**Landscape Architecture (LA)**

**LA 172. Environmental Design II. 3 Credits.**
Introduction to design studio, with practice in representational media, techniques and skills exploring drawing, visual abstraction, visual literacy relating to environmental design problem-solving, visual resolution of form and proportion, and graphic communication.

**LA 191. Seminar. 1-3 Credits.**

**LA 192. Study Abroad. 1-15 Credits.**

**LA 194. Individual Study. 1-5 Credits.**

**LA 199. Special Topics. 1-5 Credits.**

**LA 231. Digital Media + Methods Technology. 3 Credits.**
Introductory study of digital technology applications and processes within Landscape Architecture. Course focus towards digital creation and production methods including the introduction of common printing and fabrication devices. Prereq: Environmental Design or Architecture major.

**LA 271. Landform + Spacemaking Design Studio. 6 Credits.**
A sequence of hands-on small-scale design exercises to enable students to appreciate the media of the landscape - landform, plants, water, and structure- as an evocative component in the landscape design vocabulary of problem-solving, concept formation, site inventory and analysis, and programming. Prereq: Environmental Design major or minor.

**LA 291. Seminar. 1-3 Credits.**

**LA 292. Global Practicum: Study Abroad. 1-15 Credits.**
Pre-Arranged study at accredited foreign institutions (study abroad), domestic institutions (National Student Exchange) or on approved study abroad programs. Pre-requisite: Sophomore standing and prior approval by International Student and Study Abroad Services and major department. Graded ‘P’ or ‘F’ (Undergraduate), or ‘S’ or ‘U’ (Graduate).

**LA 294. Individual Study. 1-5 Credits.**

**LA 299. Special Topics. 1-5 Credits.**

**LA 321. History of Landscape Architecture. 4 Credits.**
Survey of landscape design from prehistoric civilizations, Rome, the Renaissance, Asian landscapes, the birth of landscape architecture, and contemporary design movements. Emphasis on analyzing historic landscapes as a problem-solving method.

**LA 332. Digital Drawing + Representation Technology. 3 Credits.**
Intermediate exploration into computer applications and digital design techniques as related to Landscape Architecture. Course emphasis on digital drawing methods, modeling processes and professional presentation practices. Prereq: LA 231.

**LA 341. Site Development and Detailing I. 4 Credits.**
Intermediate investigations into site planning and design development with a primary focus on site design integration with the technically-related concepts. Prereq for LA majors: Second-year standing. Prereq for ARCH majors: ARCH 272.

**LA 374. Park + Open Space Design Studio. 6 Credits.**
Design and concept development strategies in the context of both urban and rural open space systems, and behavioral configurations. Intermediate problem solving through two and three-dimensional graphics techniques; continued oral and written communication skills. Prereq: Environmental Design major, LA 271.

**LA 379. Global Seminar. 1-6 Credits.**
NDSU instructed experience or field study in a foreign country. Conducted in English for residence credit. Pre-requisite: Prior approval by International Student and Study Abroad Services and major department. May be repeated. Standard Grading.

**LA 391. Seminar. 1-3 Credits.**

**LA 392. Global Practicum: Study Abroad. 1-15 Credits.**
Pre-Arranged study at accredited foreign institutions (study abroad), domestic institutions (National Student Exchange) or on approved study abroad programs. Pre-requisite: Sophomore standing and prior approval by International Student and Study Abroad Services and major department. Graded ‘P’ or ‘F’ (Undergraduate), or ‘S’ or ‘U’ (Graduate).

**LA 394. Individual Study. 1-5 Credits.**

**LA 396. Field Experience. 1-15 Credits.**

**LA 399. Special Topics. 1-5 Credits.**

**LA 421. Planting Design: Theory + Research. 3 Credits.**
This course broadens applicable knowledge of an array of approaches in planting design using examples of iconic contemporary landscapes. This course is a blend of lectures, readings, discussions, and research that introduce history, theory, and methods of professional planting design. This is a spatial and ecological study of planting design at various scales and ecosystems. (Also offered for graduate credit - see LA 621.)
LA 431. Advanced Digital Applications + Analysis Technology. 3 Credits.
Advanced investigation into technology software and methods as applied towards the profession of Landscape Architecture. Course emphasis in complex computer modeling, analytical methods, and innovative design software. Prereq: LA 332. (Also offered for graduate credit - see LA 631.).

LA 442. Advanced Grading + Drainage. 4 Credits.
Intermediate exploration into site engineering and construction practices within Landscape Architecture. Course emphasis towards proficient site grading, stormwater management calculations, and design communication practices. Prereq: LA 341.

LA 444. Advanced Construction Drawing + Documentation. 4 Credits.
An advanced exploration into the materials, methods, and applications of construction detailing within Landscape Architecture. Course emphasis in the development of technical details, preparation of construction drawings, and use of computer-aided software. Prereq: LA 442. (Also offered for graduate credit - see LA 644.).

LA 471. Site Elements + Composition Design Studio. 6 Credits.
Intermediate exploration of research methods and site scale design development approaches as related to Landscape Architecture. Studio focus on project programming, site development, design detailing, and communication techniques. Course includes a field trip. Prereq: LA major, LA 372.

