

LAA 3421
Landscape Construction 2
UF Department of Landscape Architecture
Fall 2024

SYLLABUS

I. General Information

CLASS MEETINGS: 100% In-Person, Tuesday & Thursday.
Tuesday: Periods 2 - 5 (8:30 am – 12:35 pm)
Thursday: Periods 2 - 5 (8:30 am – 12:35 pm)

LOCATION: ARCH 322
CREDITS: 5 Credits

INSTRUCTOR: Dan Farrah
Office Hours: By appointment via email or as arranged during class
dfarrah@ufl.edu

COURSE DESCRIPTION

This course in Landscape Construction integrates the theories and principles of landscape design with structural design, selection and specification of materials, irrigation design, material take-offs, and cost estimating.

COURSE OBJECTIVES

- Objective 1: To introduce and facilitate a working knowledge of structural systems common to landscape architecture (freestanding and retaining walls, non-habitable wood construction)
- Objective 2: To develop skills of order, discipline, precision, and accuracy in construction documents
- Objective 3: To understand the proper use of construction materials commonly used to implement landscape architectural design and the related connections with other materials
- Objective 4: To understand the interrelationship of construction and design and the development of skills of organization, precision, and accuracy in construction documentation.
- Objective 5: To understand and apply the principles of irrigation design including water conservation techniques and technologies

PREREQUISITE KNOWLEDGE AND SKILLS

Students are expected to have a foundational knowledge of the design process, a working knowledge of AutoCAD, the ability to develop digital and hand graphics, and the skills developed in the prerequisite course.

REQUIRED READINGS AND WORKS

Sauter, David: Landscape Construction is the primary text used for this course.

Materials and Supplies Fees: see schedule of courses.

Drafting supplies required of all studio courses including drafting paper and color pencils or markers

The following software is required:

AutoCAD 2024

MS Office (Word, Excel, and PowerPoint)

Adobe Acrobat Reader or other PDF reading software

II. Student Learning Outcomes (SLOs)

Each student in the LA program is expected to understand and apply the design process and continuously develop:

- a range of approaches (creative, cultural, and/or historic) to create spatial and temporal landscape compositions,
- multiple design alternatives before synthesizing ideas into a defensible plan and
- the ability to thoughtfully provide, receive, and respond to feedback and critique as part of iterative design decision making.

At the end of this course, students will be expected to have achieved the developing course learning objectives (CLOs) under the program SLO headings as follows:

CONTENT
SLO 1 – Integrate concepts from the general body of knowledge of the profession of landscape architecture in design decision-making.
CLO 1 - Integrate the history and theories of landscape architecture to planning and design decisions in the built and natural environment with consideration for human and ecological contexts.
CLO 2 - Demonstrate an understanding of basic site design and planning principles
CLO 3 - Demonstrate and evaluate personal effectiveness as a leader and collaborator on multidisciplinary team
SLO 2 - Apply core professional landscape architecture skills in design decision-making.
CLO 4 - Apply the design process across multiple scales and multiple contexts.
CLO 5 - Apply knowledge of natural, physical, and social sciences to the development of comprehensive site-specific design solutions.
CLO 6 - Analyze site characteristics, including topography, climate, vegetation, and existing structures, to apply the appropriate organization of space and forms within the landscape.
SLO 3 - Apply ethical understanding to design decision-making.

CLO 7 - Examine the legal responsibilities and the role of landscape architecture in preserving and safeguarding human health, safety, and the public welfare through site design and planning.

CRITICAL THINKING

SLO 4 – Combine and analyze information from multiple sources to support design decision-making.

CLO 8 - Implement ideas that are grounded in the evaluation of data and the natural, physical, and social sciences to make informed design decisions that address and balance aesthetic, environmental, and social issues and goals.

CLO 9 - Evaluate spatial data relative to the physical, biotic, climatic and cultural context of projects and integrate findings to validate design decision making.

CLO 10 - Synthesize objective and subjective information from multiple sources and apply ecological principles to support design decision making.

CLO 11 – Analyze issues to understand the interrelationship between ecosystems, climate, and humans and evaluate the effectiveness of design solutions to mitigate climate and ecosystem harm.

CLO 12 – Evaluate the suitability of a program to multiple sites and prioritization of a site based on the defined program.

COMMUNICATION

SLO 5 – Produce professional visual, oral, and written communications.

CLO 13 – Articulate the criteria and methodology used in an evaluation of a site or program.

CLO 14 – Express ideas concretely through oral and visual communication.

