines problems affecting healthy environments and their solutions. Students study the need for protection and restoration of healthy ecological systems within the design of cities and landscapes and discuss ways to enable these systems to thrive.
Readings and discussions focus on means to evaluate, create, and advocate for healthy, sustainable environments.
Sustainable Landscapes and Cities: Read More [+]

Objectives Outcomes

Course Objectives: This course is an important elective to majors in the College of Natural Resources and CED students who have Architecture and City Planning majors. A new CED major, Sustainable Environmental Design (SED), has increased the number of students who require this class. It also fulfills the Social and Behavioral breadth requirement. Therefore, it is clear that the course enrollment should be increased to accommodate students from both inside and outside the CED.
This course offers students the opportunity to examine a specific range of sustainable design interventions that attempt to address primary problems related to climate change, the need for healthy watersheds, adequate food security and socially resilient communities in the face of rapid environmental change. Students will see the complexity of various aspects and approaches required of sustainable design and occasionally competing goals of a project.

Student Learning Outcomes: On the required field trip to San Francisco, students will be able to see and critique the efficacy of policy; of existing and emerging landscape design technology; to observe interventions intended to assist existing natural systems in urban environments and promote their viability; to see the value of community building to help establish resilient neighborhoods; to become verbally articulate about these issues.
Students will learn about and discuss the inter-connectedness of natural systems overlapped by human habitation. They will learn about design that can facilitate positive social systems and how the combination of ecological and social communities can present answers to some of the pressing environmental problems we face. Students will learn how various design strategies involve land preservation, watershed protection and restoration; local food production networks; resilient neighborhood design through community participation in open space design; pedestrian and bicycle friendly streets, urban forestry; reducing the waste stream.

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture and 1 hour of discussion per week
Summer: 8 weeks - 6 hours of lecture and 2 hours of discussion per week

Additional Details

Subject/Course Level: Landscape Architecture/Undergraduate
Grading/Final exam status: Letter grade. Final exam required.
Instructor: Stryker

Sustainable Landscapes and Cities: Read Less [-]
LD ARCH 134A Drawing Workshop 1 3 Units
Terms offered: Fall 2018, Fall 2017, Fall 2016
This studio will elaborate on a number of studio themes while introducing the students to a variety of graphic mediums and drawing techniques. Measured drawing procedures (including orthographic projections) will be augmented by figure-ground principles and themes of contrast, color, chiaroscuro, and compositions. On-site and visits to galleries and museums will complement the studio sessions.
Drawing Workshop 1: Read More [+]
Rules & Requirements
Prerequisites: Environmental Design 11A-11B or consent of instructor
Hours & Format
Fall and/or spring: 15 weeks - 2 hours of lecture and 3 hours of studio per week
Additional Details
Subject/Course Level: Landscape Architecture/Undergraduate
Grading/Final exam status: Letter grade. Final exam not required.
Instructor: Hood
Drawing Workshop 1: Read Less [-]

LD ARCH 134B Drawing Workshop II 3 Units
Terms offered: Fall 2018, Fall 2017, Fall 2016
This course introduces students to digital tools relevant to the discipline of landscape architecture. The course encompasses a series of lectures, lab exercises, and projects designed to equip students with a solid and expandable computing skill base relevant to the learning and practice of landscape architecture. Beyond technical competency, particular emphasis is placed on empowering students to move freely and creatively between software programs as an effective way of representing landscape.
Drawing Workshop II: Read More [+]
Rules & Requirements
Prerequisites: Environmental Design 11A-11B or consent of instructor
Hours & Format
Fall and/or spring: 15 weeks - 2 hours of lecture and 2 hours of laboratory per week
Additional Details
Subject/Course Level: Landscape Architecture/Undergraduate
Grading/Final exam status: Letter grade. Final exam not required.
Instructor: Kullmann
Drawing Workshop II: Read Less [-]

LD ARCH 135 The Art of Landscape Drawing 3 Units
Terms offered: Fall 2017, Fall 2016, Fall 2015
This course develops freehand drawing as an integral part of the creative process and as an expressive design tool. A broad range of exercises is employed to help students progressively gain creativity, skill, and confidence in their drawing. Various media such as ink, colored pencils, and watercolor are explored as a method to design innovative landscapes. A variety of presentation techniques will be investigated for communicating landscape design. In addition to field sketching, there will be excursions to art galleries, artists' studios, and other creative environments. Through the integration of drawing with intuition and imagination, students will be able to bring their visions to reality.
The Art of Landscape Drawing: Read More [+]
Hours & Format
Fall and/or spring: 15 weeks - 2 hours of lecture and 4 hours of studio per week
Additional Details
Subject/Course Level: Landscape Architecture/Undergraduate
Grading/Final exam status: Letter grade. Final exam not required.
Instructor: Sullivan
The Art of Landscape Drawing: Read Less [-]

LD ARCH 136 Advanced Landscape Delineation 3 Units
Terms offered: Spring 2016, Spring 2015, Spring 2013
Imagination is the foundation for creative expression in the landscape. This course encourages exploration and personal expression for the realization of new landscape forms. This laboratory intends to refine drawing compositional skills by fostering imagination, intuition, and creativity. The media explored will be pen and ink, watercolor, collage, and 3-dimensional construction. We will study the human figure through analytical drawings and live models. The realms of moving images, the landscape of the animated cartoon, and the sequential art of the comic will be investigated.
Advanced Landscape Delineation: Read More [+]
Hours & Format
Fall and/or spring: 15 weeks - 2 hours of lecture and 4 hours of studio per week
Additional Details
Subject/Course Level: Landscape Architecture/Undergraduate
Grading/Final exam status: Letter grade. Final exam required.
Instructor: Sullivan
Advanced Landscape Delineation: Read Less [-]
LD ARCH 140 Social and Psychological Factors in Open Space Design 3 Units
Terms offered: Fall 2018, Spring 2018, Spring 2017
User-oriented approach to design. Post-occupancy evaluation as a tool for understanding use of designed open spaces. Design as a communication process. Environmental needs of vulnerable populations—children, elderly, disabled, low-income families. Personal and societal environmental values.
Social and Psychological Factors in Open Space Design: Read More [+]

