LARC - LANDSCAPE ARCHITECTURE

LARC121 Computer Visualization in Design (3 Credits)
Students are provided with the opportunity to 1) explore basic design principles and practice, 2) explore and apply computer concepts and principles, 3) learn and apply basic computer tools used in landscape architecture and allied disciplines, and 4) demonstrate competency in design vocabulary and computer applications through demonstrated deliverables used in the built environment design fields.

LARC131 Computer Visualization I (3 Credits)
Provides the opportunity to 1) explore basic design principles and practice 2) explore and apply computer concepts and principles, 3) learn and apply basic computer tools used in landscape architecture and allied disciplines and 4) demonstrate competency in design vocabulary and computer applications through demonstrated deliverables used in the built environment design fields.
Restriction: Permission of AGNR-Plant Science & Landscape Architecture department; and must be in Landscape Architecture program.
Credit Only Granted for: LARC120 or LARC131.
Formerly: LARC120.

LARC151 Urban Agriculture: Designing and Assessing Edible Landscapes (3 Credits)
Students will examine the growing development of urban agriculture and edible landscapes. Urban agriculture has seen a recent growth and interest in cities across the globe. From Paris to New York, from Baltimore to Detroit, urban agriculture is an emerging land use to address a variety of needs. Redevelopment, food deserts, community engagement and environmental justice are just some of the issues and topics that are connected to the recent growth of urban agriculture. This course will take a critical examination of urban agriculture's contribution to the food system, its input and outputs in the urban landscape, and the planning and design of urban agriculture and edible landscapes.

LARC152 Greening Cities: Who Wins, Who Loses, and Who Cares? (3 Credits)
"Greening Cities" can have many interpretations: improving or adding urban economic activity, realizing energy efficiency, greening urban transport systems, etc. An important component of livable and sustainable cities and metropolitan ecosystems are the plants and landscapes that are inhabited by plants. With the majority of humans now living in cities, a survey of urban ecosystem principles and an examination of design and planning strategies for plant and landscape resources in urban and metropolitan regions is critical.
Credit Only Granted for: LARC152 or PLSC289I.
Formerly: PLSC289I.

LARC160 Introduction to Landscape Architecture and Environmental Design (3 Credits)
History, theory, philosophy and current practice of the profession of landscape architecture. Explores the interactive relationship between humans and their environment by examining people's perceptions of and changing attitude towards the landscape, as well as, an examination of how these are related to ecological and cultural influences. Topics include urban, ecological, community and creative design.

LARC161 The World Around You: People and the Environment (3 Credits)
Explore human and environmental interactions. How do natural and built environments influence human health and well-being? Many environmental settings will be examined such as hospitals, public housing neighborhoods, school settings, retirement communities, transportation corridors, and green spaces. Learn how landscape architects and related fields work together to create environments that support individuals, families, and various community groups' health and well-being.

LARC162 Environmental Justice: Same World, Different Built Environment (3 Credits)
Environmental Justice will be explored in the context of the built environment. What unequal public built environmental threats exist? How can these threats be prevented or eliminated? Public schools, public parks, access to clean water, air pollution, tree coverage are among the built environments examined in the course.

LARC188 Special Topics in Landscape Architecture (1-3 Credits)
A lecture course for students interested in Landscape Architecture to cover topics not formally taught in existing courses. An introductory class on a group of closely-related topics for students with an interest in this discipline.
Repeatable to: 6 credits if content differs.

LARC220 Landscape Visualization II (4 Credits)
Basic techniques and application of various media for graphic communication associated with landscape architecture.
Corequisite: LARC230.
Restriction: Permission of AGNR-Plant Science & Landscape Architecture department; and sophomore standing or higher; and must be in Landscape Architecture program.
Credit Only Granted for: LARC489R or LARC220.
Formerly: LARC489R.

LARC221 Digital Design Tools (3 Credits)
The development and application of computing skills as used by the landscape architecture profession. This Computer-Aided Design and Drafting (CADD) course develops computer drafting using a variety of software programs. It also introduces students to Geographic Information Systems (GIS) mapping technologies.
Prerequisite: LARC220.
Recommended: LARC240 and LARC265.
Restriction: Must be in Landscape Architecture program.

LARC230 Design Fundamentals Studio (5 Credits)
Introduction to the fundamentals of basic design focusing on creative problem solving associated with landscape architecture. Here you will explore design with different geometries, organizing principles, concept development, spatial definition, land formation, structures and plants. Emphasis will be given on how to represent design ideas using measured drafting techniques and presentation board organization. A series of foundational exercises will culminate in the redesign of a small public space.
Prerequisite: Must have completed or be concurrently enrolled in LARC265.
Corequisite: LARC220.
Restriction: Permission of AGNR-Plant Science & Landscape Architecture department; and must be in Landscape Architecture program.
Credit Only Granted for: LARC141 or LARC230.
Formerly: LARC141.

