

Instructors:

Carly Muir: carlysmuir@ufl.edu
<i>Carly's Office Hours Online (Canvas conference)</i>
<i>In person by appointment</i>
Wednesday 12:00-3:00pm

Course Description:

Introduction to spatial data; use of digital maps and satellite images as means of Earth observation; basics of spatial data analysis; location-based Web APPs; digital map services.

COURSE OVERVIEW

An introductory course that focuses on how the earth surface is visualized, explored, and analyzed in digital formats. It provides a systematic introduction of map-based analytical approaches to understanding the Earth environment and human society. The topics cover the basics of cartography (map making and reading), satellite image interpretation, geographic information systems (GIS), and map-based reasoning and communication of spatial data. Through lectures and computer exercises, students will learn fundamental concepts of digital geographic data to understand vast quantities of geographic information in our ever-changing world.

ITEMIZED LEARNING OUTCOMES**Upon successful completion of this course, students will be able to:**

1. Explain the basic concepts and principles in processing digital geographic data.
2. Collect, map and analyze spatial data as a mechanism to understand our physical and social world.
3. Think spatially and develop problem-solving skills with critical understanding of geographic context.
4. Demonstrate the ability to reason and communicate using map-based technologies such as online maps, Google Earth, ArcGIS, and R programming language.

REQUIRED TEXTS

Bradley A. Shellito, 2014. Introduction to Geospatial Technologies. 4th Edition. W. H. Freeman and Company, a Macmillan Higher Education Company.

Emailing & Office Hours

I will try my best to answer e-mail questions promptly (by the next school day ~24 hours). If you do not receive a response by the next school day, please follow up with me because I may not have received the e-mail for various reasons.

Office hours will be held both online and in person in Turlington. To access office hours online please use the Canvas conference tool, which is located on the right side of the home page.

Grading Scheme

A	A-	B+	B	B-	C+	C	C-	D+	D	D-	E
100-94	93-90	89-87	86-83	82-80	79-77	76-74	73-70	69-67	66-64	63-60	<60

Assignments

Exam: 20 pts

The exam will be multiple choice and short answer. It will be administered at the end of the semester and is cumulative. It is taken online, but you will not need proctorU.

Discussions: 3 pts each

Each week students will be asked to participate in class discussion. If you're in the online section this will require you to post in the canvas discussion board. If you are in the live section, you will participate in a conversation during a class period. The goal of class discussions is to get you thinking critically and consider aspects of geospatial technology that are not covered in labs.

Labs: 5 pts each

Each week you will complete a lab that is found in the book or provided on canvas. This lab will require you to use a geospatial software and answer questions. These labs are meant to introduce you to software used in geospatial science and provide you with introductory experience.

Academic Paper Review: 15 pts

During the semester you will be asked to find an academic paper (from a peer reviewed journal) that interests you. The paper must use geospatial technology as a method of analysis. You will give a brief presentation to the class explaining the methods used (live section). It is meant to introduce and help you understand scientific writing of geospatial techniques.

Final project: 25 pts

At the end of the semester you will be asked to create 1-2 maps using data of your choice (help with finding data will be provided if needed). You will be asked to explain your data acquisition process, your map-making process, and explain what the maps convey. You should use ArcGIS, QGIS, or R.

Late Policy

Late assignments will only be accepted 24hrs after they are due and there will be a 20% penalty for each day they are late. No exams will be accepted late.

If you cannot complete an assignment or an exam because of an excused reason (illness, family emergency, etc.), please contact me as soon as possible. In order for the assignment to be excused, **official documentation** must be provided to either instructor. Instructions on how to send the documents will be handled at the time I am informed of the incident. Note that most of the assessments are open for multiple days. The valid reason must cover all of these days.

If you know of an event in advance that will conflict with an assignment or test date, it is your responsibility to contact me beforehand and let me know. I prefer to know sooner than later.

Not all conflicts will be excused (e.g. you want to miss an exam to attend a rock concert). It is the instructors' discretion to determine what is excused and what is not.

Academic Honesty

[Accountability to Academic Honesty](#)

You are all bound by the student academic honor code.

We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity.

"On my honor, I have neither given nor received unauthorized aid in doing this assignment."

In the Assessments, Canvas will shuffle the order of the questions and the order of the possible answers, generating a nearly unique assessment per student. **Plagiarism or cheating of any variety on any assignment will not be tolerated.** If a student is suspected of cheating and there is sufficient evidence in support of the allegation, the student will be reported to the appropriate student body, according to the University's Student Conduct and Conflict Resolution system.

Special Accommodations

Students requesting disability-related academic accommodations must first register with the **Disability Resource Center**. <http://www.dso.ufl.edu/drc/>

- The Disability Resource Center will provide documentation to the student—each student requesting special accommodations must provide this documentation to the Instructor. We do not automatically receive this information, so the student is responsible with providing the DSO request to the Instructor.
- We will honor all requests. Please contact an instructor by e-mail to make appointment so that we can go through these accommodations and sign the form.

Student Support Services

- For any technical issues you encounter with your course please contact the UF computing Help Desk at 342-392-4357. For Help Desk hours visit: <http://helpdesk.ufl.edu/>.
- For a list of additional student support services links and information please visit: <http://www.distance.ufl.edu/student-services>
- In some special circumstances (when documentation is not available, for instance), we may ask you to contact the Dean of Students Office: **The Dean of Students Office**: 202 Peabody Hall, PO Box 114075, Phone: (352) 392-1261

- The Dean of Students is a resource, available to all students, for when special circumstances arise that disrupts students' abilities to maintain their academic standing. We encourage students to use this resource if necessary.
- Useful Links:
 - [Student Counseling by College](#)
 - [Student Right and Responsibilities](#)

Course Evaluations

Students are expected to provide feedback on the quality of instruction in this course based on 10 criteria. These evaluations are conducted online at <https://evaluations.ufl.edu>. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at <https://evaluations.ufl.edu/results>.

Date	Topic
28-Aug	Sattelite Data
30-Aug	
4-Sep	Datums, Coordinate systems, Translating data
6-Sep	
11-Sep	Georeferencing and transformations
13-Sep	
18-Sep	Global positioning systems
20-Sep	
25-Sep	Geographic Information Systems
27-Sep	
2-Oct	GIS and Spatial Analysis
4-Oct	
9-Oct	GIS and Map Making
11-Oct	
16-Oct	Networks and Navigation
18-Oct	
23-Oct	Remote Sensing Introduction
25-Oct	
30-Oct	How Remote Sensing Works
1-Nov	
6-Nov	Sattelite Data
8-Nov	
13-Nov	Earth's Climate and Environment from Space
15-Nov	
20-Nov	MOVIE DAY :D
22-Nov	NO CLASS - Thanksgiving
27-Nov	Geospatial Applications
29-Nov	Geospatial Applications
4-Dec	Review
6-Dec	Final Exam