Hours & Format
Fall and/or spring: 15 weeks - 1.5 hours of lecture and 1.5 hours of discussion per week

Additional Details
Subject/Course Level: Landscape Architecture/Undergraduate
Grading/Final exam status: Letter grade. Final exam required.

LD ARCH 154 Special Topics in Landscape Architecture and Environmental Planning 1 - 3 Units
Terms offered: Spring 2018, Fall 2017, Spring 2004
Designed to be a forum for presentation of student research, discussions with faculty researchers and practitioners, and examination of topical issues in landscape architecture and environmental planning. Topics will be announced at the beginning of each semester.

Special Topics in Landscape Architecture and Environmental Planning: Read More [+]

Rules & Requirements
Repeat rules: Course may be repeated for credit without restriction.

Hours & Format
Fall and/or spring: 15 weeks - 1-3 hours of seminar per week

Additional Details
Subject/Course Level: Landscape Architecture/Undergraduate
Grading/Final exam status: Letter grade. Final exam not required.

LD ARCH 160 Professional Practice Seminar 3 Units
Survey and analysis of professional practice in landscape architecture focusing on: the context of professional practice—office structure, public, private and non-profit practice, marketing, project management and delivery; the legal parameters of practice—contracts, codes, planning regulations, project approval processes, liability; and economics—budgeting, profits, project development costs, fiscal impacts, and financing.

Professional Practice Seminar: Read More [+]

Rules & Requirements
Prerequisites: 161 or graduate standing

Hours & Format
Fall and/or spring: 15 weeks - 3 hours of seminar per week

Additional Details
Subject/Course Level: Landscape Architecture/Undergraduate
Grading/Final exam status: Letter grade. Final exam required.

LD ARCH 170 History and Literature of Landscape Architecture 3 Units
This course surveys the history of landscape architecture in four realms: 1) gardens; 2) urban open space, that is, plazas, parks, and recreation systems; 3) urban and suburban design; and 4) regional and environmental planning. The course will review the cultural and social contexts which have shaped and informed landscape architecture practice and aesthetics, as well as the environmental concerns, horticultural practices, and technological innovations of historic landscapes.

History and Literature of Landscape Architecture: Read More [+]

Hours & Format
Fall and/or spring: 15 weeks - 3 hours of lecture per week

Additional Details
Subject/Course Level: Landscape Architecture/Undergraduate
Grading/Final exam status: Letter grade. Final exam required.
Instructor: Mozingo

History and Literature of Landscape Architecture: Read Less [-]
LD ARCH C171 The American Designed Landscape Since 1850 3 Units
Terms offered: Fall 2018, Fall 2017, Fall 2016
This course surveys the history of American landscape architecture since 1850 in four realms: 1) urban open spaces—that is squares, plazas, parks, and recreation systems; 2) urban and suburban design; 3) regional and environmental planning; 4) gardens. The course will review the cultural and social contexts which have shaped and informed landscape architecture in the United States since the advent of the public parks movement, as well as, the aesthetic precepts, environmental concerns, horticultural practices, and technological innovations of American landscapes. Students will complete a midterm, final, and a research assignment.

The American Designed Landscape Since 1850:  Read More [+]

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture per week

Additional Details

Subject/Course Level: Landscape Architecture/Undergraduate
Grading/Final exam status: Letter grade. Final exam required.

Instructor: Mozingo

Also listed as: AMERSTD C171

The American Designed Landscape Since 1850: Read Less [-]

LD ARCH C177 GIS and Environmental Spatial Data Analysis 4 Units
Terms offered: Spring 2017, Spring 2016, Spring 2015
This course offers an introduction to spatial data analysis. It integrates ArcGIS analysis with spatial statistical analysis for the study of pattern and process applicable to a wide variety of fields. Major topics covered include: spatial sampling, processing data with ARC Info, exploratory GIS analysis, spatial decomposition, spatial point patterns and Ripley's K function, spatial autocorrelation, geostatistics, spatially weighted regression, spatial autoregression, generalized linear models and generalized linear mixed models.

GIS and Environmental Spatial Data Analysis:  Read More [+]

Rules & Requirements

Prerequisites: Requirements are course in GIS and a course in probability and statistics. We invite participation of undergraduates and graduate students from: ESPM, Landscape Architecture & Environmental Planning, City and Regional Planning, IB, Civil Engineering, Energy and Resources Group, Public Health, Earth and Planetary Science, and other campus departments or units with students interested in learning and using spatial analysis for the environment- both natural and built

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture and 3 hours of laboratory per week

Additional Details

Subject/Course Level: Landscape Architecture/Undergraduate
Grading/Final exam status: Letter grade. Alternative to final exam.
Instructors: Biging, Radke

Also listed as: ESPM C177

GIS and Environmental Spatial Data Analysis: Read Less [-]
**LD ARCH C188 Geographic Information Systems 4 Units**

Terms offered: Fall 2018, Fall 2017, Fall 2016

This course introduces the student to the rapidly expanding field of Geographic Information Systems (GIS). It addresses both theory and application and provides the student with a dynamic analytical framework within which temporal and spatial data and information is gathered, integrated, interpreted, and manipulated. It emphasizes a conceptual appreciation of GIS and offers an opportunity to apply some of those concepts to contemporary geographical and planning issues.

