LAA 3420 Landscape Construction 1 UF Department of Landscape Architecture Spring 2025

## **SYLLABUS**

## I. General Information

CLASS MEETINGS:	100% In-Person, Tuesday & Thursday. Tuesday: Periods 6 - 9 (12:50 pm – 4:55 pm) Thursday: Periods 6 - 9 (12:50 pm – 4:55 pm)				
LOCATION: CREDITS:	ARCH 322 5 Credits				
INSTRUCTOR:	Dan Farrah				

ISTRUCTOR: Dan Farrah Office Hours: By appointment via email or as arranged during class <u>dfarrah@ufl.edu</u>

#### **COURSE DESCRIPTION**

This course is designed to provide students with the skills needed to develop grading solutions that incorporate drainage, aesthetics, and best management practices. This course is composed of lectures, in-class assignments, field exercises, and 2 projects and is divided into 3 main modules: visualization, vignettes, and synthesis. This course will primarily cover basic grading techniques including how to read contour maps, basic surveying principles, preparation for the licensing exam, and grading a site.

#### **COURSE OBJECTIVES**

- Develop grading and drainage plans that are part of a construction set
- Be able to effectively read contour maps and visualize landforms
- Understand basic principles of surveying
- Develop the ability to create landforms as an integral part of the design
- Create contour maps from survey data
- Develop skills needed for the LARE
- Grade the land with regards to water collection, erosion, sedimentation, and preservation of existing vegetation

#### 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**

The required books are available on the UF Library website for free.

Sharky, Bruce. *Landscape Site Grading Principles: Grading with Design in Mind*. Hoboken, New Jersey: John Wiley & Sons, Inc., 2015. Print.

Aymer, Valerie. *Landscape Grading: A Study Guide for the LARE*. Second edition. Abingdon, Oxon ; Routledge, 2020. Print.

Materials and Supplies Fees: see schedule of courses. Additional supplies for assignments are listed in individual assignment instructions.

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

The following software is required: AutoCAD 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 1: Visualization (20 % of total grade)

This module will focus on understanding the 2-dimensional representation of landforms. The ability to read grading plans and understand their relationship to real world topography is the foundation necessary for success in using grading effectively.

#### Module 2: Vignettes (30 % of total grade)

This module is composed of vignettes representing common site elements and how they are integrated into the existing site topography. Elements include building pads, tennis courts, sidewalks, parking lots, walls, steps, and catch basins.

#### Module 3: Synthesis (40% of total grade)

Module 3 combines the previously developed skills to develop creative design solutions for several project sites.

#### Attendance and Participation (10% of total grade)

Attendance and active participation in this course are essential. This course covers a large amount of material with each new skill building on the previous. Students are expected to participate for the duration of the class. A course time sheet detailing the number of hours worked on each specific task will be due at the end of each class period and will be used to determine the attendance and participation grade.

The graded work assesses the course learning objectives as follows.														
	LAA 3420 - Course Learning Objectives (CLOs)													
Assessment	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 1: Visualization		•	•			•								•
Module 2: Vignettes						•	•							•
Modules 3: Synthesis	•	•		•	•	•	•	٠	•	•	•	•		•

#### The graded work assesses the course learning objectives as follows:

#### **GRADING SCALE**

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

А	93 – 100%	С	73 – 76%
A-	90 – 92%	C-	70 – 72%
B+	87 – 89%	D+	67 – 69%
В	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. <u>Point deductions on the assignment may result from not following submittal directions or providing incorrect submittal or file formats.</u>

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 5% for every day it is late. Projects are out of 100 points. Therefore, if a 100-point project is one day late, the maximum points that the student can receive for the project is 95 points (i.e., 95% of the total grade). If the student receives the equivalent grade of 85% on the project, the student would receive 81 points (85% of 95 points).

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.

Week	Topics, Homework, and Assignments
Week 1	<ul> <li>Topic: Introduction to course and basic grading concepts</li> <li>Summary: This week students will be introduced to basic grading concepts and will complete exercises to aid in visualization of 2d representations of landforms. (CLO# 6, 14)</li> <li>Required Readings/Works: Sharky chapters 1, 2, 7, 9</li> <li>Assignment 1: Contours in the field (see Canvas for exercise requirements and deadlines) (CLO# 2, 3, 6, 14)</li> </ul>
Week 2	<ul> <li>Topic: Visualization</li> <li>Summary: This week students will create common landforms using clay and document with AutoCAD plans, sections, and a model. (CLO# 2, 3, 6, 14)</li> <li>Required Readings/Works: Sharky chapters 8, 11</li> <li>Assignment 2: Clay models (see Canvas for exercise requirements and deadlines) (CLO# 2, 6, 14)</li> </ul>