III. Graded Work

DESCRIPTION OF GRADED WORK

Module 0: Conceptual Design (10 % of total grade)

This topic will focus on a quick conceptual design for the project site. This design will serve as the base for all other modules for the course and the final project.

Modules 1 – 4: Landscape Components (40% of total grade; each module is 15% of total grade)

Each of these modules will focus on a different topic in landscape construction.

Module 1: Landscape Paving

Module 2: Wood Landscape Structures

Module 3: Fences & Walls

Module 4: Irrigation

A material sheet will be assigned for each of the modules that includes pictures, sections/elevations, and construction details.

Module 5: Construction Document Set (30 % of total grade)

This module includes final design development, materials plan, layout plan, and cost estimates.

The graded work assesses the course learning objectives as follows:

Assessment	LAA 3421 - Course Learning Objectives (CLOs)													
	SLO 1			SLO 2			SLO 3	SLO 4				SLO 5		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Module 0: Conceptual Design	•	•			•	•		•						•
Modules 1 - 4: Landscape Components	•	•			•	•		•						•
Module 5: Construction Set	•				•		•							

GRADING SCALE

For information on how UF assigns grade points, visit: <https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/>

A	93 – 100%		C	73 – 76%
A-	90 – 92%		C-	70 – 72%
B+	87 – 89%		D+	67 – 69%
B	83 – 86%		D	63 – 66%
B-	80 – 82%		D-	60 – 62%
C+	77 – 79%		E	<60

As per department policy, Landscape Architecture Majors must receive a C or better to move forward. Any grade lower than a C will require that the course be taken over again.

All student work may be retained and used by the Department of Landscape Architecture. Digital copies of student work for this course must be turned in at the completion of each assignment. Please follow the directions given by the instructor as to how they will be submitted (e.g., Canvas, PDF, word file, etc.). If an assignment is required to be scanned, it must be scanned; photographs of assignments are not acceptable. If a multipage PDF is requested, do NOT submit each page as a separate PDF. It must be submitted as one file. Point deductions on the assignment may result from not following submittal directions or providing incorrect submittal or file formats.

Studio projects are expected to be submitted by the specified due date. If no prior arrangement is made with the instructor for a late submittal, the maximum points that the student can earn for the project will be reduced by 2% for every day it is late. Projects are out of 100 points. Therefore, if a 100-point project is five days late, the maximum points that the student can receive for the project is 90 points (i.e., 90% of the total grade). If the student receives the equivalent grade of an 85% on the project, the student would receive 76.5 points (85% of 90 points). Projects that are ten days late or more will be

graded out of 80% of the total points of the assignment. Late projects will be accepted on or before the last day of class. A grade of zero will be given until the project has been turned in.

Timely submission of exercises is included as part of the activity rubric.

A due date and time will be provided for every assignment, and an assignment is considered a day late if it is submitted after the specified date and time. The deadline is a hard deadline; no exceptions will be made for scanning, computer related issues, uploading, et cetera. Assignments are considered an additional day late every 24 hours from the due date.

Assignment submissions may be updated and re-uploaded to the Canvas site as needed prior to a submittal deadline. Once the deadline has passed for an assignment and a submission has been made, additional submittals are not guaranteed to be accepted. If the updated, late submittal is accepted, the entire submittal will be considered late and points will be deducted based on the date of the late submission. In addition, it is the student’s responsibility to ensure that a submission is complete; missing items will not be given credit.

IV. Annotated Weekly Schedule

Week	Topics, Homework, and Assignments
Week 1	<ul style="list-style-type: none"> • Topic: Introduction to course, project introduction • Summary: This week students will be introduced to construction documents and will develop a conceptual design to use as the basis for a completed set. (CLO# 1,2,5,6,8,14) • Required Readings/Works: none • Assignment: Conceptual design (see Canvas for exercise requirements and deadlines) (CLO# 1,2,5,6,8,14)
Week 2	<ul style="list-style-type: none"> • Topic: Conceptual design • Summary: This week students will continue to develop a conceptual design to use as the basis for a completed set. (CLO# 1,2,5,6,8,14) • Required Readings/Works: none • Assignment: Conceptual design (see Canvas for exercise requirements and deadlines) (CLO# 1,2,5,6,8,14)