**Rules & Requirements**

Prerequisites: Some computer experience

**Hours & Format**

Fall and/or spring: 15 weeks - 3 hours of lecture and 2 hours of laboratory per week

**Additional Details**

Subject/Course Level: Landscape Architecture/Undergraduate

Grading/Final exam status: Letter grade. Final exam required.

Instructor: Radke

Formerly known as: C188X

Also listed as: GEOG C188

Geographic Information Systems: Read Less [-]

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**LD ARCH 189 Representation as Research: Contemporary Topics in Landscape Visualization 3 Units**

Terms offered: Fall 2017, Fall 2016

This course will explore landscape representation through a variety of drawing types and conventions, across a range of scales, and through interplay between analog and digital media. The semester is composed of three units. Each unit explores topics central to the San Francisco Bay Area and introduces students to new tools and techniques that reinforce strategies for effectively communicating ideas for the landscape. Given our proximity to the San Francisco Bay and its surrounding ecological, infrastructural, and social systems, each exercise is intended to guide students to observe, image, and communicate landscape strategies for the Bay.

**Hours & Format**

Fall and/or spring: 15 weeks - 1.25 hours of laboratory and 1.25 hours of lecture per week

**Additional Details**

Subject/Course Level: Landscape Architecture/Undergraduate

Grading/Final exam status: Letter grade. Alternative to final exam.

Instructor: Danika Cooper

Representation as Research: Contemporary Topics in Landscape Visualization: Read Less [-]
LD ARCH 197 Field Study in Landscape Architecture 2 - 3 Units
Terms offered: Fall 2016, Fall 2015, Fall 2014
See departmental information sheet for limitations. Supervised experience relative to specific aspects of landscape architecture. Regular individual meetings with faculty and outside sponsor. Reports required. Field Study in Landscape Architecture: Read More [+]
Rules & Requirements
Prerequisites: Upper division standing and consent of instructor and sponsor
Repeat rules: Course may be repeated for credit without restriction.
Hours & Format
Fall and/or spring: 15 weeks - 2-3 hours of fieldwork per week
Summer:
6 weeks - 5-7.5 hours of fieldwork per week
8 weeks - 3.5-5.5 hours of fieldwork per week
10 weeks - 3-4.5 hours of fieldwork per week
Additional Details
Subject/Course Level: Landscape Architecture/Undergraduate
Grading/Final exam status: Offered for pass/not pass grade only. Final exam not required.
Field Study in Landscape Architecture: Read Less [-]

LD ARCH 198 Directed Group Study 1 - 4 Units
Terms offered: Spring 2017, Fall 2016, Spring 2016
Enrollment restrictions apply.
Directed Group Study: Read More [+]
Rules & Requirements
Prerequisites: Consent of instructor
Repeat rules: Course may be repeated for credit without restriction.
Hours & Format
Fall and/or spring: 15 weeks - 1-4 hours of directed group study per week
Summer:
6 weeks - 2.5-10 hours of directed group study per week
8 weeks - 1.5-7.5 hours of directed group study per week
10 weeks - 1.5-6 hours of directed group study per week
Additional Details
Subject/Course Level: Landscape Architecture/Undergraduate
Grading/Final exam status: Offered for pass/not pass grade only. Final exam not required.
Directed Group Study: Read Less [-]

LD ARCH 199 Supervised Independent Study and Research 1 - 4 Units
Terms offered: Spring 2016, Fall 2015, Spring 2013
Enrollment restrictions apply.
Supervised Independent Study and Research: Read More [+]
Rules & Requirements
Prerequisites: Consent of instructor
Repeat rules: Course may be repeated for credit without restriction.
Hours & Format
Fall and/or spring: 15 weeks - 1-4 hours of independent study per week
Summer:
6 weeks - 2.5-10 hours of independent study per week
8 weeks - 1.5-7.5 hours of independent study per week
10 weeks - 1.5-6 hours of independent study per week
Additional Details
Subject/Course Level: Landscape Architecture/Undergraduate
Grading/Final exam status: Offered for pass/not pass grade only. Final exam not required.
Supervised Independent Study and Research: Read Less [-]

LD ARCH 200A Fundamentals of Landscape Design 5 Units
Terms offered: Fall 2018, Fall 2017, Fall 2016
This studio introduces students to the programmatic, artistic, and technical aspects of land form and topographic adjustments to accommodate human use. Topics include pedestrian and vehicular circulation, conservation and addition of plant materials, movement of water, recreation use, and creation of views. Sculptural land forms will be emphasized through the use of topographic plans, sections, and contour models.
Fundamentals of Landscape Design: Read More [+]
Hours & Format
Fall and/or spring: 15 weeks - 2 hours of lecture and 6 hours of studio per week
Additional Details
Subject/Course Level: Landscape Architecture/Graduate
Grading: Letter grade.
Instructor: Hill
Fundamentals of Landscape Design: Read Less [-]
LD ARCH 200B Case Studies in Landscape Design 5 Units
This studio stresses the shaping and coordination of ideas from initial concept to complete design product. A product(s) of intermediate scale and complexity (such as a garden, small park, plaza, or campus courtyard) will be developed in detail including the selection of planting, selection of construction materials, and topographic design. Lecture modules on selected professional topics are integrated into this course. Case Studies in Landscape Design: Read More [+]

