Landscape Architecture (LAR)

LAR 200 Landscape Architecture Introductory Studio (6 credit hours)
Small scale landscape architectural design. Site observation exercises and visits, physical design projects, reading and discussion. Basic skills in landscape architecture, discerning the environmental issues in design, understanding design process, drawing and verbally communicating issues, and idea conceptualization and realization.

Prerequisite: Design Majors and D 104
Typically offered in Fall only

LAR 210 Digital Drawing for Landscape Architecture (3 credit hours)
Digital modeling and computer aided design in landscape architecture. Integration of digital data in visualization of past, existing and future designs.

Prerequisite: LAR Majors
Typically offered in Fall only

LAR 211 Digital Design Media for Landscape Architecture (3 credit hours)
Principles and practices related to the use of digital applications in landscape architectural design. Includes two-dimensional raster imaging, vector graphics, photo simulation, and three-dimensional modeling.

Prerequisite: LAR Majors
Typically offered in Spring only

LAR 221 Introduction to Environment and Behavior for Designers (3 credit hours)
Integration of behavioral and environmental systems related to design. Exploration of humane, ecologically sound design alternatives.

Typically offered in Summer only

LAR 222 Perception and Behavior for Designers (3 credit hours)
Perceptual systems, linkages among them, and linkages between them and language and culture as these affect the design process.

Typically offered in Spring only

LAR 292 Special Topics in Landscape Architecture (1-3 credit hours)
Topics of current interest in Landscape Architecture. Normally used to develop new courses.

Typically offered in Fall, Spring, and Summer

LAR 400 Landscape Architecture Studio (6 credit hours)
Projects cover small scale design, urban landscapes, community design, and environmental management. Design process stressed, including attention to project organization, design synthesis and realization.

Prerequisite: D 105, LAR 200; or Departmental Head Approval
Typically offered in Spring only

LAR 430 Site Planning (3 credit hours)
Technical operations and environmental landscape controls for site development. Site analysis, grading and drainage, earthwork, horizontal and vertical control for road alignment. Graphic exercises.

Prerequisite: LAR 400 or LAR 501
Typically offered in Spring only

LAR 444 History of Landscape Architecture (3 credit hours)
The history of designed landscapes. Environmental, social and cultural factors which influence human made landscapes presented with history and art of landscape architecture.

Typically offered in Fall only

LAR 445 Sustainable Design and Development (3 credit hours)
This online, asynchronous course focuses on the global, regional and local environmental and social impacts of development. We explore sustainable design and development strategies and examine exemplary case studies in the following areas: climate change; ecosystems; water systems; food systems; material, resource and waste systems; building and energy systems; and cities and communities. Select UN Sustainable Development Goals provide a framework for this course and allow us to examine issues of equity as they relate to these goals.

GEP Interdisciplinary Perspectives
Typically offered in Fall only

LAR 457 Landscape Construction Materials, Methods and Documentation (3 credit hours)
Materials, standards, and construction methods used to implement landscape architectural designs. Development of construction documents.

Prerequisite: LAR 400 or LAR 502
Typically offered in Summer only

LAR 465 Landscape Architecture International Studio (6 credit hours)
Define landscape architectural problems and develop design solutions in an international setting. Exercises and projects related to design, culture and the physical environment of the host country. Focus on landscape architecture, gardens and urbanism studied through sketching and documentation, discussion, site investigation, historical context, current design examples and design applications.

Prerequisite: Junior Standing in the College of Design and Approval of the International Study Abroad Office.
Typically offered in Spring only

LAR 492 Special Topics in Landscape Architecture (1-3 credit hours)
Topics of current interest in Landscape Architecture. Normally used to develop new courses.

Typically offered in Fall, Spring, and Summer

LAR 495 Independent Study in Landscape Architecture (1-3 credit hours)
Individual projects in landscape architecture developed under the direction of a faculty member on a tutorial basis. Individualized/ Independent Study and Research courses require a "Course Agreement for Students Enrolled in Non-Standard Courses" be completed by the student and faculty member prior to registration by the department.