LA 472. Advanced Community Planning + Design Studio. 6 Credits.
Design strategies based on the complex behavioral interactions of people with the restorative components of the landscape environment to address contemporary life challenges for promoting people’s health and ensuring well-being in the built environment for site-specific local and accessible projects at the community and neighborhood-scale such as mixed-use housing and commercial, elderly communities, university campuses. Prereq: LA major; LA 471.

LA 475. City-Shaping Design Studio. 6 Credits.
Regional to neighborhood scale investigation of urban design theories, systems, and planning practices as related to Landscape Architecture. Focus on streetscapes and bicycle and pedestrian facility analysis and problem-solving strategies through written, graphical, and modeling studies. Prereq: LA 472.

LA 476. Ecological Design Studio. 6 Credits.
Regional to site-scale study exploring the ecological processes and cultural systems within Landscape Architecture. Studio emphasis towards the application of the full design development process, from problem definition to construction detailing, as a comprehensive advanced-level project.

LA 491. Seminar. 1-5 Credits.
LA 492. Global Practicum: Study Abroad. 1-15 Credits.
Pre-Arranged study at accredited foreign institutions (study abroad), domestic institutions (National Student Exchange) or on approved study abroad programs. Pre-requisite: Sophomore standing and prior approval by International Student and Study Abroad Services and major department. Graded 'P' or 'F' (Undergraduate), or 'S' or 'U' (Graduate).

LA 494. Individual Study. 1-5 Credits.
LA 496. Field Experience. 1-15 Credits.
LA 563. Programming and Thesis Preparation. 3 Credits.
Discussion and application of a comprehensive design process for production of the design thesis. Emphasis on preparing a design program. Prereq: LA 472.

LA 571. Environmental Planning Studio. 6 Credits.

LA 572. Design Thesis. 8 Credits.
Capstone opportunity as a culmination of design education. Student generated design topic is fully developed and realized from master planning through design development, detailing, and documentation. Prereq: LA 563, LA 571.

LA 581. Professional Practice. 3 Credits.
Study of contemporary architectural practice covering professional development, firm organization, and project management within the context of the ethical, legal, and regulatory environment. Cross-listed with ARCH 681. Prereq: LA 472.

LA 590. Seminar. 1-5 Credits.
LA 593. Individual Study/Tutorial. 1-5 Credits.
LA 596. Special Topics. 1-5 Credits.
LA 621. Planting Design: Theory + Research. 3 Credits.
This course broadens applicable knowledge of an array of approaches in planting design using examples of iconic contemporary landscapes. This course is a blend of lectures, readings, discussions, and research that introduce history, theory, and methods of professional planting design. This is a spatial and ecological study of planting design at various scales and ecosystems. (Also offered for undergraduate credit - see LA 421.).

LA 631. Advanced Digital Applications + Analysis Technology. 3 Credits.
Advanced investigation into technology software and methods as applied towards the profession of Landscape Architecture. Course emphasis in complex computer modeling, analytical methods, and innovative design software. (Also offered for undergraduate credit - see LA 431.).
LA 644. Advanced Construction Drawings + Documentation. 4 Credits.
An advanced exploration into the materials, methods, and applications of construction detailing within Landscape Architecture. Course emphasis in the development of technical details, preparation of construction drawings, and use of computer-aided software. (Also offered for undergraduate credit - LA 444.).

LA 722. Landscape Theory, Research, + Scholarly Methods. 3 Credits.
Discussion on how landscape architectural discourse enables critical thinking, enhances synthetic design skills, and interweaves research and design processes. Emphasis on research methodologies and writing to produce the design thesis. Prereq: LA major or minor.

LA 763. Landscape Architecture Thesis Research & Programming. 3 Credits.
An application of research methodologies and the research required to complete a design thesis in a first professional degree program in Architecture at the graduate level. Completion of a Thesis Proposal and a Thesis Research document in preparation for the Design Thesis Studio to follow.

LA 771. Performance Based Design Studio. 6 Credits.
Design of sustainable sites and quality communities with themes that promote the approach of parametric and data driven design in landscape architecture. Strategies, technologies, metrics tools, and practices regarding evaluating site performances will be introduced. Prereq: LA 472, LA 441.

LA 772. Landscape Architecture Graduate Thesis. 6 Credits.
Student generated design solution assimilating the theoretical, social, environmental, technical and ethical practices of Landscape Architecture. Advanced exploration into research/analysis, design development and presentation methods as a culmination of graduate education. Prereq: LA 771.

LA 781. Professional Practice. 3 Credits.
Study of contemporary landscape architectural practice covering professional development, firm organization, project management, SITES 2.0 within the context of the ethical, legal, sustainable, and regulatory environment. Prereq: LA 472.

LA 789. Professional Topics in Landscape Architecture. 3 Credits.
Various topics related to theoretical or methodological aspects of landscape architecture as a professional discipline. May be repeated. Prereq: Students must be Architecture or Landscape Architecture majors only.