LARC231 Site Planning and Design Studio (5 Credits)
An examination of the influence of landscape character and site features (natural and cultural) on landscape architecture, architecture and planning through application in the studio setting.
Prerequisite: LARC230.
Corequisite: LARC411 and LARC221.
Restriction: Must be in Landscape Architecture program.
Credit Only Granted for: LARC340 or LARC231.
Formerly: LARC340.

LARC263 History of Landscape Architecture (3 Credits)
A survey of landscape architecture history from the ancient Western civilizations to the twentieth century with consideration of parallel developments in the Eastern World, European Africa and the Americas.

LARC265 Site Analysis and Ecological Principles (3 Credits)
Principles and methods of site analysis with an emphasis on the application of ecological principles in landscape architecture, architecture and planning.
Prerequisite: LARC141.
Corequisite: LARC240 and LARC221.
Restriction: Permission of AGNR-Plant Science & Landscape Architecture department; and sophomore standing or higher; and must be in Landscape Architecture program.
Credit Only Granted for: LARC265 or ARCH460.

LARC266 Site and Landscape Ecology Field Studies (1 Credit)
Field Excursions that are essential to apply theory and principles explored in the LARC265 to real world environments.
Prerequisite: Must have completed or be concurrently enrolled in LARC230 or LARC640.
Corequisite: LARC265.
Restriction: Sophomore standing or higher; and must be in Landscape Architecture program.
Additional Information: This course requires field trips.

LARC330 Urban Design Studio (5 Credits)
The landscape architect's role within the interdisciplinary urban design process, focusing on urban site design issues. Pedestrian friendly site design and the future of sustainable development will be studied.
Prerequisite: LARC231.
Restriction: Must be in Landscape Architecture program.
Credit Only Granted for: LARC330 or LARC440.
Formerly: LARC440.

LARC331 Regional Design and GIS Studio (5 Credits)
An examination of the landscape architect's role within the interdisciplinary regional design field incorporating GIS technologies, spatial modeling, and the regional design process.
Prerequisite: LARC330 and LARC412.
Corequisite: LARC413.
Restriction: Must be in Landscape Architecture program.
Credit Only Granted for: LARC341 or LARC331.
Formerly: LARC341.

LARC388 Honors Thesis Research (3-6 Credits)
Undergraduate honors thesis research conducted under the direction of an AGNR faculty member in partial fulfillment of the requirements of the College of AGNR Honors Program. The thesis will be defended to a faculty committee.
Prerequisite: Must be in the AGNR Honors Program.
Repeatable to: 6 credits if content differs.

LARC389 Internship in Landscape Architecture (3 Credits)
A supervised internship where students earn credit for work experience related to their career goals. Each student must keep a work log, work on a special project, and produce a report related to this project. An evaluation from the external supervisor of the project is required. Participation requires application to the internship advisor in the preceding semester.
Restriction: Must be in Landscape Architecture program.
Repeatable to: 6 credits.

LARC398 Seminar (1 Credit)

LARC411 Construction Technology I: Principles of Site Engineering (4 Credits)
First of three courses in the landscape architecture engineering and construction sequence that focuses on the principles, procedures, and applications of site grading. Included in this subject area are the topics of relief visualization and representation, slope and contour calculations, grading objectives and methodology, structure siting principles, drainage principles, contour manipulation procedures, stormwater management, horizontal and vertical road alignment, and cut-fill calculations.
Corequisite: LARC231 or LARC641.
Restriction: Must be in Landscape Architecture program.
Credit Only Granted for: LARC320, LARC411 or LARC720.
Formerly: LARC320.

LARC412 Construction Technology II: Materials and Structures (4 Credits)
Second of three courses in the landscape architecture engineering and construction sequence focuses on site construction, soil and water-centric Best Design Practices (BDPs). Included in this subject area are the topics of construction operations and earthwork, soil erosion and sediment control, retaining wall, soil and constructed media, shoreline construction, bioretention and planting systems and green roofs
Prerequisite: LARC411.
Corequisite: LARC330 or LARC642.
Restriction: Must be in Landscape Architecture program.
Credit Only Granted for: LARC321, LARC412 or LARC721.
Formerly: LARC321.

LARC413 Construction Technology III: Water Soil-Centric Practices (4 Credits)
Third of three courses in the landscape architecture engineering and construction sequence focuses on site construction, soil and water-centric Best Design Practices (BDPs). Included in this subject area are the topics of construction operations and earthwork, soil erosion and sediment control, retaining wall, soil and constructed media, shoreline construction, bioretention and planting systems and green roofs.
Prerequisite: LARC412.
Restriction: Must be in Landscape Architecture program.

LARC420 Professional Practice (3 Credits)
An introduction to and comparative study of the professional concerns of design firms. Focus on planning, legal, ethical, marketing and management considerations of interdisciplinary practices.
Restriction: Must be in Landscape Architecture program.