Week 3	<ul style="list-style-type: none"> • Topic: design / build Lego project • Summary: Students will learn how to create a small construction set based on a Lego creation. This will use skills such as dimensions, plans, sections / elevations to convert the 3D Lego build into 2D drawings. (CLO# 2,14) • Required Readings/Works: Sauter: none • Assignment: none
Week 4	<ul style="list-style-type: none"> • Topic: Landscape Paving • Summary: Students will learn about typical landscape paving materials including concrete, brick, stone, and other unit pavers. Typical uses, construction methods, and design considerations will be explored. (CLO# 1,2,5,6,8,14) • Required Readings/Works: none • Assignment: Materials & Structures Assignment: Paving (see Canvas for exercise requirements and deadlines) (CLO# 1,2,5,6,8,14)
Week 5	<ul style="list-style-type: none"> • Topic: Landscape Paving • Summary: Students will learn about typical landscape paving materials including concrete, brick, stone, and other unit pavers. Typical uses, construction methods, and design considerations will be explored. (CLO# 1,2,5,6,8,14) • Required Readings/Works: none • Assignment: Materials & Structures Assignment: Paving (see Canvas for exercise requirements and deadlines) (CLO# 1,2,5,6,8,14)
Week 6	<ul style="list-style-type: none"> • Topic: Wood Landscape Structures • Summary: Students will learn about wood structures, material selection, and common fasteners. Typical uses, construction methods, and design considerations will be explored. (CLO# 1,2,5,6,8,14) • Required Readings/Works: none • Assignment: Materials & Structures Assignment: Wood (see Canvas for exercise requirements and deadlines) (CLO# 1,2,5,6,8,14)
Week 7	<ul style="list-style-type: none"> • Topic: Wood Landscape Structures • Summary: Students will learn about wood structures, material selection, and common fasteners. Typical uses, construction methods, and design considerations will be explored. (CLO# 1,2,5,6,8,14) • Required Readings/Works: none • Assignment: Materials & Structures Assignment: Wood (see Canvas for exercise requirements and deadlines) (CLO# 1,2,5,6,8,14)
Week 8	Topic: Fences & Walls

	<p>Summary: Students will explore typical free-standing and retaining walls used in landscape architecture projects. Fence and wall materials covered include wood, chain link, metal, and masonry. (CLO# 1,2,5,6,8,14)</p> <p>Required Readings/Works: none</p> <p>Assignment: Materials & Structures Assignment: Fences & Walls (see Canvas for exercise requirements and deadlines) (CLO# 1,2,5,6,8,14)</p>
Week 9	<ul style="list-style-type: none"> • Topic: Fences & Walls • Summary: Students will explore typical free-standing and retaining walls used in landscape architecture projects. Fence and wall materials covered include wood, chain link, metal, and masonry. (CLO# 1,2,5,6,8,14) • Required Readings/Works: none <ul style="list-style-type: none"> • Assignment: Materials & Structures Assignment: Fences & Walls (see Canvas for exercise requirements and deadlines) (CLO# 1,2,5,6,8,14)
Week 10	<ul style="list-style-type: none"> • Topic: Layout Plans • Summary: Students will learn about layout and dimensioning and how it is implemented in a construction document set. • Required Readings/Works: none • Assignment: Layout plan (see Canvas for exercise requirements and deadlines) (CLO# 1,2,5,6,8,14)
Week 11	<ul style="list-style-type: none"> • Topic: Layout Plans • Summary: Students will learn about layout and dimensioning and how it is implemented in a construction document set. • Required Readings/Works: none • Assignment: Layout plan (see Canvas for exercise requirements and deadlines) (CLO# 1,2,5,6,8,14)
Week 12	<ul style="list-style-type: none"> • Topic: Bid Documents • Summary: This week, students will be introduced to bid documents including cost estimates, specifications, change orders, submittals, and other aspects of construction administration. • Required Readings/Works: none • Assignment: In-class design/build assignment (see Canvas for exercise requirements and deadlines) (CLO# 1,2,5,6,8,14)
Week 13	<ul style="list-style-type: none"> • Topic: Construction Documents • Summary: This week, students will learn about the components of a complete construction set including sheet composition and order, references, title blocks, and other elements. • Required Readings/Works: none

