

Visualization of Spatial Information – SUR 3323

1 Overview

Methods of mapping, modeling, communicating and visualizing spatial features. Includes boundary and topographical features, attributes, site modeling, site development and mapping using computer-aided mapping and design features.

- 3 Credits
- Spring Semester 2024
- Format: 100% online: Lecture videos are on the eLearning website
- <http://elearning.ufl.edu/>
- Office Hours via Zoom: Period 3 (9:35-10:25 W F) or via Zoom (by appointment) : <https://ufl.zoom.us/my/jthomas88>

Course Prerequisites: none

Instructor: Justin Thomas (Phone: 352.392.4996; Email: jthomas88@ufl.edu, Office: 301 Reed Lab [Main Campus])

- Please use gatorlink email (jthomas88@ufl.edu) for fastest response and be sure to start the subject with SUR3323.
- Office hours: as needed by appointment via Zoom¹ (<https://ufl.zoom.us/my/jthomas88>), phone, or email.

Required textbook(s) and/or readings: None. Utilize online resources.

2 Learning Outcomes

At the end of this course, each student will be able to:

- Produce readable graphic communications using AutoCAD software
- Develop intelligent drawings by attaching attributes to graphic objects
- Solve geometric construction problems using graphical methods
- Perform the necessary AutoCAD tasks required of an entry level surveyor

3 Course Logistics

This course is entirely web-based and students may access lectures, supporting materials, quizzes and homework assignments as they become available each week.

Learning modules consisting of lecture videos, supporting material, homework assignment and a quiz, provided online for each topic. Learning modules build on previous modules so you should complete the learning modules in the order presented.

There are no mandatory laboratory sessions. Any office hour sessions will be scheduled with the instructor and conducted in Zoom as needed. Support is also available by phone or by email. In the past, students have typically found that communication by email is a flexible way to work through assignment issues.

¹ Zoom is a software program used to conduct virtual meetings. See “Using Zoom Software” section of the syllabus.

Technology Requirements:

- A computer or mobile device with high-speed internet connection.
- A headset and/or microphone and speakers; a web cam is suggested.
- Latest version of web browser. Canvas supports only the two most recent versions of any given browser. [What browser am I using?](#)
- Zoom: <https://ufl.zoom.us/my/jthomas88> is accessible through a pop-up in a chrome browser, but may also run through other browsers, though further installation may be needed.

Using Zoom Software

Office hour meetings (per request) will be conducted using Zoom web conferencing software. The software is accessed by clicking the link provided by the instructor via the eLearning course site. The instructor will schedule and post sessions and their links. Click the provided link to access the office hour session.

The eLearning site provides information about participating in Zoom meetings and sessions. Zoom requires internet connection and a web browser. A microphone, speakers, and a webcam are recommended for participation in office hours to capitalize on the full communication functionality of Zoom. Zoom supports almost all operating systems, including Windows, Macintosh, and Linux. Most widely used browsers are also supported, including Internet Explorer, Firefox, Safari, and Chrome. Zoom is compatible with iOS, Android, Blackberry and Surface Pro devices. Visit the "[Getting Started](#)" link to see other connections and trouble shooting.

3.1 Assignments & Deliverables

Participation

Class participation is encouraged. Discussions and questions can take place with the instructor during scheduled office hours or via phone or email. Discussion can also take place on the eLearning course site's message boards.

Weekly Topic Structure

A series of instructional videos will be made available each week, corresponding to that week's topic. These video lectures teach the necessary skills, information, and tasks to complete each week's assigned quiz and homework.

Quizzes

Each week's quiz may be taken at any point up to the deadline included in the course schedule. The deadline for each quiz will generally be before the homework assignment is completed. Quizzes will assess mastery of material in the module, but cumulative skills may be needed due to the nature of the course content. **There are no provisions for making up a missed quiz.** Exceptions will be made only for extenuating circumstances. A missed quiz will result in a score of zero, and each quiz can be taken only once. To accommodate a potential missed quiz, the lowest quiz score will be dropped.