LARC421 Computer-Aided Design and Drafting (CADD): Urban Construction (3 Credits)
This Computer-Aided Design and Drafting (CADD) course applies computer drafting using AutoCAD. It focuses on providing the technical skills for students who are working in built environment professions. Drawing types may include (but not be limited to) site plan drawings, construction detailing, grading plans, site layout plans and sheet layout conventions.
Credit Only Granted for: LARC489O or LARC421.
Formerly: LARC489O.

LARC430 Community Design Studio (5 Credits)
Studio that emphasizes the integration of critical thinking skills and methodologies introduced throughout the landscape architecture curriculum. Students apply design and analysis methodologies, evaluate alternative solutions, involve community residents and engage in final design development, using the master plan and site design process, report writing, and oral and graphic presentations. Final presentations are open to the university and the community.
Prerequisite: LARC331 and LARC413.
Restriction: Senior standing; and must be in Landscape Architecture program.

LARC440 Urban Design Studio (5 Credits)
The landscape architect's role within the interdisciplinary urban design process, focusing on urban site design issues. Pedestrian friendly site design and the future of sustainable development will be studied.
Prerequisite: LARC321; and LARC340; and LARC341.
Restriction: Must be in Landscape Architecture program.

LARC451 Sustainable Communities (3 Credits)
Explores concepts, strategies and examples of community design which address the needs of a growing population while preserving the environment and its resources.

LARC452 Green Infrastructure and Community Greening (3 Credits)
A critical look and exploration of green infrastructure (GI) elements in the built environment in contributing to ecosystems services and the sustainability of the built environment. The course explores the science, issues, challenges, and the policy, planning and design solutions offered by green infrastructure.
Prerequisite: PLSC110 and PLSC111; or (PLSC112 and PLSC113); or permission of instructor.
Restriction: Junior standing or higher.
Credit Only Granted for: LARC489G or LARC452.
Formerly: LARC489G.

LARC453 Introduction to GIS and Hydrologic Modeling (3 Credits)
Introduction to Geographic Information Systems (GIS) and their application to hydrologic modeling. Basic GIS skills are used to manipulate and analyze spatial data to populate NRCS TR-55 hydrologic model for use in sizing constructed wetlands, bio-retention cells, and minor flood zones. No prior knowledge of GIS or hydrologic modeling is required. Stormwater and erosion control permitting as well as basic design principles for Maryland Environmental Site Design standards are introduced.

LARC454 Principles for Planting Design (3 Credits)
Emphasis will be placed on the analysis of natural systems of the landscape as they relate to visual thinking and to the rigor of the design process. Planting Design will familiarize you with native habitats, reinforce the application of design principles, and assess human response to the built environment in terms of developing a planting scheme. Students will acquire an understanding of and an appreciation for complex, interdependent relationships that exist in a healthy plant community. Students will graphically represent planting plans as communication tools suitable for client and contractor discussion as well as the basic construction documentation process through plant schedules, details, technical specifications, soil analysis, cost estimating, site preparation, and landscape maintenance procedures.
Prerequisite: PLSC253 and LARC220 or LARC620; or permission of instructor.
Restriction: Must be in Landscape Architecture program.
Credit Only Granted for: LARC454 or LARC489E.
Formerly: LARC489E.

LARC461 People and the Environment (3 Credits)
Focus is placed on human and environmental interactions. Students will look at both natural and built environments and how they influence human health and well-being. Many environmental settings will be examined. These include hospitals, public housing neighborhoods, school settings, retirement communities, transportation corridors and green spaces. We will also explore how racial and socio-economic factors affect living and working environmental conditions. Ultimately, students will be using this knowledge to create environments that support individuals, families and various community groups' health and well-being.
Credit Only Granted for: LARC489K or LARC461.
Formerly: LARC489K.

LARC470 Landscape Architecture Seminar (3 Credits)
A combination of self-directed study, seminar, and lecture formats. An introduction to aspects of research methods, critical analysis, and proposal writing with a focus on urban and community design.
Prerequisite: LARC321; and LARC341.
Corequisite: LARC440.
Restriction: Senior standing; and must be in Landscape Architecture program.

LARC471 Capstone Praxis Studio (5 Credits)
A capstone experience with projects of varied thematic content that emphasize the integration of critical thinking skills and methodologies introduced throughout the landscape architecture curriculum. Students apply design and analysis methodologies, evaluate alternative solutions, involve community residents and engage in final design development, using the master plan and site design process, report writing, and oral and graphic presentations. Final presentations are open to the university and the community.
Prerequisite: LARC430.
Restriction: Must be in Landscape Architecture program.

LARC489 Special Topics in Landscape Architecture (1-4 Credits)
Credit according to time scheduled and organization of course. A lecture and/or studio course organized as an in-depth study of a selected specialization of landscape architecture not covered by existing courses.
Prerequisite: Permission of AGNR-Plant Science & Landscape Architecture department.
Repeatable to: 4 credits if content differs.

LARC499 Independent Studies in Landscape Architecture (1-4 Credits)
Independent studies in landscape architecture including field, studio or library research under the direction of a faculty member.
Restriction: Must be in Landscape Architecture program.
Repeatable to: 4 credits if content differs.