

LANDSCAPE ARCHITECTURE (LARC)

LARC 201: LA Design 3: Site Design

The focus of this design studio is sustainable site-scale planning and design. Students explore site planning theories, methods and resources used in analyses for sustainable settlement, preservation or management of the land. Natural, cultural and experiential data are integrated into the decision-making and design processes.

Credits: 4

College: College of Architecture, Design and Engineering

Prerequisites: LARC 102 or ARDS 102 [Min Grade: C]

Schedule Type: Studio

LARC 203: Vis Comm & Digital Modeling

The primary intent of this course is to establish the computer as an effective tool in the design and presentation process. The course will focus on two primary areas in this regard: Visualizing design concepts in three dimensions and Communicating those concepts in a manner consistent with studio and professional-level work. Each project will explore various methods of creating, evolving, describing, and detailing two and three-dimensional objects. Each project will entail utilizing visualization techniques and technologies to communicate utilizing various means and methods of communication

Credits: 3

College: College of Architecture, Design and Engineering

Schedule Type: Lecture, Studio

LARC 206: History of Landscape Arch 1

This survey course covers significant examples of landscapes and landscape design from the eastern, central Asian, and western regions of the world, produced from ancient times through the 19th centuries. Students will be introduced to the cultural and social history of each epoch as a means of critically analyzing key historical works of landscape design and addressing the ideas and concepts embedded in the term landscape.

Credits: 3

College: College of Architecture, Design and Engineering

Prerequisites: WRIT 101 or WRIT 101G or WRIT 101S [Min Grade: D]

Schedule Type: Lecture

LARC 207: LA Technology: Grading

This course focuses on the principles and techniques of landform manipulation for design and drainage. Students develop an understanding of contours, contour manipulation, and siteconstruction methodologies. Topics include topographic and grading problems in landscape engineering: drainage plans, grading plans, spot elevations, road alignment, sections and profiles and cut- and-fill calculations.

Credits: 3

College: College of Architecture, Design and Engineering

Schedule Type: Lab, Lecture, Lecture/Lab

LARC 212: Local Flora

An introduction to regional native plants used in landscape architecture and ecological restoration. Characteristics, terminology, and keys used in identifying plants and plant families will be taught as well as sight recognition of common species. Other topics include plant growth, development, and propagation, species interactions, habitat ranges, and recognition of best management practices. Field work constitutes a significant part of the course.

Credits: 3

College: College of Architecture, Design and Engineering

Schedule Type: Lab, Lecture

LARC 300: La Design 4: Urban Dsgn I

This design studio focuses on urban design at the site scale. It reinforces design principles learned in earlier semesters, while introducing students to increasing complexity in both program and the design process. The primary philosophical underpinning of the studio is design within a sustainable urban context.

Credits: 6

College: College of Architecture, Design and Engineering

Schedule Type: By Appointment - 1 student, Studio

LARC 303: La Tech: Advanced Grading

This Advanced Grading course augments what the students have learned in their first Grading course, plus covers in more depth other sustainable aspects of landform manipulation for design and stormwater management. Computer applications will be used as a learning tool. Field trips to sites that are particularly appropriate for observing, measuring, and experiencing the sculptural qualities and capabilities of landform are also an integral component of this course.

Credits: 3

College: College of Architecture, Design and Engineering

Prerequisites: LARC 207 [Min Grade: C]

Schedule Type: Lab, Lecture

LARC 304: LA Design 5: Community Design

This studio focuses on sustainable community design with the physical environment viewed as a catalyst for community enhancement and revitalization. Issues include community identification, social cohesiveness, social, economic and political factors, the role of open space in urban neighborhoods, and community safety and livability. Emphasis is placed on learning methods and techniques for developing physical-design solutions and implementation strategies when working with school, neighborhood and communities groups. An important component of the experience is community participation.

Credits: 6

College: College of Architecture, Design and Engineering

Schedule Type: Studio

LARC 305: Plant Community Ecology

This course investigates how interactions within plant species, between species, and between species and their environment influences plant community structure. Questions explored include: How many species are in a given habitat type? Why these species and not others? How do they interact with each other plants? What controls their abundances in natural and urban landscapes? Students will learn how plant distributions are influenced by environmental conditions with a particular emphasis on the urban environs. In- the-field exercises constitute a significant portion of this course.

Credits: 3

College: College of Architecture, Design and Engineering

Schedule Type: Lab, Lecture

LARC 307: History of Landscape Arch 2

This course is the third of a four-term sequence of history/ theory courses. It surveys key examples of landscape architecture from the mid-19th century to the present time. Students strengthen their vocabulary for analyzing and evaluating the designed landscape. Students are also introduced to the influential personalities, projects, events, concepts and thoughts that were pivotal in the philosophical and ethical development of the profession of landscape architecture.