Starting with module 2, there will be an opportunity to make up half of the points missed on each quiz. This opportunity is optional. For each quiz question missed you may make up half of the points by posting a "hypothetical" quiz question and answer for that module's content in the provided discussion board topic for the module. Posts that are deemed of appropriate quality and content will be accepted if

submitted by the corresponding homework deadline. These discussion board posts of questions and answers should be of a quality that would be helpful to study for the midterm and final exams.

Homework Assignments

Each homework assignment deliverable must include a .dwg of the required type (2018 dwg), .pdf, and/or project feedback as specified in the assignment instructions. These deliverables and their associated quizzes are typically due as the next week's topic begins. Refer to the included schedule for due dates. The instructor reserves the right to modify the schedule if necessary. Any modifications will be announced through the eLearning course site. All homework projects are to be completed **individually**. Assignments must be submitted by the deadline, as **late work will be penalized 5% per day of the graded assignment. There is no provision for missed homework assignments** aside from the policy of dropping the lowest homework score, excluding the final assignment.

Submitted files for homework assignments should conform to the following naming convention: Course Prefix & Number – HW# - Student Last Name – First Initial (for example: **SUR3323-HW2-Thomas-J.dwg**). Additional submission instructions will be included in each homework assignment.

Exams

The exams for the course are scheduled as an online, one-hour exams that can be taken any time between 8 AM and 11:59 PM. The exams are cumulative, covering topics from the entire semester taught up until that point.

- Midterm Exam: March 19th
- Final Exam: April 30th

3.2 Grades & Grading Scale

Grading Item	Points	Description
Quizzes	12 @10 points (120 points total)	Online quizzes. See "Quizzes" section. Lowest quiz grade dropped. See also opportunity to make up half of points on discussion boards.
Midterm Exam	70 points	March 19: Online Midterm Exam
Homeworks	12@ 20 points + 1@40 points (280 points total)	14 homework assignments. Final project (HW 14) is worth 40 points. Lowest homework dropped excluding HW 14.
Final Exam	80 points	April 30: Online Final Exam
Total=	550	Total Possible Points

The final grade will be calculated by dividing the number of cumulative points received by the total possible points. The instructor reserves the right to modify the grading scheme as necessary. Individual assignments, quizzes, and exams will not be curved. Grades may or may not be curved at the end of the semester. Final grades are based on the +/- grading scale used at UF. For information on current UF policies for assigning grade points, see <https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>.

Letter Grade	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	E
Corresponding Course Score	91-100	90	89	81-88	80	79	71-78	70	69	61-68	60	0-59
Grade Points	4	3.67	3.33	3	2.67	2.33	2	1.67	1.33	1	0.67	0

4 Course Content

Order of Learning Modules and Exams

Module	Topic	HW/Quiz
1	Course Outline, Introduction – AutoCAD Basics and Layout	HW 1, Quiz 1
2	Basic Drafting, Editing, and Plotting,	HW 2, Quiz 2
3	Geometric Drafting (COGO – Coordinate Geometry)	HW 3, Quiz 3
4	2D Orthographic Drawing	HW 4, Quiz 4
5	Dimensioning and Text	HW 5, Quiz 5
6	AutoCAD Extended Basics	HW 6, Quiz 6
7	Templates, Title Blocks, and more Plotting (Extended Basics II)	HW 7, Quiz 7
8	Blocks	HW 8, Quiz 8
9	Block Libraries and Attributes	HW 9, Quiz 9
Midterm	Online Midterm Exam: March 19	Midterm Exam
10	3D Modeling	HW 10, Quiz 10
11	Surface Models	HW 11, Quiz 11
12	Introduction to Civil 3D	HW 12, Quiz 12
13	Civil 3D Points	HW 13, Quiz 13
14	Civil 3D – Import Points, Point Styles, and Label Styles	HW 14
Final	Online Final Exam: April 30th	Final Exam

