## LAA 2379C

Design Communications 2
UF Department of Landscape Architecture
Spring 2024

## **SYLLABUS**

## I. General Information

CLASS MEETINGS: 100% In-Person: Mondays, Wednesdays, and Fridays

Periods 3-4 (9:35 AM – 11:30 AM)

LOCATION: Architecture 116

CREDITS: 4 Credits

INSTRUCTOR: Daniel P. Manley, PLA, ASLA

**ARC 431E** 

Office Hours: Mondays, 12:30 PM – 2:30 PM or by appointment

dpmanley@ufl.edu

TA: Bryce Donner

Brycedonner@ufl.edu

Office Hours: Mondays, 12:30 PM - 2:30 PM or by appointment

#### **COURSE DESCRIPTION**

This course advances techniques introduced in Design Communications 1 by developing student skills in digital visualization and communication strategies. The course introduces measured drawings and 2D digital representation techniques through AutoCAD. Students then progress to working with Rhino 3D modeling and digital fabrication. In addition to learning individual software programs, this course emphasizes the integration between various software. Students will work fluently between hand-sketching, AutoCAD, Adobe Creative Suite, Rhino 3D and digital fabrication.

## PREREQUISITE KNOWLEDGE AND SKILLS

LAA2376C - Design Communications 1

## **REQUIRED READINGS AND WORKS**

All required readings and works can be found online, course reserves, or in the UF Library (see annotated schedule).

Materials and Supplies Fees: see schedule of courses.

#### **REQUIRED SUPPLIES AND SOFTWARE**

You are required to purchase a Sketchbook 6"x8" or 5.5"x8.5" (at least 50 sheets) – you can use your Sketchbook from Design Communications 1 provided you have enough sheets. You are also responsible for purchasing appropriate drawing implements for sketching.

You will be responsible for a 4-week membership to the Infinity Fab Lab (at a reduced rate).

The following software is required:
MS Office (Word, Excel and PowerPoint)
Adobe Suite Products (Photoshop, Illustrator, and In-Design)
Autodesk AutoCAD (latest edition)
Rhinoceros (latest edition)

# **II. Student Learning Outcomes (SLOs)**

At the end of this course, students will be expected to have achieved the introductory 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 Describe standard conventions of technical drawing and digital modeling in landscape architectural practice.
- CLO 2 Explain fundamental characteristics of professional-quality technical drawing and digital modeling representation.
- **SLO 2** Apply core professional landscape architecture skills in design decision-making.
- CLO 3 Represent observable landscapes through analog drawing.
- CLO 4 Advance skills in workflow between computer programs as well as between computer programs and analog, hand drawing.
- CLO 5 Develop basic skills in digital fabrication.

#### COMMUNICATION

- **SLO 5** Produce professional visual, oral, and written communications.
- CLO 6 Represent two-dimensional drawing using precision and accuracy.
- CLO 7 Convey three-dimensional space using digital modeling.
- CLO 8 Implement proper setup and annotation for technical drawings and digital modeling.

## III. Graded Work

## **DESCRIPTION OF GRADED WORK**

#### Project 1 – AutoCAD Park Plan (40% of total grade)

Students will be required to produce a CAD base from a hand-drawn plan graphic of a recreational park. In addition, students will digitize construction details and provide them on a construction titleblock. Finally, students will produce a laser-cut topography model using CAD interfaced with laser cutters in

the Infinity Fab Lab using hand-drawn contours as the starting point. This project will be broken down into multiple assignments:

- Project 1.1 Park Elements
- Project 1.2 Park Master Plan
- Project 1.3 Topographic Model
- Project 1.4 Construction Documents

## Project 2 – Rhino Park Model (40% of total grade)

In the second half of the semester, students will digitally model a built example of landscape architecture in Rhino 3D. Students will use the 3D digital model to cut sections, render perspective views in Lumion, and print a 3D FDM model. This project will be broken down into multiple assignments:

- Project 2.1 Landscape Elements
- Project 2.2 Topography
- Project 2.3 Lumion Perspectives
- Project 2.4 3D Printed FDM Model

## In-Class Drawing Exercises (10% of total grade)

Students will have various readings and graphic exercises that will be assigned and evaluated at various points during the semester.

