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
- Fall Semester
- Format: 100% online: Lecture videos are on the eLearning website
- [http://elearning.ufl.edu/](http://elearning.ufl.edu/)
- Office Hours are offered in person and via Zoom: Wednesdays and Fridays, Period 3, 9:35am – 10:25am (see link on Canvas Course Home Page) or via Zoom (by appointment)

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 are offered in person and via Zoom: Wednesdays and Fridays, 9:35am – 10:25am (see link on Canvas Course Home Page) or via Zoom (by appointment)

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 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 8 PM. The exams are cumulative, covering topics from the entire semester taught up until that point.

- Midterm Exam: October 17
- Final Exam: December 11

### 3.2 Grades & Grading Scale

<table>
<thead>
<tr>
<th>Grading Item</th>
<th>Points</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quizzes</td>
<td>12 @10 points (120 points total)</td>
<td>Online quizzes. See “Quizzes” section. Lowest quiz grade dropped. See also opportunity to make up half of points on discussion boards.</td>
</tr>
<tr>
<td>Midterm Exam</td>
<td>70 points</td>
<td>October 17: Online Midterm Exam</td>
</tr>
<tr>
<td>Homeworks</td>
<td>12@ 20 points + 1@40 points</td>
<td>14 homework assignments. Final project (HW 14) is worth 40 points. Lowest homework dropped excluding HW 14.</td>
</tr>
<tr>
<td>Final Exam</td>
<td>80 points</td>
<td>December 11: Online Final Exam</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>550</td>
<td><strong>Total Possible Points</strong></td>
</tr>
</tbody>
</table>
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.

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

4 Course Content

Order of Learning Modules and Exams

<table>
<thead>
<tr>
<th>Module</th>
<th>Topic</th>
<th>HW/Quiz</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Course Outline, Introduction – AutoCAD Basics and Layout</td>
<td>HW 1, Quiz 1</td>
</tr>
<tr>
<td>2</td>
<td>Basic Drafting, Editing, and Plotting</td>
<td>HW 2, Quiz 2</td>
</tr>
<tr>
<td>3</td>
<td>Geometric Drafting (COGO – Coordinate Geometry)</td>
<td>HW 3, Quiz 3</td>
</tr>
<tr>
<td>4</td>
<td>Labor Day (9/4)</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>2D Orthographic Drawing</td>
<td>HW 4, Quiz 4</td>
</tr>
<tr>
<td>6</td>
<td>Dimensioning and Text</td>
<td>HW 5, Quiz 5</td>
</tr>
<tr>
<td>7</td>
<td>AutoCAD Extended Basics</td>
<td>HW 6, Quiz 6</td>
</tr>
<tr>
<td>8</td>
<td>Templates, Title Blocks, and more Plotting (Extended Basics II)</td>
<td>HW 7, Quiz 7</td>
</tr>
<tr>
<td>9</td>
<td>Blocks Homecoming (10/6)</td>
<td>HW 8, Quiz 8</td>
</tr>
<tr>
<td>Midterm</td>
<td>Online Midterm Exam: October 17</td>
<td>Midterm Exam</td>
</tr>
<tr>
<td>10</td>
<td>Block Libraries and Attributes</td>
<td>HW 9, Quiz 9</td>
</tr>
<tr>
<td>11</td>
<td>3D Modeling</td>
<td>HW 10, Quiz 10</td>
</tr>
<tr>
<td>12</td>
<td>Introduction to Civil 3D Veterans Day (Osv) (11/10)</td>
<td>HW 11, Quiz 11</td>
</tr>
<tr>
<td>13</td>
<td>Civil 3D Points</td>
<td>HW 12, Quiz 12</td>
</tr>
<tr>
<td>14</td>
<td>Civil 3D – Import Points, Point Styles, and Label Styles Thanksgiving (11/22-24)</td>
<td>HW 13, Quiz 13</td>
</tr>
<tr>
<td>15</td>
<td>Online Final Exam: December 11</td>
<td>HW 14</td>
</tr>
<tr>
<td>Final</td>
<td></td>
<td>Final Exam</td>
</tr>
</tbody>
</table>
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. http://teach.ufl.edu/docs/NetiquetteGuideforOnlineCourses.pdf

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/scr/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.
5.8 In-Class Recording Policy

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

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
- SFFGS Academic Hub https://ufl.instructure.com/courses/303721

6.1 Student Life, Wellness, and Counseling Help

Students experiencing crises or personal problems that interfere with their general well-being are encouraged to utilize the university’s counseling resources. The Counseling & Wellness Center provides confidential counseling services at no cost for currently enrolled students. Resources are available on campus for students having personal problems or lacking clear career or academic goals, which interfere with their academic performance.

- Counseling and Wellness resources http://www.counseling.ufl.edu/cwc/
- U Matter, We Care http://www.umatter.ufl.edu/
- Career Connections Center http://career.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, Fisheries, & Geomatics Sciences cares about your experience and we will make every effort to address course concerns. We request that 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. You can also submit feedback anytime.
If you have a more urgent concern, your first point of contact should be the Academic Coordinator or the Graduate/Undergraduate Coordinator for the program offering the course. You may also submit a complaint directly to UF administration:

- [https://distance.ufl.edu/getting-help/](https://distance.ufl.edu/getting-help/)
- [https://registrar.ufl.edu/complaint.html](https://registrar.ufl.edu/complaint.html)