Schedule for Exams, Quiz deadlines, and Homework deadlines

SUR 3323 Spring 2024

January	February	March	April	May
1 Mo			1 Mo	
2 Tu			2 Tu	
3 We			3 We Q12 Due	1 We
4 Th	1 Th		4 Th	2 Th
5 Fr	2 Fr	1 Fr	5 Fr	3 Fr
6 Sa	3 Sa	2 Sa	6 Sa	4 Sa
7 Su	4 Su HW4 Due	3 Su HW8 Due	7 Su HW12 Due	5 Su
8 Mo 1st day of Classes	5 Mo	4 Mo	8 Mo	6 Mo
9 Tu	6 Tu	5 Tu	9 Tu	7 Tu
10 We	7 We Q5 Due	6 We Q9 Due	10 We Q13 Due	8 We
11 Th	8 Th	7 Th	11 Th	9 Th
12 Fr	9 Fr	8 Fr	12 Fr	10 Fr
13 Sa	10 Sa	9 Sa	13 Sa	11 Sa
14 Su HW1/Q1 Due	11 Su HW5 Due	10 Su	14 Su HW13 Due	12 Su
15 Mo MLK Day	12 Mo	11 Mo	15 Mo	13 Mo
16 Tu	13 Tu	12 Tu	16 Tu	14 Tu
17 We Q2 Due	14 We Q6 Due	13 We	17 We	15 We
18 Th	15 Th	14 Th	18 Th	16 Th
19 Fr	16 Fr	15 Fr	19 Fr	17 Fr
20 Sa	17 Sa	16 Sa	20 Sa	18 Sa
21 Su HW2 Due	18 Su HW6 Due	17 Su HW9 Due	21 Su	19 Su
22 Mo	19 Mo	18 Mo	22 Mo	20 Mo
23 Tu	20 Tu	19 Tu Midterm Exam	23 Tu Q14 Due	21 Tu
24 We Q3 Due	21 We Q7 Due	20 We Q10 Due	24 We Last Day of Classes/HW14 Due	22 We
25 Th	22 Th	21 Th	25 Th Reading Day	23 Th
26 Fr	23 Fr	22 Fr	26 Fr Reading Day	24 Fr
27 Sa	24 Sa	23 Sa	27 Sa	25 Sa
28 Su HW3 Due	25 Su HW7 Due	24 Su HW10 Due	28 Su	26 Su
29 Mo	26 Mo	25 Mo	29 Mo	27 Mo
30 Tu	27 Tu	26 Tu	30 Tu Online Final Exam	28 Tu
31 We Q4 Due	28 We Q8 Due	27 We Q11 Due		29 We
	29 Th	28 Th		30 Th
		29 Fr		
		30 Sa		
Indicates Day of No Class		31 Su HW11 Due		

5 Policies and Requirements

This syllabus represents current plans and objectives for this course. As the semester progresses, changes may need to be made to accommodate timing, logistics, or to enhance learning. Such changes, communicated clearly, are not unusual and should be expected.

5.1 Late Submissions & Make-up Requests

It is the responsibility of the student to access on-line lectures, readings, quizzes, and exams and to maintain satisfactory progress in the course.

Late submissions will not be accepted except for under extenuating circumstances. Examples of extenuating circumstances can be found at

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

Computer or other hardware failures, except failure of the UF e-Learning system, will not excuse students for missing assignments. Any late submissions due to technical issues MUST be accompanied by the ticket number received from the Helpdesk when the problem was reported to them. The ticket number will document the time and date of the problem. You MUST e-mail your instructor within 24 hours of the technical difficulty if you wish to request consideration.

For computer, software compatibility, or access problems call the HELP DESK phone number—352-392-HELP = 352- 392-4357 (option 2). Requirements for class attendance and make-up exams, assignments and other work are consistent with university policies that can be found at:

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

5.2 Semester Evaluation Process

Student assessment of instruction is an important part of efforts to improve teaching and learning.

At approximately the mid-point of the semester, the School of Forest Resources & Conservation will request anonymous feedback on student satisfaction on various aspects of this course. These surveys will be sent out through Canvas and are not required, but encouraged. This is not the UF Faculty Evaluation!

At the end of the semester, 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.aa.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.aa.ufl.edu/public-results/>.