Rules & Requirements
Prerequisites: Landscape Architecture 200A

Hours & Format
Fall and/or spring: 15 weeks - 2 hours of lecture and 6 hours of studio per week

Additional Details
Subject/Course Level: Landscape Architecture/Graduate
Grading: Letter grade.
Instructor: Hood

Formerly known as: Landscape Architecture 102

Case Studies in Landscape Design: Read Less [-]

LD ARCH 201 Ecological Factors in Urban Landscape Design 5 Units
Terms offered: Fall 2018, Fall 2017, Fall 2016
Through lectures, studio problems, research projects, and discussion, this course will explore the challenge and potential incorporating ecological factors in urban contexts. The course focuses on the interaction of landscape science (hydrology, geology, etc.) with the necessities and mechanisms of the human environment (urban design, transportation, economics, etc.). Lectures and research projects will particularly emphasize innovative and forward thinking solutions to the ecological problems of the human environment. Throughout the semester, reading and discussion sessions will highlight the connections between the broader concerns of the global ecological crisis and landscape design and planning.
Ecological Factors in Urban Landscape Design: Read More [+]

Rules & Requirements
Prerequisites: 110, 134A-134B, or consent of instructor

Hours & Format
Fall and/or spring: 15 weeks - 2 hours of lecture and 6 hours of studio per week

Additional Details
Subject/Course Level: Landscape Architecture/Graduate
Grading: Letter grade.

Ecological Factors in Urban Landscape Design: Read Less [-]

LD ARCH 202 Design of Landscape Sites 5 Units
A site design studio stressing the shaping and coordination of ideas from initial concept to complete design of open space in various contexts. Typical projects will be of an intermediate scale and might include a park, plaza, museum sculpture garden, playground, office park, or housing project. Modules on social factors and planting design are included.
Design of Landscape Sites: Read More [+]

Rules & Requirements
Prerequisites: 201 or consent of instructor

Hours & Format
Fall and/or spring: 15 weeks - 2 hours of lecture and 6 hours of studio per week

Additional Details
Subject/Course Level: Landscape Architecture/Graduate
Grading: Letter grade.
Instructor: Jewell

Design of Landscape Sites: Read Less [-]

LD ARCH 203 Landscape Project Design 5 Units
Terms offered: Fall 2018, Fall 2017, Fall 2016
A site design studio stressing the shaping and coordination of ideas from initial concept to the thoughtful execution of design ideas at the site scale. Typical projects will focus on the experiential rather than the pictorial. Projects might include a park, plaza, or rehabilitation of a brownfield site.
Landscape Project Design: Read More [+]

Rules & Requirements
Prerequisites: 201, or consent of instructor

Hours & Format
Fall and/or spring: 15 weeks - 3 hours of lecture and 6 hours of studio per week

Additional Details
Subject/Course Level: Landscape Architecture/Graduate
Grading: Letter grade.

Landscape Project Design: Read Less [-]
LD ARCH C203 Shaping the Public Realm 5 Units
Terms offered: Fall 2018, Fall 2017, Fall 2016
This interdisciplinary studio focuses on the public realm of cities and explores opportunities for creating more humane and delightful public places. Problems will be at multiple scales in both existing urban centers and in areas of new growth. Skills in analyzing, designing, and communicating urban design problems will be developed. Studio work will be supplemented with lectures, discussions, and field trips. Visiting professionals will present case studies and will serve on reviews. Shaping the Public Realm: Read More [+]
Rules & Requirements
Prerequisites: Previous design studio or consent of instructor
Hours & Format
Fall and/or spring: 15 weeks - 3 hours of lecture and 6 hours of studio per week
Additional Details
Subject/Course Level: Landscape Architecture/Graduate
Grading: Letter grade.
Instructor: Southworth
Formerly known as: 203
Also listed as: CY PLAN C243
Shaping the Public Realm: Read Less [-]

LD ARCH 204 Advanced Project Design 5 Units
Special topics in the design and planning of the landscape. The focus of the studio varies from semester to semester. Possible topics include community design, educative environments, landscape as art, park design, or energy-conserving design. For current offerings, see department announcement. Advanced Project Design: Read More [+]
Rules & Requirements
Prerequisites: 201 or consent of instructor
Hours & Format
Fall and/or spring: 15 weeks - 3 hours of lecture and 6 hours of studio per week
Additional Details
Subject/Course Level: Landscape Architecture/Graduate
Grading: Letter grade.
Instructor: Meyer
Advanced Project Design: Read Less [-]

LD ARCH 205 Environmental Planning Studio 5 Units
Application of environmental planning principles to a complex problem involving a variety of environmental criteria and desired land uses in a complex institutional and political setting. Student teams will identify needed data, assess environmental developmental problems, weigh competing uses, and prepare an environmental management plan. Environmental Planning Studio: Read More [+]
Rules & Requirements
Prerequisites: 201 or consent of instructor
Hours & Format
Fall and/or spring: 15 weeks - 3 hours of lecture and 6 hours of studio per week
Additional Details
Subject/Course Level: Landscape Architecture/Graduate
Grading: Letter grade.
Instructors: Radke, Kondolf
Environmental Planning Studio: Read Less [-]