Prerequisite: Junior standing in Landscape Architecture 3.0 GPA or better
Typically offered in Summer only

LAR 500 Landscape Design Studio (6 credit hours)
Application of information and skills developed in course work to environmental design problems. Process of site selection, activity programming, site planning and program evaluation followed employing creation of interactive communication systems between designer, clients and users. Goals include design of satisfying new landscapes as well as conservation and design strategies for existing culturally important landscapes and townscapes.

Prerequisite: Graduate standing
Typically offered in Fall and Spring

LAR 501 Landscape Architecture Introduction Design Studio (6 credit hours)
Introduction to landscape architectural design thinking processes and applications that include: site analysis, post occupancy user studies, programming, site planning, graphic representation (drawing, model making, digital graphics), verbal communication, and criticism and reflection.

Typically offered in Fall only

LAR 502 Site Design and Environmental Planning Studio (6 credit hours)
Strategies, principles, and methods for designing and evaluating resilient ways and means to fit an intensive development program(s) on environmentally challenging, regionally specific sites. This design studio is integrally linked with courses LAR 527- Landform, Grading and Environmental Site Systems and LAR 520- Environment and Culture.

Prerequisite: LAR 501
Typically offered in Spring only

LAR 503 Landscape Architecture Design Development & Construction Documentation Studio (6 credit hours)
Site planning design refinement from conceptual schematic design through to the preparation of technical landscape architectural construction plans and details.

Prerequisite: LAR 501 and LAR 502 or permission of Department Head of DGP.
Typically offered in Fall only

LAR 504 Landscape Architecture International Design Studio (6 credit hours)
Application of design thinking processes in landscape architectural design situations resident within a host international urban venue. This is a studio course for Landscape Architecture students studying abroad.

Prerequisite: LAR 501 and LAR 502 and LAR 503 or department head or DGP consent.
Typically offered in Fall only

LAR 505 Landscape Architecture Final Project Studio (6 credit hours)
Individual semester long projects demonstrating capabilities in a full range of design and production skills.

Typically offered in Fall and Spring

LAR 506 Landscape Architecture Design + Build Studio (6 credit hours)
Design and construction implementation of sustainable construction practices for a low impact landscape system installation that responds to degraded environmental conditions.

Prerequisite: LAR 501 and LAR 502 and LAR 503 or department head or DGP consent.
Typically offered in Spring only

LAR 507 Advanced Topics Studio in Landscape Architecture and Environmental Planning (6 credit hours)
Advanced engagement, emphasizing research, development and application of experimental and best practices, on current and emerging landscape architectural and environmental planning topics of increased complexity. Advanced Topics Studios in LA and Env Plng integrate, apply, and reinforce materials including history and theory, site works, modeling and representation, research methods, environmental analysis, and professional practice delivered in LAR subject area courses.

Prerequisite: LAR 502 or department head or DGP consent.
Typically offered in Fall and Spring

LAR 508 Landscape Architecture Design Research Project (6 credit hours)
Independent research in a specific area of landscape architectural design with the requirement that the research be integrated and applied within a landscape architectural design context; provides opportunities for a student or team of students (up to 4 people) to engage in independent inquiry leading to the completion of a definitive scholarly, research-oriented landscape architectural design project. Requires consent of department head or DGP.

Prerequisite: LAR 507 and LAR 541 and LAR 697 or department head consent.
Typically offered in Fall, Spring, and Summer

LAR 509 Landscape Architecture Design Fundamentals (3 credit hours)
Introduction to the language, topics, and processes associated with landscape architectural design and the means used to envision and transform ideas into physical form in the landscape.

Typically offered in Summer only

LAR 510 Introduction to Landscape Architectural Drawing Applications (3 credit hours)
Introduction to fundamental drawing principles and methods utilized in landscape architectural design and representation applications. Topics covered include: freehand sketching, field observation diagrams and sketches, freehand and constructed perspectives, plan and section view drawings, shade and shadow, color, design process drawings, and presentation layout.