## Sketching (10% of total grade)

Throughout the semester, students will be required to hand sketch in a sketchbook. These sketches will primarily be performed outside of class, and your sketchbook will be submitted for review at various times throughout the semester.

The graded work assesses the course learning objectives as follows:

	LAA 2379C - Course Learning Objectives (CLOs)									
	SLO 1		SLO 2			SLO 5				
Assessment	1	2	3	4	5	6	7	8		
Project 1 – AutoCAD Park Plan	Χ	Χ		X	Χ	Χ	Χ	Х		
Project 2 – Rhino Park Model	Χ	Χ		X	Χ	Χ	Χ	Х		
In-Class Exercises	Χ	Χ	Χ	X		Χ	Χ	Х		
Sketching			Х							

#### **GRADING SCALE**

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

Α	93 – 100%	B-	80 – 82%	D+	67 – 69%
A-	90 – 92%	C+	77 – 79%	D	63 – 66%
B+	87 – 89%	С	73 – 76%	D-	60 – 62%
В	83 – 86%	C-	70 – 72%	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, CD, 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.

Projects assignments 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. 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). Project assignments 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.

Interim submittals for studio projects are evaluated for completeness and timeliness of submission. Late penalties are included in the points for the interim submittal.

Timely submission of exercises is included as part of the exercise grade/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.

# IV. Annotated Weekly Schedule

Week	Topics, Homework, and Assignments
Week 1	<ul> <li>Topic: Principles of Technical Drawing and AutoCAD</li> <li>Summary: This week we will introduce the course; we will discuss the basic principles of technical drawing; and we will introduce AutoCAD. We will focus on proper customization of the program interface, the importance of quick keys, layers, and basic commands. (CLO# 1, 2, 6, 8)</li> <li>Required Readings/Works: None</li> <li>Assignment: Project 1.1 Assigned (due Week 3 – Monday). Sketching 1 Assigned (due Week 4 – Wednesday).</li> </ul>
Week 2 (No Class – 1/15)	<ul> <li>Topic: Principles of AutoCAD</li> <li>Summary: We will continue our discussion of proper AutoCAD drafting technique. We will introduce new commands and reinforce appropriate production workflows. (CLO# 1, 2, 6, 8)</li> <li>Required Readings/Works: None</li> <li>Assignment: No new outside class assignments</li> </ul>
Week 3	<ul> <li>Topic: Intermediate AutoCAD - Translating Hand Drawings to AutoCAD Drawings</li> <li>Summary: We will continue to develop our skills in AutoCAD. We will move on to an intermediate understanding of AutoCAD commands, and we focus on the workflow for translate hand-drawn plan graphics to technical line drawings in AutoCAD. (CLO# 1, 2, 4, 6, 8)</li> <li>Required Readings/Works: None</li> <li>Assignment: Project 1.2 Assigned (due Week 6 – Monday).</li> </ul>
Week 4	<ul> <li>Topic: Intermediate AutoCAD and Fab Lab Orientation</li> <li>Summary: We will continue to develop our knowledge of AutoCAD commands, and we will visit the Infinity Fab Lab to learn about digital fabrication using laser cutters. (CLO# 1, 2, 4, 5, 6, 8)</li> <li>Required Readings/Works: None</li> <li>Assignment: Project 1.3 Assigned (due Week 8 – Monday)</li> </ul>
Week 5	<ul> <li>Topic: Integration of Software and Digital Fabrication</li> <li>Summary: This week we will focus on the workflow process for creating topographic chipboard models using laser cutters in the Infinity Fab Lab. (CLO# 1, 2, 4, 5, 6, 8)</li> <li>Required Readings/Works: None</li> <li>Assignment: Sketching 2 (due Week 7 – Wednesday)</li> </ul>
Week 6	<ul> <li>Topic: AutoCAD Construction Detailing and Sheet Setup</li> <li>Summary: This week we will discuss the basics of construction detailing and construction document sheet setup. (CLO# 1, 2, 6, 8)</li> <li>Required Readings/Works: None</li> <li>Assignment: Project 1.4 Assigned (due Week 8 – Monday)</li> </ul>