LD ARCH 206 Final Project Preparation Studio: Thesis and Reports 5 Units
This is a spring studio for students to work on final projects (theses and professional reports). The studio, including lectures by the instructor, is meant to train and assist students in thesis or professional project research and help them in finalizing their thesis or professional report topic. The course includes weekly exercises ranging from writing articles documenting, illustrating, and critiquing landscapes to finally producing a thesis or professional report. Final Project Preparation Studio: Thesis and Reports: Read More [+]
Rules & Requirements
Prerequisites: 252 and graduate standing
Hours & Format
Fall and/or spring: 15 weeks - 3 hours of lecture and 6 hours of studio per week
Additional Details
Subject/Course Level: Landscape Architecture/Graduate
Grading: Letter grade.
Instructor: Mozingo
Final Project Preparation Studio: Thesis and Reports: Read Less [-]
LD ARCH 221 Quantitative Methods in Environmental Planning 3 Units
Discussion and critique of the application of quantitative methods to environmental assessment, analysis, and evaluation in environmental planning. Topics to include geographical information systems and data bases, remote sensing, and multivariate analysis. This course emphasizes computer applications and data analysis.
Quantitative Methods in Environmental Planning: Read More [+]
Hours & Format
Fall and/or spring: 15 weeks - 1.5 hours of lecture and 3 hours of laboratory per week
Additional Details
Subject/Course Level: Landscape Architecture/Graduate
Grading: Letter grade.
Instructor: Radke
Quantitative Methods in Environmental Planning: Read Less [-]

LD ARCH 222 Hydrology for Planners 4 Units
This course presents an overview of relevant hydrologic, hydraulic, and geomorphic processes, to provide the planner and ecologist with insight sufficient to coordinate with technical specialists in the field of hydrology. In addition, relevant regulations and policies are reviewed.
Hydrology for Planners: Read More [+]
Hours & Format
Fall and/or spring: 15 weeks - 3 hours of lecture and 2 hours of laboratory per week
Additional Details
Subject/Course Level: Landscape Architecture/Graduate
Grading: Letter grade.
Instructor: Jewell
Hydrology for Planners: Read Less [-]

LD ARCH 226 Landscape Design Construction 2 Units
The course investigates the process of developing schematic landscape design proposals into constructed landscapes. Emphasis will be placed on understanding the durability of materials and design details, the efficient use of materials, and the ability to evaluate how material selection and detailing can impact the environment. Field trips to construction sites, manufacturing facilities, and built landscapes will be included.
Landscape Design Construction: Read More [+]
Rules & Requirements
Prerequisites: 121 (may be taken concurrently)
Hours & Format
Fall and/or spring: 15 weeks - 3 hours of seminar per week
Additional Details
Subject/Course Level: Landscape Architecture/Graduate
Grading: Letter grade.
Instructor: Kondolf
Landscape Design Construction: Read Less [-]

LD ARCH 227 Restoration of Rivers and Streams 3 Units
Terms offered: Fall 2018, Fall 2017, Fall 2016
This course reviews the underlying goals and assumptions of river and stream restoration projects, reviews techniques employed in these efforts, and emphasizes strategies for evaluation of project success. The course focuses on geomorphic and hydrologic analyses relevant to restoration and enhancement of aquatic and riparian habitat in freshwater systems. Format: lectures by instructor, guest lectures, presentation of student independent projects, and field trips. Course requirement: independent term project involving original research.
Restoration of Rivers and Streams: Read More [+]
Rules & Requirements
Prerequisites: Prior background in hydrology, geomorphology, ecology, restoration, or consent of instructor
Hours & Format
Fall and/or spring: 15 weeks - 3 hours of seminar per week
Additional Details
Subject/Course Level: Landscape Architecture/Graduate
Grading: Letter grade.
Instructor: Kondolf
Restoration of Rivers and Streams: Read Less [-]
LD ARCH C231 Environmental Planning and Regulation 3 Units
Terms offered: Fall 2018, Spring 2015, Fall 2014, Fall 2013
This course will examine emerging trends in environmental planning and policy and the basic regulatory framework for environmental planning encountered in the U.S. We will also relate the institutional and policy framework of California and the United States to other nations and emerging international institutions. The emphasis of the course will be on regulating “residuals” as they affect three media: air, water, and land.
Environmental Planning and Regulation: Read More [+]

Hours & Format
Fall and/or spring: 15 weeks - 3 hours of lecture per week

Additional Details
Subject/Course Level: Landscape Architecture/Graduate
Grading: Letter grade.
Instructor: Corburn

Also listed as: CY PLAN C251

LD ARCH 232 The Landscape As a Sacred Place 3 Units
Terms offered: Spring 2018, Spring 2017, Spring 2010
Visual and cultural analysis of landscapes, inventory procedures for “place” values, and problems related to sustainable design development, with special emphasis on highly valued places.
The Landscape As a Sacred Place: Read More [+]

Hours & Format
Fall and/or spring: 15 weeks - 3 hours of lecture per week

Additional Details
Subject/Course Level: Landscape Architecture/Graduate
Grading: Letter grade.
Instructor: Sullivan

The Landscape As a Sacred Place: Read Less [-]

LD ARCH 235 Design Thinking: Art, Nature, Consciousness 3 Units
Terms offered: Fall 2018, Spring 2004, Spring 2002
This course is a laboratory for design thinking, invention and visual perception. A designed landscape has the potential to induce a powerful emotional experience. The premise of this course is based on the idea that highly valued places are works of art, as well as places of enlightenment and transformation. This class will explore ideas of ‘sacredness’ in the landscape through a series of design explorations and a summation project. Our journey of discovery aspires to provide future landscape architects with a new and unique perspective to help them recognize and generate sacred landscapes. Design Thinking will outline a process for creative practice that builds upon historic approaches while imagining new possibilities.
Design Thinking: Art, Nature, Consciousness: Read More [+]

Rules & Requirements
Prerequisites: LD ARCH 134A

Hours & Format
Fall and/or spring: 15 weeks - 2 hours of lecture and 1 hour of studio per week