5.3 Netiquette: Communication Courtesy and Professionalism

Just as in any professional environment, meaningful and constructive dialogue is expected in this class and requires a degree of mutual respect, willingness to listen, and tolerance of opposing points of view.

Respect for individual differences and alternative viewpoints will be maintained in this class at all times. All members of the class are expected to follow rules of common courtesy, decency, and civility in all interactions. Failure to do so will not be tolerated and may result in loss of participation points and/or referral to the Dean of Students' Office.

All members of the class are expected to follow rules of common courtesy in all email messages, threaded discussions and chats. Failure to do so may result in loss of participation points and/or referral to the Dean of Students' Office. <https://teach.ufl.edu/wp-content/uploads/2020/04/NetiquetteGuideforOnlineCourses.docx>

Prepare emails as you would in a professional setting. Start emails with an appropriate subject line, including the course number (SUR 3323) followed by the subject of the email. Emails are typically responded to within a business day. Please try to avoid last minute emails as I may be unable to respond before a homework, quiz, or exam deadline.

5.4 Academic Honesty Policy

As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge: *"We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity."*

You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit 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."*

It is assumed that **you will complete all work independently** unless the instructor provides explicit permission for you to collaborate on course tasks (e.g. assignments, quizzes, exams). Furthermore, as part of your obligation to uphold the Honor Code, you should report any condition that facilitates academic misconduct or appropriate personnel. It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated.

Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For more information regarding the Student Honor Code, please see:

<http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code>.

5.5 Inclusive Learning Environment

This course embraces the University of Florida's Non-Discrimination Policy, which reads,

The University shall actively promote equal opportunity policies and practices conforming to laws against discrimination. The University is committed to non-discrimination with respect to race, creed, color, religion, age, disability, sex, sexual orientation, gender identity and expression, marital status, national origin, political opinions or affiliations, genetic information and veteran status as protected under the Vietnam Era Veterans' Readjustment Assistance Act.

If you have questions or concerns about your rights and responsibilities for inclusive learning environment, please see the instructor or refer to the Office of Multicultural & Diversity Affairs website: <http://multicultural.ufl.edu>.

5.6 University Policy on Accommodating Students with Disabilities:

Students requesting accommodation for disabilities must first register with the Dean of Students Office (<http://www.dso.ufl.edu/drc/>). The Dean of Students Office will provide documentation to the student who must then provide this documentation to the instructor when requesting accommodation. You must submit this documentation prior to submitting assignments or taking the quizzes or exams.

Accommodations are not retroactive, therefore, students should contact the office as soon as possible in the term for which they are seeking accommodations.

5.7 Software Use

All faculty, staff and students of the university are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against university policies and rules, disciplinary action will be taken as appropriate.

6 Campus Helping Resources

For issues with technical difficulties for e-learning in Canvas, please post your question to the Technical Help Discussion in your course, or contact the UF Help Desk at:

- Learning-support@ufl.edu | (352) 392-HELP - select option 2 | <http://elearning.ufl.edu>
- Library Help Desk support <http://cms.uflib.ufl.edu/ask>
- SFRC Academic Hub <https://ufl.instructure.com/courses/303721>

6.1 Student Life, Wellness, and Counseling Help

- Counseling and Wellness resources <http://www.counseling.ufl.edu/cwc/>
- U Matter, We Care <http://www.umatter.ufl.edu/>
- Career Resource Center <http://www.crc.ufl.edu/>
- Other resources are available at <http://www.distance.ufl.edu/getting-help> for online students.

6.2 Student Complaint Process

The School of Forest Resources & Conservation cares about your experience and we will make every effort to address course concerns. We request that all of our online students complete a course satisfaction survey each semester, which is a time for you to voice your thoughts on how your course is being delivered.

If you have a more urgent concern, your first point of contact should be the SFRC Academic Coordinator or the Graduate/Undergraduate Coordinator for the program offering the course. You may also submit a complaint directly to UF administration:

- Students in online courses: <http://www.distance.ufl.edu/student-complaint-process>