LARC - LANDSCAPE ARCHITECTURE

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.
Prerequisite: LARC321.
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; and must have completed or be concurrently enrolled in LARC420.
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 or equivalent; and LARC220 or LARC620.
Restriction: Permission of Landscape Architecture program; and must be in Landscape Architecture program; or permission of 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: Senior standing; and 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.
Prerequisite: 12 credits in LARC courses; or permission of AGNR-Plant Science & Landscape Architecture department.
Restriction: Must be in Landscape Architecture program; or must be in Plant Sciences program.
Repeatable to: 4 credits if content differs.

LARC620 Graphic Tools for Landscape Representation (3 Credits)
This course integrates digital and analog methods of communication and provides an introduction to computer tools and techniques commonly used in landscape architecture practice. Non-drafting computer tools will be used to orient basic digital image capture, manipulation, and presentation formatting. Also includes techniques and application of various media for graphic communication associated with landscape architecture.
Corequisite: LARC640.
Restriction: Permission of AGNR-Plant Science & Landscape Architecture department.

LARC640 Graduate Studio I (5 Credits)
Principles and techniques of design as applied to shaping the landscape; developing concepts in visual thinking, environmental awareness, and design intervention through studio exercises and projects.
Corequisite: LARC620.
Restriction: Permission of AGNR-Plant Science & Landscape Architecture department.

LARC641 Graduate Studio II (5 Credits)
Principles and techniques of site analysis, environmental design and site development for human settlements and interaction with natural systems. Will expand analytical skills through complex site design problems. Students will research, observe and apply low impact development and sustainable practices, become familiar with building and landscape types by investigating alternative arrangements on the land, and understand user needs and design for populations with a range of abilities. Will support LEED and sustainable practices and acknowledge the requirements of public health, safety, and welfare.
Prerequisite: LARC640.
Corequisite: LARC720.
Restriction: Permission of AGNR-Plant Science & Landscape Architecture department.

LARC642 Graduate Studio III (5 Credits)
A focus on the interaction of landscape science (hydrology, geology, etc.) with the necessities and mechanisms of human settlements (transportation, economics, etc.) emphasizing innovative and forward thinking solutions to urbanization and ecological problems. It will apply this knowledge to landscape analysis, recreational planning and design, and community development, emphasizing resource management, spatial organization, landscape character, and the physical and social structure of community services. This course will be required for both Trach 1 and Track 2 students.
Prerequisite: LARC641.
Corequisite: LARC670.
Restriction: Permission of AGNR-Plant Science & Landscape Architecture department.

LARC648 Graduate Studio IV (5 Credits)
An exploration that will focus on issues in landscape planning and design such as campus planning, urban housing and recreation, and neighborhood preservation, restoration and development. Projects will emphasize the value of responsible academic and civic landscapes, the place of historic resources in contemporary life, and innovative solutions for the integration of past and future landscapes.
Prerequisite: LARC721 and LARC642.
Restriction: Permission of AGNR-Plant Science & Landscape Architecture department.
Repeatable to: 6 credits if content differs.

LARC661 Seminar in Landscape Architecture (1 Credit)
Explore the multifaceted realm of the profession and discipline for landscape architecture. Students will explore a select topic or technology for the intersection of nature, culture, and human intervention in shaping the built environment. Through critical readings or exercise, participants learn critical technologies, analyze historical precedents, contemporary theories, and design and planning practices. Engaging discussions and collaborative projects or exercise empower students to synthesize knowledge, fostering a holistic perspective.
Restriction: Must be in Landscape Architecture program .

LARC663 Landscape and Garden History (3 Credits)
History of garden making and its evolution into design practice. Students will become familiar with narratives of garden art and landscape architecture through the study of selected key sites, designers, and visual written sources. A focus on gardens' past and afterlife; the nature of primary sources (both built and written), and how these can be evaluated and used. Primary sources will be drawn from several disciplines and include a wide array of genres: treatises, epistolary exchanges, tax returns, novels, poems, paintings and drawings.
Restriction: Permission of AGNR-Plant Science & Landscape Architecture department.

LARC670 Landscape Architecture Theory and Criticism (3 Credits)
Review and analysis of the body of literature concerning landscape architecture and relationships between humans and both natural and designed environments. Topics may include: rationalism, ethics, aesthetics, social and economic values, postmodernism, feminist, multiculturalism, ecological determinism, preservation/conservation, and sustainability and ecological design. Each week students will lead a debate and discussion on a theoretical issue based on the assigned readings for that week.
Restriction: Permission of AGNR-Plant Science & Landscape Architecture department.

LARC671 Landscape Architecture Research Methods (3 Credits)
Investigation and discussion of broad scope of research methods and the development of landscape design and planning research techniques and skills. The urban environment will be viewed primarily as a social and psychological environment, with concern for who uses these environments and the conflicts that can arise between user groups.
Restriction: Permission of AGNR-Plant Science & Landscape Architecture department.

LARC689 Special Topics in Landscape Architecture (1-6 Credits)
Special topics in landscape architecture
Repeatable to: 6 credits if content differs.

LARC699 Independent Studies in Landscape and Architecture (1-3 Credits)
Individual Instruction course.
Restriction: Permission of instructor.
Repeatable to: 6 credits.

LARC720 Environmental Analysis and Site Engineering (3 Credits)
Techniques for prediction of alterations in social and natural processes brought about by human use of the land; application of such assessments to environmental management; basic methods of landscape alteration, augmentation, and control including grading, drainage, road and trail design, and stormwater management.
Prerequisite: LARC640; or permission of AGNR-Plant Science & Landscape Architecture department.
Corequisite: LARC641.

LARC721 Landscape Construction Methods and Materials (3 Credits)
Basic methods of constructing landscapes and manipulating the appropriate plant and inorganic materials for the creation of ecologically sustainable environments for human use. An examination of the use, properties, and detailing of materials used in landscape construction.
Prerequisite: LARC720.
Restriction: Permission of AGNR-Plant Science & Landscape Architecture department.

LARC748 Advanced Special Topics Studio (5 Credits)
Advanced special topics comprehensive landscape architecture studio-exploration will focus on cultural, behavioral and ecological issues in the physical planning and design of urban landscapes.
Prerequisite: LARC648 and LARC671.
Restriction: Permission of AGNR-Plant Science & Landscape Architecture department.
Repeatable to: 10 credits if content differs.

LARC799 Master's Thesis Research (1-6 Credits)
Development of a terminal thesis on a problem in landscape architecture, designed to demonstrate comprehensive skills and knowledge achieved in the graduate program. The subject will be selected in consultation with an advisor and periodically reviewed with a committee headed by the advisor.
Prerequisite: LARC748.
Restriction: Permission of AGNR-Plant Science & Landscape Architecture department.
Repeatable to: 12 credits if content differs.