Typically offered in Summer only

LAR 513 Landscape Architecture Digital Media 1 (3 credit hours)
Introduction to the principles and practices related to the use of 2D and 3D digital media in landscape architectural design representation and communication applications.

Typically offered in Summer only

LAR 514 Landscape Architecture Digital Design Media 2 (3 credit hours)
Digital modeling and representation methods, applications and production using two and three-dimensional digital design media; this course is integrally linked with LAR 501, Landscape Architecture Introduction Design Studio.

Prerequisite: LAR 513 or instructor or department head, or DGP consent
Typically offered in Fall only

LAR 515 Advanced Landscape Architecture Digital Design Media (3 credit hours)
Advanced digital media tools and techniques to create and refine routines used in landscape architectural modeling and representation applications.

Prerequisite: LAR 513 and LAR 514 or consent of Department Head or DGP.
Typically offered in Fall only

LAR 517/GIS 517 GIS Applications in Landscape Architecture and Environmental Planning (3 credit hours)
Introduction to the methods and applications of geographic spatial modeling technology in landscape architecture and environmental planning.

Typically offered in Fall only

LAR 520 Environment and Culture (3 credit hours)
An integrative approach to human and natural systems, specifically the dynamic social and ecological forces that act upon, modify, and give meaning to landscapes.

Typically offered in Fall only

LAR 521 Values, Theory and Methods of Landscape Architecture (3 credit hours)
Radical change in profession of landscape architecture in the past decade. New and emerging roles for landscape architect include regional analysis, landscape assessment, land development, urban planning, recreation planning, etc. Development of core values and theories from which each emerged and survey of the techniques and methods of their development.

Prerequisite: Graduate standing
Typically offered in Fall only

LAR 523 Landscape Architecture Plant Identification (2 credit hours)
Introduction to the vocabulary and methods necessary to identify ornamental and native plants in the built and natural landscape. The course is structured around the understanding of the taxonomic tools necessary to identify plants.

Typically offered in Summer only

LAR 524 Planting Design Applications in Landscape Architecture (2 credit hours)
Introduction to theories, practices, and implications associated with the diverse uses of plants in landscape architectural design applications considerate of functional, ecologic, aesthetic, economic, maintenance, health, safety, welfare, and other factors.

Prerequisite: LAR 501 and LAR 502 or permission of Department Head of DGP.
Typically offered in Summer only

LAR 525 Landscape Architecture Field Studies (3 credit hours)
On-site observation and assessment of constructed landscape architectural projects focused on historic and contemporary design practices that promote environmental health, safety, wellbeing, and beauty through industry defined practices.

Typically offered in Fall only

LAR 527 Landform, Grading, and Environmental Site Systems (3 credit hours)
Introduction to landform representation, grading, environmental site systems, and best practices required in landscape architectural site design and environmental planning applications.

Prerequisite: LAR 501 or consent of instructor or department head or DGP.
Typically offered in Spring only

LAR 528 Landscape Architecture Construction Materials and Methods (3 credit hours)
Introduction to landscape architectural construction materials, methods, documentation, and implementation practices including best professional practices, and current and emerging technologies.

Prerequisite: LAR 501 and LAR 502 and LAR 527 or permission of department head or DGP.
Typically offered in Fall only

LAR 534 Landscape Architecture Theory and Criticism (3 credit hours)
Introduction to the pervasive principles, concepts, movements, and applications influencing landscape architectural planning and design.

Prerequisite: LAR 501 and LAR 502 and LAR 520 or consent of Department Head or DGP.
Typically offered in Fall only

LAR 535 Environmental Social Equity and Design (3 credit hours)
Principles of environmental justice and social equity in the context of design and community engagement; focus on the trends affecting environmental and human health in the built environment.

Typically offered in Spring only

LAR 540 Research Methods in Landscape Architecture and Environmental Planning (3 credit hours)
An overview of the role of research in landscape architecture and environmental planning with introductions to systematic inquiry that help to understand the complex relationships between people and their environment. The course explores different tools and approaches for answering research questions and translating research findings into usable strategies and environmental design solutions.