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Week 7	<ul> <li>Topic: AutoCAD – Wrap-up</li> <li>Summary: We will conclude our discussion of AutoCAD with a focus on less common, but important, AutoCAD commands. (CLO# 1, 2, 4, 6, 8)</li> <li>Required Readings/Works: None</li> <li>Assignment: No new outside class assignments</li> </ul>
Week 8	<ul> <li>Topic: Rhino Basics</li> <li>Summary: This week we will go over the Rhino interface as well as basic Rhino commands. We will also build some simple 3D forms in Rhino. (CLO# 1, 2, 7, 8)</li> <li>Required Readings/Works: <a href="https://www.linkedin.com/learning/introducing-rhino-7/quick-start?u=41282748">https://www.linkedin.com/learning/introducing-rhino-7/quick-start?u=41282748</a></li> <li>Assignment: Project 2.1 – Landscape Elements Assigned (due Week 9 – Friday);</li> </ul>
Week 9	<ul> <li>Topic: Rhino 3D Forms</li> <li>Summary: This week we will introduce additional Rhino commands and modeling techniques. (CLO# 1, 2, 7, 8)</li> <li>Required Readings/Works: <a href="https://www.linkedin.com/learning/introducing-rhino-7/quick-start?resume=false&amp;u=41282748">https://www.linkedin.com/learning/introducing-rhino-7/quick-start?resume=false&amp;u=41282748</a></li> <li>Assignment: Sketching 3 Assigned (due Week 12 – Wednesday)</li> </ul>
Week 10 (No Class – Spring Break)	<ul> <li>Topic: Spring Break</li> <li>Summary: No Class</li> <li>Required Readings/Works: None</li> <li>Assignment: No New Outside Class Assignment</li> </ul>
Week 11	<ul> <li>Topic: Rhino Topography Modeling</li> <li>Summary: This week we will learn how to create surfaces in Rhino 3D. (CLO# 1, 2, 4, 7, 8)</li> <li>Required Readings/Works: <a href="https://www.linkedin.com/learning/introducing-rhino-7/quick-start?resume=false&amp;u=41282748">https://www.linkedin.com/learning/introducing-rhino-7/quick-start?resume=false&amp;u=41282748</a></li> <li>Assignment: Project 2.2 – Topography Assigned (due Week 13 – Friday)</li> </ul>
Week 12	<ul> <li>Topic: Rhino Topography Modeling</li> <li>Summary: This week we will continue our work modeling and manipulating surfaces in Rhino 3D. We will also learn how to cut a section. (CLO# 1, 2, 4, 6, 7, 8)</li> <li>Required Readings/Works: <a href="https://www.linkedin.com/learning/introducing-rhino-7/quick-start?resume=false&amp;u=41282748">https://www.linkedin.com/learning/introducing-rhino-7/quick-start?resume=false&amp;u=41282748</a></li> <li>Assignment: No new outside class assignments.</li> </ul>
Week 13	<ul> <li>Topic: Rhino Topography Modeling</li> <li>Summary: We will conclude our work topography modeling in Rhino by adding geometry to a topography surface, as well as other landscape elements. (CLO# 1, 2, 4, 7, 8)</li> <li>Required Readings/Works: None</li> <li>Assignment: No new outside class assignments. Sketching 4 Assigned (due Week 16 – Wednesday)</li> </ul>

Week 14	<ul> <li>Topic: Rendering in Lumion</li> <li>Summary: This week students will learn the essentials of rendering in Lumion: the interface, layers, adding objects and elements, importing / updating a Collada file from Rhino, and effects. (CLO# 2, 4, 7, 8)</li> <li>Required Readings/Works: None</li> <li>Assignment: Project 2.3 – Lumion Perspectives Assigned (due Week 15 – Monday)</li> </ul>
Week 15	<ul> <li>Topic: 3D Printing</li> <li>Summary: We will conclude Project 2 with generating a 3-dimensional FDM Print of the site. (CLO# 1, 2, 4, 5, 7, 8)</li> <li>Required Readings/Works: None</li> <li>Assignment: Project 2.4 – 3D Printed FDM Model Assigned (due Week 16 – Wednesday)</li> </ul>
Week 16 (No Class 12/26 – Reading Day)	<ul> <li>Topic: Course Wrap-up</li> <li>Summary: Students will schedule a time to 3D print their FDM Models in the Infinity Fab Lab. (CLO# 4, 5, 7, 8)</li> <li>Required Readings/Works: None</li> <li>Assignment: No new outside class assignments.</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
- 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.

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

#### 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

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