Additional Details
Subject/Course Level: Landscape Architecture/Graduate
Grading: Letter grade.
Instructor: Sullivan

Design Thinking: Art, Nature, Consciousness: Read Less [-]

LD ARCH 237 The Process of Environmental Planning 3 Units
Terms offered: Fall 2018, Fall 2017, Fall 2016
A review of the techniques used in environmental planning, and evaluation of alternate means of implementation in varying environmental and political circumstances. The class will examine and critique a number of well-known environmental planning programs and plans. Lectures and discussion will address recurrent planning problems, such as the limitations of available data, legal and political constraints on plans, conflicts among specialists.
The Process of Environmental Planning: Read More [+]

Hours & Format
Fall and/or spring: 15 weeks - 3 hours of lecture per week

Additional Details
Subject/Course Level: Landscape Architecture/Graduate
Grading: Letter grade.
Instructor: Hill

The Process of Environmental Planning: Read Less [-]
**LD ARCH C241 Research Methods in Environmental Design 4 Units**
Terms offered: Fall 2018, Fall 2017, Fall 2016
Research Methods in Environmental Design: Read More [+]

**Hours & Format**
Fall and/or spring: 15 weeks - 3 hours of lecture and 2 hours of laboratory per week

**Additional Details**
Subject/Course Level: Landscape Architecture/Graduate
Grading: Letter grade.
Instructor: Bosselmann
Formerly known as: Interdepartmental Studies 241
Also listed as: CY PLAN C241

Research Methods in Environmental Design: Read Less [-]

**LD ARCH C242 Citizen Involvement in the City Planning Process 3 Units**
Terms offered: Fall 2018, Fall 2017, Fall 2016
An examination of the roles of the citizens and citizen organizations in the city planning process. Models for citizen involvement ranging from advising to community control. Examination of the effectiveness of different organizational models in different situations.
Citizen Involvement in the City Planning Process: Read More [+]

**Rules & Requirements**
Credit Restrictions: Students will not receive credit for C242 after taking City and Regional Planning 208, Interdepartmental Studies 206 Fall 1990, and Interdepartmental Studies 206 Fall 1991.

**Hours & Format**
Fall and/or spring: 15 weeks - 3 hours of lecture per week

**Additional Details**
Subject/Course Level: Landscape Architecture/Graduate
Grading: Letter grade.
Instructor: Bosselmann
Formerly known as: Interdepartmental Studies 223
Also listed as: CY PLAN C241

Citizen Involvement in the City Planning Process: Read Less [-]

**LD ARCH C250 Theories of Urban Form and Design 3 Units**
Terms offered: Fall 2018, Spring 2017, Spring 2016
Theories and patterns of urban form throughout history are studied with emphasis on the role of planning and design in shaping cities and the relationship between urban form and social, economic, and geographic factors. Using a case study approach, cities are evaluated in terms of various theories and performance dimensions.
Theories of Urban Form and Design: Read More [+]

**Rules & Requirements**
Prerequisites: Consent of instructor

**Hours & Format**
Fall and/or spring: 15 weeks - 3 hours of lecture per week

**Additional Details**
Subject/Course Level: Landscape Architecture/Graduate
Grading: Letter grade.
Instructor: Macdonald
Formerly known as: Interdepartmental Studies 206
Also listed as: CY PLAN C240

Theories of Urban Form and Design: Read Less [-]

**LD ARCH 251 Theories of Landscape Architecture and Environmental Planning 2 Units**
Terms offered: Fall 2016, Spring 2016, Fall 2014
The focus will be on debate and discussion of central ideas in landscape architecture and environmental planning, drawing on primary literature over many decades of thought. This is not a history course, but it will include some literature that goes back to the early years of the field. This course covers the breadth of thinking in the field, including both environmental planning and landscape design as well as other sub disciplines. Each week students will lead a debate on a different theoretical issue.
Theories of Landscape Architecture and Environmental Planning: Read More [+]

**Hours & Format**
Fall and/or spring: 15 weeks - 2 hours of seminar per week

**Additional Details**
Subject/Course Level: Landscape Architecture/Graduate
Grading: Letter grade.
Instructor: Mozingo

Theories of Landscape Architecture and Environmental Planning: Read Less [-]
LD ARCH 252B Thesis and Professional Project Proposal Seminar 3 Units
Terms offered: Fall 2018, Fall 2017, Fall 2016
Students learn research methods including social factors, historical/archival, design exploration, master planning, theoretical, and scientific field work. Students develop a conceptual framework, survey instrument, literature review, and detailed work plan. A full committee and funding proposal due on the last day of class.
Thesis and Professional Project Proposal Seminar: Read More [+]
Rules & Requirements
Prerequisites: 252A

LD ARCH 253 Landscape Architecture and Environmental Planning Colloquium 1 Unit
Terms offered: Spring 2018, Spring 2016, Fall 2015
Invited lectures on current research, planning practice, and design projects. Out of approximately 14 presentations per term, typically two or three would be by department faculty, two or three by graduating students, the remainder by outside speakers.
Landscape Architecture and Environmental Planning Colloquium: Read More [+]
Rules & Requirements
Repeat rules: Course may be repeated for credit without restriction.

LD ARCH 254 Topics in Landscape Architecture and Environmental Planning 1 - 5 Units
Terms offered: Fall 2018, Spring 2018, Fall 2016
Designed to be a forum for presentation of student research, discussions with faculty researchers and practitioners, and examination of topical issues in landscape architecture and environmental planning. Topics will be announced at the beginning of each semester.
Topics in Landscape Architecture and Environmental Planning: Read More [+]
Rules & Requirements
Repeat rules: Course may be repeated for credit when topic changes.