Typically offered in Spring only

LAR 542 Human Use of the Urban Landscape (3 credit hours)
Urban environment-behavior field research methods at site planning scale (behavior and cognitive mapping, interview and survey methods, archival research), suitable for application in practice. Methods of integrating user needs into design programming using participatory approaches. Evidence-based design applied to residential neighborhood, health, education, and recreation settings. Research activities conducted in small groups. No required texts. Overnight, weekend field trip at student expense.

R: Masters students at NCSU, UNC-CH, or Duke University. Upper level undergraduate students are allowed with permission of the instructor.
Typically offered in Spring only

LAR 543 Landscape Performance and Metrics (3 credit hours)
Concepts, tools and methods, and research to measure and integrate considerations of landscape performance including environmental, economic/life cycle, management, social, and aesthetic factors in landscape architectural applications.

Typically offered in Spring only

LAR 544 Contemporary Issues in Landscape Preservation (3 credit hours)
An examination of how local governments organize themselves to deal with the conservation and protection of areas of acknowledged cultural value or scenic/aesthetic character as well as the respective roles of federal, state, and local governments in these efforts. Particular attention will be given to understanding the recent past in preservation efforts.

Typically offered in Fall only

LAR 545 City Planning and Design - Building Great Communities (3 credit hours)
This course explores the history and heritage of city planning and design in an ever-urbanizing world, the legal underpinning and practice of the tools of planning in the US - comprehensive planning, zoning, infrastructure planning and design guidelines, environmental and social challenges for an urban planet, and the procurement of planning and design services, both from the perspective of the hiring entity as well as from that of the consultant.

Typically offered in Spring only

LAR 546 The Landscape Imperative (3 credit hours)
Exposure to the complex interrelationships of demographics, resource stewardship and land development in terms of the issues, questions, challenges and opportunities for landscape architects and urban designers.

Typically offered in Spring only

LAR 547 Greenway Planning and Design (3 credit hours)
Exposure to complex interrelationships in the planning, design, development and operations of greenway corridors and systems, including natural systems evaluation, community planning, public engagement, preparation of construction documents, construction administration, business practices, regulatory issues, legal framework, programming and funding.

Typically offered in Fall only

LAR 550 Landscape Architecture Professional Practice (3 credit hours)
Exposure to the range of practice opportunities in landscape architecture with an overview of career opportunities in the public (Federal, State, and Local) and private sectors as well as in non-traditional and emerging roles.

Typically offered in Spring only

LAR 552 Survey of Natural Hazards and Disasters (3 credit hours)
This survey course provides a graduate level introduction to the broad fields of study associated with natural hazards and disasters. Emphasis is placed on gaining an understanding of the defining characteristics of natural hazards and how their effects on human settlements can lead to a series of issues that help us understand what defines a disaster. This course introduces students to a range of topics including meteorology, geology, hydrology, engineering and building performance, policy making, planning, and sociology, among other disciplines. The course is framed using concepts of sustainable development and disaster resilience, including those pre- and post-disaster conditions and actions that enhance or hinder these aims. Emphasis is placed on the use of case studies of past disasters to help students understand the physical characteristics of natural hazards and how individual, community, state, regional, national and international actions led to the event becoming a disaster.

Typically offered in Fall only

LAR 554 Disaster Resilient Policy, Engineering and Design (3 credit hours)
This course addresses the interdisciplinary (policy, engineering and design) study and practice of disaster resilience. Emphasis is placed on the critical review of existing policies, programs and approaches taken that have led to increased levels of exposure to natural hazards, growing levels of social vulnerability and exponentially rising disaster losses. In an era of climate change, these issues are explored relative to the need to enhance adaptive capacity through sound policy, engineering and design. Class lectures, readings and student/faculty discussions help to advance each student's knowledge of the subject matter and provide relevant background information to inform interdisciplinary class projects.