Credits: 3**College:** College of Architecture, Design and Engineering**Schedule Type:** Lecture**LARC 310: Introduction to GIS**

This course introduces students to Geographic Information Systems (GIS) and is a prerequisite for those accepted in the MS in Geospatial Technology for Geodesign program who do not have acceptable prior GIS training or professional experience. GIS is a computer-based tool that uses spatial (geographic) data to analyze and help solve real-world problems. Specific GIS methods and topics covered include digital cartography, geoprocessing techniques, demographics analysis, site selection, raster analysis, 3D GIS, land use scenario development, and environmental applications.

Credits: 3**College:** College of Architecture, Design and Engineering**Schedule Type:** Hybrid, Lab, Lecture, Lecture/Lab, Studio**LARC 312: Sustainable Planting Design**

In this course students apply the ecological needs of plants to real situations such as greenroofs, xeriscaping, habitat management, brownfield restorations, meadows and highway plantings. The course stresses ecological relationships among plants and how those relationships are used in the design of these environments. In order to design and maintain these environments students need to understand planting design as well as ecology.

Credits: 3**College:** College of Architecture, Design and Engineering**Schedule Type:** Lab, Lecture**LARC 400: La Design 6: Restoration Mgmt**

This studio course focuses on restoration management methodologies and ecological landscape design principles as they apply to a damaged urban landscape. Students explore sustainable restoration methodologies, how to determine values and make choices, while being cognizant of the costs and public perception. Techniques, practices and materials both sustainable and conventional are evaluated as part of the planning and design processes.

Credits: 6**College:** College of Architecture, Design and Engineering**Schedule Type:** Studio**LARC 401: LA Design 7: Interdisc Design**

LA Design 7 is an interdisciplinary studio for landscape architecture and other design students who will work in interdisciplinary teams. Specific studio topics may include brownfield redevelopment, co-housing development, waterfront redevelopment, community revitalization.

Credits: 6**College:** College of Architecture, Design and Engineering**Prerequisites:** ARCH 301 or LARC 301 or LARC 304 [Min Grade: C]**Schedule Type:** Studio**LARC 409: LA Tech: Materials and Methods**

This course develops concepts, methods and techniques for understanding construction materials and assembly techniques related to landscape architecture construction. Students are introduced to materials commonly used in landscape construction (wood, stone and brick, concrete, and asphalt), with an emphasis on sustainable landscape construction materials and practices. Methods, concepts, and principles for developing construction details are also covered, including conventional and digital communication techniques. Specialized aspects such as structural mechanics for various materials and uses are emphasized.

Credits: 3**College:** College of Architecture, Design and Engineering**Prerequisites:** LARC 207 and (LARC 201 or LARC 202) [Min Grade: D]**Schedule Type:** Lab, Lecture**LARC 412: LA Tech: Urban Hydrology**

Urban hydrology examines sustainable water resource issues as they relate to landscape planning and site planning and design within the urban or urbanizing context. This includes the theory and techniques associated with soil and water conservation comprehension of the why, when and where that leads to sustainable planning or design strategies. Topics include surface water hydrology, stormwater runoff estimation, sustainable stormwater management techniques, watershed planning, flood routing and impact mitigation, and erosion and sedimentation control tools and regulations.

Credits: 3**College:** College of Architecture, Design and Engineering**Schedule Type:** Lecture, Lecture/Lab**LARC 506: Professional Practice for LA**

Professional Management for Landscape Architecture introduces the ethical, legal, and administrative issues and procedures encountered in numerous forms within landscape architecture practice. Topics include: types of practice, project management, the ethical and legal frameworks in which professional landscape architecture practice occurs, contractual documents, proposal preparation and fee structuring. The preparation of an effective resume and portfolio concludes the course.

Credits: 3**College:** College of Architecture, Design and Engineering**Schedule Type:** Lecture, On-Line**LARC 515: Adv GIS for Landscape Analysis**

This is an advanced course in Geographic Information Systems (GIS). Students continue their studies in GIS applications appropriate to landscape analyses. GIS is an increasingly important tool for organizing digital spatial data in an accessible and logical manner for site design, recreation master planning, visual analysis, comprehensive planning, resource management and public advocacy.

Credits: 3**College:** College of Architecture, Design and Engineering**Prerequisites:** LARC 310 [Min Grade: D]**Schedule Type:** Lab, Lecture, Lecture/Lab**LARC 516: LA Tech: Construction Docs**

This is the final course of the construction technology series. The major emphasis is the preparation of a complete set of technical construction documents with specifications, sustainable practices, and cost estimates. Specific topics include: site demolition, layout and dimensioning, and specification writing.

Credits: 4**College:** College of Architecture, Design and Engineering**Schedule Type:** Lab, Lecture, Lecture/Lab

LARC 599: LA Design 8: Capstone Project

This course is the last in a series of studios specific to the landscape architecture program curriculum. Students work independently and/or in groups. The Design Project requires individual/team research, inventory and analysis, programming, and design concept development through final design.

Credits: 6

College: College of Architecture, Design and Engineering

Prerequisites: LARC 400 or LARC 401 [Min Grade: C]

Schedule Type: Studio