	<ul style="list-style-type: none"> • Assignment: Materials plan and details assignment (see Canvas for exercise requirements and deadlines) (CLO# 1,2,5,6,8,14)
Week 14	<ul style="list-style-type: none"> • Topic: Irrigation • Summary: Students will learn the basics of irrigation design including layout, irrigation equipment, and pipe and valve sizing. • Required Readings/Works: none • Assignment: Materials & Structures Assignment: Irrigation (see Canvas for exercise requirements and deadlines) (CLO# 1,2,5,6,8,14)
Week 15	<ul style="list-style-type: none"> • Topic: Thanksgiving Break
Week 16	<ul style="list-style-type: none"> • Topic: Design perspectives • Summary: Students will learn common oversights by landscape architects on projects and will consider projects from multiple users' perspectives. • Required Readings/Works: none • Assignment: none

VI. Required Policies

ATTENDANCE POLICY

Attendance is mandatory. Students are expected to arrive on time. Acceptable reasons for excused absences are as follows:

- o Illness
- o Serious family emergency
- o Special curricular requirements (e.g., judging trips, field trips, professional conferences)
- o Military obligation
- o Severe weather conditions
- o Religious holidays
- o Participation in official university activities such as music performances, athletic competition, or debate.
- o Court-imposed legal obligations (e.g., jury duty or subpoena)

If necessary, students shall be permitted a reasonable amount of time to make up material or activities covered in their excused absence; however, absences do not affect project deadline dates unless prior arrangements have been made.

Studio work time and desk critiques are essential to the learning experience; therefore, attendance is expected for the entire class time. During the studio (critique) portion of the course, it is expected that all students will be in attendance for the entire class and working on LAA 4356 assignments. Arriving late to class, leaving during class for extended durations, or leaving early from class may be considered being absent from class.

The instructor will not provide the student notifications regarding absences and tardiness. You may email the instructor should you have any questions regarding your attendance. Please schedule an office

meeting for any discussions regarding attendance, tardiness, and late assignments. Do not discuss these issues with the instructor during studio time.

Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at:

<https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>

STUDENTS REQUIRING ACCOMMODATION

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center by visiting <https://disability.ufl.edu/students/get-started/>. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

UF EVALUATIONS PROCESS

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at <https://gatorevals.ua.ufl.edu/students/>. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <https://ufl.bluera.com/ufl/>. Summaries of course evaluation results are available to students at <https://gatorevals.ua.ufl.edu/public-results/>.

UNIVERSITY HONESTY POLICY

UF students are bound by The Honor Pledge which states, “We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: “On my honor, I have neither given nor received unauthorized aid in doing this assignment.” The Honor Code (<https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/>) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class.

COUNSELING AND WELLNESS CENTER

Contact information for the Counseling and Wellness Center: <http://www.counseling.ufl.edu/>, 392-1575; and the University Police Department: 392-1111 or 9-1-1 for emergencies.

COURSE MATERIALS AND IN-CLASS RECORDINGS

The digital course materials provided on Canvas (e.g., lectures, assignments, quizzes, et cetera) are provided for personal study and are not intended for distribution by electronic or other means. Further distribution or posting on other websites is not permitted.

Our class sessions may be audio visually recorded. Students who participate with their camera engaged or utilize a profile image are agreeing to have their video or image recorded. If you are unwilling to consent to have your profile or video image recorded, be sure to keep your camera off and do not use a profile image. Likewise, students who participate orally are agreeing to have their voices recorded.

Students are allowed to record video or audio of class lectures. However, the purposes for which these recordings may be used are strictly controlled. The only allowable purposes are (1) for personal educational use, (2) in connection with a complaint to the university, or (3) as evidence in, or in preparation for, a criminal or civil proceeding. All other purposes are prohibited. Specifically, students may not publish recorded lectures without the written consent of the instructor.

A “class lecture” is an educational presentation intended to inform or teach enrolled students about a particular subject, including any instructor-led discussions that form part of the presentation, and delivered by any instructor hired or appointed by the University, or by a guest instructor, as part of a University of Florida course. A class lecture does not include lab sessions, student presentations, clinical presentations such as patient history, academic exercises involving solely student participation, assessments (quizzes, tests, exams), field trips, private conversations between students in the class or between a student and the faculty or lecturer during a class session.

Publication without permission of the instructor is prohibited. To “publish” means to share, transmit, circulate, distribute, or provide access to a recording, regardless of format or medium, to another person (or persons), including but not limited to another student within the same class section. Additionally, a recording, or transcript of a recording, is considered published if it is posted on or uploaded to, in whole or in part, any media platform, including but not limited to social media, book, magazine, newspaper, leaflet, or third party note/tutoring services. A student who publishes a recording without written consent may be subject to a civil cause of action instituted by a person injured by the publication and/or discipline under UF Regulation 4.040 Student Honor Code and Student Conduct Code.