No prerequisites for graduate students. Undergraduate students may petition to take this graduate course. Preference given to graduate students pursuing the proposed graduate certificate titled Disaster Resilient Policy, Engineering and Design
Typically offered in Spring only

LAR 565 International Landscape Architecture Design Studio (6 credit hours)
Landscape architectural problems and design solution in international setting. Exercises and projects related to design, culture and physical environment of host country. Focus on landscape architecture, gardens and urbanism through sketching and documentation, discussion, site investigation, historical context, current design examples and design applications.

Prerequisite: Graduate standing the College of Design and approval of the International Study Abroad Office
Typically offered in Fall only

LAR 582 Special Topics In Landscape Architecture (1-6 credit hours)
Topics of current interest to programs in School of Design offered by faculty in the School. Subjects offered under this number are normally used to test and develop new courses.

Prerequisite: Graduate standing
Typically offered in Fall and Spring

LAR 607 Natural Hazards, Disasters and Climate Change Adaptation Lecture Series (1 credit hours)
Invited practitioners and scholars will discuss a range of contemporary topics (bi-weekly) tied to natural hazards, disasters and climate change adaptation, including research findings, experience in practice, and the translation of knowledge to action. Speakers are drawn from federal, state, and local jurisdictions; scholars from pertinent fields of study, including physical and social scientists; private sector representatives, including corporations, insurance officials, developers, and consultants; members of the media; politicians; environmental and social justice advocates; community leaders; members of various professional associations; and others as identified. Emphasis will be placed on the role of design, broadly defined, to enhance resilience to slow- and rapid onset natural hazards and disasters, including those caused or exacerbated by a changing climate. Preference will be given for students pursuing the graduate certificate Disaster Resilient Policy, Engineering and Design once approved. Undergraduates may petition to take course.

P: Graduate Standing
Typically offered in Spring only

LAR 630 Independent Study (1-3 credit hours)
Special problems in various aspects of design developed under direction of a faculty member on a tutorial basis.

Prerequisite: Graduate standing
Typically offered in Fall, Spring, and Summer

LAR 650 Internship in Landscape Architecture (3 credit hours)
Supervised field experience in a professional landscape architecture office, related design office, or governmental agency.

Prerequisite: LAR 501 and LAR 502 and LAR 503 or department head or DGP consent.
Typically offered in Fall, Spring, and Summer

LAR 685 Master's Supervised Teaching (1-3 credit hours)
Teaching experience under the mentorship of faculty who assist the student in planning for the teaching assignment, observe and provide feedback to the student during the teaching assignment, and evaluate the student upon completion of the assignment.

Prerequisite: Master's student
Typically offered in Fall and Spring

LAR 688 Non-Thesis Masters Continuous Registration - Half Time Registration (1 credit hours)
For students in non-thesis master's programs who have completed all credit hour requirements for their degree but need to maintain half-time continuous registration to complete incomplete grades, projects, final master's exam, etc.

Prerequisite: Master's student
Typically offered in Fall and Spring

LAR 689 Non-Thesis Master Continuous Registration - Full Time Registration (3 credit hours)
For students in non-thesis master's programs who have completed all credit hour requirements for their degree but need to maintain full-time continuous registration to complete incomplete grades, projects, final master's exam, etc. Students may register for this course a maximum of one semester.

Prerequisite: Master's student
Typically offered in Fall and Spring

LAR 690 Master's Examination (1-9 credit hours)
For students in non thesis master's programs who have completed all other requirements of the degree except preparing for and taking the final master's exam.

Prerequisite: Master's student
Typically offered in Fall, Spring, and Summer

LAR 696 Summer Thesis Res (1 credit hours)

LAR 697 Design Research Project Independent Study (3 credit hours)
Advanced Independent study under taken by 1-4 students leading to the preparation of the Project Proposal, as a prerequisite for undertaking LAR 508-Design Research Project. (Permission to proceed with LAR 697 requires approval by department head or DGP and faculty mentor.)

Prerequisite: LAR 540 or approval from Department Head or DGP.
Typically offered in Fall, Spring, and Summer

LAR 896 Summer Dissert Res (1 credit hours)