LD ARCH 255 Doctoral Seminar in Environmental Planning 1 Unit
Terms offered: Fall 2018, Spring 2018, Fall 2017
Designed to be a forum for presentation of doctoral student research, discussions with faculty researchers and environmental planning practitioners, and examination of topical issues in environmental planning. Topics will be announced at the beginning of each semester.
Doctoral Seminar in Environmental Planning: Read More [+]
Rules & Requirements
Prerequisites: Doctoral student or consent of instructor
Repeat rules: Course may be repeated for credit without restriction.
**LD ARCH 257 Special Topics in Design 1 - 3 Units**

Research seminar on selected topics in landscape design. Seminars will focus on the theoretical foundations and practical applications of design and planning methods as well as emerging issues in the discipline. Seminars will include lectures by the faculty member offering the course, guest lecturers, student presentations, and discussions. Readings and requirements vary from year to year based on the topic and instructor.

Special Topics in Design: Read More [+]

**Rules & Requirements**

**Prerequisites:** Graduate standing or consent of instructor

**Repeat rules:** Course may be repeated for credit when topic changes.

**Hours & Format**

Fall and/or spring: 15 weeks - 1-3 hours of seminar per week

Summer: 6 weeks - 1-3 hours of seminar per week
8 weeks - 1-3 hours of seminar per week

**Additional Details**

**Subject/Course Level:** Landscape Architecture/Graduate

**Grading:** The grading option will be decided by the instructor when the class is offered.

Special Topics in Design: Read Less [-]

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**LD ARCH 289 Applied Remote Sensing 3 Units**

This course consists of one lecture and one computer lab per week introducing fundamental principles and methods of environmental remote sensing and their practical applications. We will explore strategies for working with different types of remote sensing data and extracting image-based landscape information for various environmental research and planning objectives. This course focuses largely on local to regional scale applications of remote sensing in ecology, environmental planning and design, civil & environmental engineering and natural resource management.

Applied Remote Sensing: Read More [+]

**Objectives Outcomes**

**Course Objectives:** Become familiar with different types of data and instruments in remote sensing and learn how to choose the optimal remote sensing data and procedure for various landscape and environmental analysis applications.

Develop the capacity to work with the remote sensing literature and synthesize the relevant knowledge across different studies.

Explore traditional and novel remote sensing techniques and their use in landscape planning, environmental studies and natural resource management.

Learn practical skills and techniques to extracting landscape information from remote sensing data as image interpretation, classification, accuracy assessment, mapping and change analysis.

**Rules & Requirements**

**Prerequisites:** An introductory GIS course such as LA C188/Geography C188, ESPM 233 or equivalent

**Hours & Format**

Fall and/or spring: 15 weeks - 1.5 hours of lecture and 1.5 hours of laboratory per week

**Additional Details**

**Subject/Course Level:** Landscape Architecture/Graduate

**Grading:** Letter grade.

**Instructor:** Dronova

Applied Remote Sensing: Read Less [-]
LD ARCH 295 Supervised Research in Landscape Architecture and Environmental Planning 2 Units
Terms offered: Fall 2015, Fall 2014, Fall 2013
Supervised experience on a research project in landscape architecture and/or environmental planning. Regular meetings with faculty sponsor required. See departmental sheet for other limitations.

LD ARCH 296 Directed Dissertation Research 1 - 12 Units
Terms offered: Spring 2016, Spring 2015, Fall 2014
Open to qualified students who have been advanced to candidacy for the Ph.D. degree and are directly engaged upon the doctoral dissertation.

LD ARCH 297 Supervised Field Study 2 - 3 Units
Terms offered: Spring 2016, Fall 2015, Summer 2015 10 Week Session
Supervised experience relative to specific aspects of practice in landscape architecture and/or environmental planning. Regular meetings with faculty and outside sponsor as well as final report required. See departmental information sheet for other limitations.

LD ARCH 298 Group Study 1 - 4 Units
Terms offered: Spring 2016, Spring 2015, Fall 2014
Special group studies. Topics to be announced at the beginning of each semester.

Rules & Requirements
Prerequisites: Graduate standing and appointment as a research assistant
Credit Restrictions: Any combination of 295 or 297 may be taken for a total of six units maximum toward the M.L.A degree.

Hours & Format
Fall and/or spring: 15 weeks - 0 hours of independent study per week
Summer: 8 weeks - 3.5-5.5 hours of fieldwork per week

Additional Details
Subject/Course Level: Landscape Architecture/Graduate
Grading: Offered for satisfactory/unsatisfactory grade only.

Supervised Research in Landscape Architecture and Environmental Planning: Read More [+]
Supervised Field Study: Read Less [-]

Rules & Requirements
Prerequisites: Advancement to Ph.D. candidacy
Repeat rules: Course may be repeated for credit without restriction.

Hours & Format
Fall and/or spring: 15 weeks - 1-12 hours of independent study per week
Summer: 8 weeks - 1.5-22.5 hours of independent study per week

Additional Details
Subject/Course Level: Landscape Architecture/Graduate
Grading: Letter grade.

Directed Dissertation Research: Read Less [-]
Group Study: Read Less [-]
LD ARCH 299 Individual Research 1 - 6 Units
Terms offered: Spring 2016, Fall 2015, Spring 2015
Research work conducted preparatory to completion of the thesis or professional project as well as other approved research. A maximum of six units will be counted toward the M.L.A degree. The six units allows for four units maximum for thesis or professional project research, and two units maximum for other approved research. See departmental information sheet for other limitations.