# **IV. Annotated Weekly Schedule**

Week 3	<ul> <li>Topic: Surveying: Spot elevations and slope</li> <li>Summary: Students will learn how to create contour plans using spot elevations. Students will also learn how to visualize and calculate slope. (CLO# 3, 6, 14)</li> <li>Required Readings/Works: Sharky chapter 10, Aymer p.4-5</li> <li>Assignment 3: Spot elevations and interpolation</li> <li>Assignment 4: Slope</li> </ul>
Week 4	<ul> <li>Topic: Surveying: Field survey</li> <li>Summary: Students will measure spot elevations for a site on campus and develop a contour map and a model. (CLO# 3, 6, 14)</li> <li>Required Readings/Works: none</li> <li>Assignment: Materials &amp; Structures Assignment: Paving (see Canvas for exercise requirements and deadlines) (CLO# 3, 6, 14)</li> </ul>
Week 5	<ul> <li>Topic: Vignettes</li> <li>Summary: Students will complete grading vignettes for common landscape elements. (CLO# 5, 6, 14)</li> <li>Required Readings/Works: Sharky chapter 12, 13, 14 p. 239-244</li> <li>Assignment 6: Vignettes (see Canvas for exercise requirements and deadlines) (CLO# 5, 6, 14)</li> </ul>
Week 6	<ul> <li>Topic: Vignettes</li> <li>Summary: Students will complete grading vignettes for common landscape elements. (CLO# 5, 6, 14)</li> <li>Required Readings/Works: none</li> <li>Assignment 6: Vignettes (see Canvas for exercise requirements and deadlines) (CLO# 5, 6, 14)</li> </ul>
Week 7	<ul> <li>Topic: Storm and surface drainage</li> <li>Summary: Students will learn about common drainage issues and solutions. (CLO# 1,2,5,6,8,14)</li> <li>Required Readings/Works: Sharky chapter 14</li> <li>Assignment 7: Drainage (see Canvas for exercise requirements and deadlines) (CLO# 5, 6, 14)</li> </ul>
Week 8	<ul> <li>Topic: Cut and fill</li> <li>Summary: Students will learn how to calculate and balance cut and fill on a site. (CLO# 5, 6, 14)</li> <li>Required Readings/Works: Sharky chapter 15 p.257-261, Untermann p.147</li> <li>Assignment 8: Cut and Fill (see Canvas for exercise requirements and deadlines) (CLO# 5, 6, 14)</li> </ul>

Week 9	<ul> <li>Topic: Synthesis</li> <li>Summary: Students will use the skills developed throughout the semester to design a site using landforms. (CLO# 1, 2, 5, 6, 7, 8, 9, 10, 11, 12, 14)</li> <li>Required Readings/Works: none</li> <li>Assignment 9: Creative grading project. (see Canvas for exercise requirements and deadlines) (CLO# 1, 2, 5, 6, 7, 8, 9, 10, 11, 12, 14)</li> </ul>
Week 10	<ul> <li>Topic: Synthesis</li> <li>Summary: Students will use the skills developed throughout the semester to design a site using landforms. (CLO# 1, 2, 5, 6, 7, 8, 9, 10, 11, 12, 14)</li> <li>Required Readings/Works: none</li> <li>Assignment 9: Creative grading project. (see Canvas for exercise requirements and deadlines) (CLO# 1, 2, 5, 6, 7, 8, 9, 10, 11, 12, 14)</li> </ul>
Week 11	<ul> <li>Topic: Synthesis</li> <li>Summary: Students will develop a comprehensive grading plan.</li> <li>Required Readings/Works: none</li> <li>Assignment 10: Final Project (see Canvas for exercise requirements and deadlines) (CLO# 1, 2, 5, 6, 7, 8, 9, 10, 11, 12, 14)</li> </ul>
Week 12	<ul> <li>Topic: Synthesis</li> <li>Summary: Students will develop a comprehensive grading plan.</li> <li>Required Readings/Works: none</li> <li>Assignment 10: Final Project (see Canvas for exercise requirements and deadlines) (CLO# 1, 2, 5, 6, 7, 8, 9, 10, 11, 12, 14)</li> </ul>
Week 13	<ul> <li>Topic: Synthesis</li> <li>Summary: Students will develop a comprehensive grading plan.</li> <li>Required Readings/Works: none</li> <li>Assignment 10: Final Project (see Canvas for exercise requirements and deadlines) (CLO# 1, 2, 5, 6, 7, 8, 9, 10, 11, 12, 14)</li> </ul>
Week 14	<ul> <li>Topic: Synthesis</li> <li>Summary: Students will develop a comprehensive grading plan.</li> <li>Required Readings/Works: none</li> <li>Assignment 10: Final Project (see Canvas for exercise requirements and deadlines) (CLO# 1, 2, 5, 6, 7, 8, 9, 10, 11, 12, 14)</li> </ul>

# **VI. Required Policies**

### ATTENDANCE POLICY

<u>Attendance is mandatory.</u> 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 3420 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: <a href="https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx">https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx</a>

## 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 <a href="https://disability.ufl.edu/students/get-started/">https://disability.ufl.edu/students/get-started/</a>. 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 <a href="https://gatorevals.aa.ufl.edu/students/">https://gatorevals.aa.ufl.edu/students/</a>. 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 <u>https://ufl.bluera.com/ufl/</u>. Summaries of course evaluation results are available to students at <u>https://gatorevals.aa.ufl.edu/public-results/</u>.

#### 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

(<u>https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/</u>) 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: <u>http://www.counseling.ufl.edu/</u>, 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.