Rules & Requirements
Prerequisites: Graduate standing and consent of instructor
Repeat rules: Course may be repeated for credit without restriction.

Hours & Format
Fall and/or spring: 15 weeks - 0 hours of independent study per week

Summer:
6 weeks - 2.5-30 hours of independent study per week
8 weeks - 1.5-22.5 hours of independent study per week

LD ARCH 300 Supervised Teaching in Landscape Architecture and Environmental Planning 2 Units
Terms offered: Spring 2018, Spring 2017, Fall 2016
Supervised teaching experience in undergraduate courses. Regular meetings with faculty sponsor. See departmental sheet for other limitations.

Supervised Teaching in Landscape Architecture and Environmental Planning: Read More [+]
Rules & Requirements
Prerequisites: Graduate standing and appointment as a Teaching Assistant
Repeat rules: Course may be repeated for credit without restriction.

Hours & Format
Fall and/or spring: 15 weeks - 0 hours of independent study per week

Additional Details
Subject/Course Level: Landscape Architecture/Professional course for teachers or prospective teachers
Grading: Offered for satisfactory/unsatisfactory grade only.

LD ARCH 301 Methods of Teaching in Landscape Architecture and Environmental Planning 2 Units
Terms offered: Fall 2012, Fall 2010, Fall 2009
This course presents general pedagogical principles and methods adapted to teaching in the fields of landscape architecture, environmental planning, and environmental sciences. The format varies from week to week, but involves presentations by faculty and experienced graduate student instructors (GSIs), guided discussions, sharing of teaching experiences for current GSIs, discussion of readings on effective teaching, viewing of videos, and presentation by GSIs of sections for upcoming weeks. Required of all graduate students to be eligible for appointment as GSIs; may be taken concurrently with first GSI position for entering students. Topics include learning objectives, lesson plans, active learning, group learning, classroom diversity, assessing student learning, giving constructive feedback, teaching in the studio environment, engaging students through field exercises, grading, and composing effective tests.

Methods of Teaching in Landscape Architecture and Environmental Planning: Read More [+]
Rules & Requirements
Prerequisites: Graduate student standing

Hours & Format
Fall and/or spring: 15 weeks - 2 hours of seminar per week

Additional Details
Subject/Course Level: Landscape Architecture/Professional course for teachers or prospective teachers
Grading: Offered for satisfactory/unsatisfactory grade only.

Methods of Teaching in Landscape Architecture and Environmental Planning: Read Less [-]
LD ARCH 375 Methods of Teaching in Landscape Architecture and Environmental Planning 2 Units
Terms offered: Fall 2018, Fall 2016, Fall 2014
This course presents general pedagogical principles and methods adapted to teaching in the fields of landscape architecture, environmental planning, and environmental sciences. The format varies from week to week, but involves presentations by faculty and experienced graduate student instructors (GSIs), guided discussions, sharing of teaching experiences for current GSIs, discussion of readings on effective teaching, viewing of videos, and presentation by GSIs of sections for upcoming weeks. Required of all graduate students to be eligible for appointment as GSIs; may be taken concurrently with first GSI position for entering students. Topics include learning objectives, lesson plans, active learning, group learning, classroom diversity, assessing student learning, giving constructive feedback, teaching in the studio environment, engaging students through field exercises, grading, and composing effective tests.
Methods of Teaching in Landscape Architecture and Environmental Planning: Read More [+]
Rules & Requirements
Prerequisites: Graduate student standing
Hours & Format
Fall and/or spring: 15 weeks - 2 hours of seminar per week
Additional Details
Subject/Course Level: Landscape Architecture/Professional course for teachers or prospective teachers
Grading: Offered for satisfactory/unsatisfactory grade only.
Formerly known as: Landscape Architecture 301
Methods of Teaching in Landscape Architecture and Environmental Planning: Read Less [-]

LD ARCH 601 Individual Study for Master's Students 1 - 8 Units
Terms offered: Fall 2015, Fall 2014, Fall 2013
Individual study for final degree requirements in consultation with adviser.
Individual Study for Master's Students: Read More [+]
Rules & Requirements
Prerequisites: Last semester of residence in M.L.A. program
Credit Restrictions: Course does not satisfy unit or residence requirements for master's degree.
Hours & Format
Fall and/or spring: 15 weeks - 0-0 hours of independent study per week
Summer: 10 weeks - 0-0 hours of independent study per week
Additional Details
Subject/Course Level: Landscape Architecture/Graduate examination preparation
Grading: Offered for satisfactory/unsatisfactory grade only.
Individual Study for Master's Students: Read Less [-]

LD ARCH 602 Individual Study for Doctoral Students 1 - 8 Units
Terms offered: Spring 2016, Fall 2015, Spring 2015
Individual study in consultation with the major field adviser, intended to provide an opportunity for qualified students to prepare themselves for the various examinations required of candidates for the Ph.D.
Individual Study for Doctoral Students: Read More [+]
Rules & Requirements
Prerequisites: For candidates for doctor's degree
Credit Restrictions: Course does not satisfy unit or residence requirements for doctoral degree.
Repeat rules: Course may be repeated for credit without restriction.
Hours & Format
Fall and/or spring: 15 weeks - 0-0 hours of independent study per week
Summer: 10 weeks - 0-0 hours of independent study per week
Additional Details
Subject/Course Level: Landscape Architecture/Graduate examination preparation
Grading: Offered for satisfactory/unsatisfactory grade only.
Individual Study for Doctoral Students: Read Less [-]