Course Syllabus

✎ **Edit**

Research in GIS

GIS 5107C

Office Hours: Find me on GroupMe and arrange a Zoom Meeting via Canvas Calendars.

Course Description

The purpose of this course is to introduce Graduate students to the practice and theory of utilizing Geographic Information Systems (GIS) as a method for analysis of the environment. Students will examine the fundamentals of GIS and their applications with an emphasis on the concepts needed to effectively manipulate, query, analyze, and visualize spatial-based data. At the end of the semester, students should feel comfortable applying GIS to a range of environmental issues and have a solid understanding of the procedures and data necessary to conduct a geographical analysis.

Tracks

As a student, you have two tracks for this course that you should choose at the beginning of the semester.

Tack 1 - Introductory Track

This track is for the graduate student who has little or no background in GIS. You will take the course along with the GIS 3043 students (Foundations in GIS) and when you get to the end of the semester project you will apply it to either your graduate work or a research side project you may have.

Tack 2 - Advanced Track

This track is for the graduate student who has an in-depth background in GIS and is using GIS in their research. The course will focus all semester on the 'final project' and some auxiliary labs. The goal of the class is to substantially improve the methods section of your dissertation or thesis.

During the first week of the course, you will meet with the instructor to determine what is the best track for you to take.

COURSE OBJECTIVES

1. To understand the concepts and principles of Geographic Information Science (GISc), including Geographic Information Systems (GIS), Remote Sensing (RS), Cartography, Geography, and Global Positioning Systems (GPS)
2. To become competent in solving environmental problems with GISc Tools
3. To understand and communicate in the technical language associated with GISc

INSTRUCTOR EXPECTATIONS OF STUDENTS

You are expected to engage with materials on canvas, attend labs (on-campus sections), participate in discussions, and to read the assigned material. The instructor expects students to be curious and interested in the topic and want to engage with the materials. Students not interested in the subject should not take the course. Choose something that engages you. This is your education!

CREATIVITY

GIS is a versatile technique. Its applications are limitless. Students are expected to take this into account when doing coursework. Customizing coursework to fit your own academic goals is not only allowed but encouraged.

Prerequisites

There are no formal prerequisites for this course, however, a basic statistical methods course (e.g. GEO3162C/GEO6160). If there are concerns about readiness for the course please contact the instructor for guidance on which courses to take to prepare.

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Course Resources

This course participates in the Affordable UF Initiative. The high cost of instructional materials can be a burden. This course is working to keep your material costs at less than $20 per-credit-hour. To accomplish this, there is no required text for this course. All course material will be provided on the eLearning Platform. The software will also be provided through the UF Apps framework as well as in TUR 3006 and on-campus libraries. At the request of the student to the Instructor, license codes can be provided for the Esri GIS platforms for personal laptop use.

Class Meetings

You are expected to commit four to six hours per week in-lab time during the normal semester and ten-twenty hours a week during accelerated summer. The instructor will hold virtual office hours as

requested to have one-on-one instruction. Please take advantage of the various digital interactions available in the course to get feedback and foster the sense of community with the class.

Peer Review

Many assignments will require peer-review. This is a time to give feedback to your fellow students as well as see what others are turning in. It is fine to be harsh and give feedback, but it is not appropriate to be disparaging, rude, or just plain mean. Give the peer review that you hope that you would get. Constructive feedback so you can make better GIS products.

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."

Despite the course emphasis on code-reuse and collaboration, the final work you hand in for labs and for exams MUST be your own work or clearly cited as not your own. Do not plagiarize code or material. The first time a student is caught cheating they will get a zero in the lab/test. On the second offense, the student will be reported to the appropriate student body.

UF Counseling Services

Resources are available on campus for students having personal problems or lacking clear career and academic goals that interfere with their academic performance. These resources are available on campus for students having personal problems or lacking clear career and academic goals that interfere with their academic performance. These resources include   University Counseling Center, 301 Peabody Hall, 392-1575 (personal and career counseling); Student Mental Health, Student Health Care Center, 392-1171 (personal counseling); Center for Sexual Assault /Abuse Recovery and Education (CARE), Student Health Care Center, 392-1161 ext. 4231 (counseling related to sexual assault and abuse); Career Resource Center, Reitz Union, 392-1601 (career development assistance and counseling).

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.

Americans With Disabilities Act

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for

reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Student Services before bringing your request to the instructor.

Grade Breakdowns

100	A
99	A
98	A
97	A
96	A
95	A
94	A
93	A
92	A
91	A
90	A
89	B+
88	B+
87	B+
86	B+
85	B+
84	B
83	B
82	B
81	B
80	B
79	C+
78	C+
77	C+
76	C+
75	C+
74	C
73	C
72	C
71	C
70	C

69	D+
68	D+
67	D+
66	D+
65	D+
64	D
63	D
62	D
61	D
60	D
59	E
58	E
57	E
56	E
55	E
54	E
53	E
52	E
51	E
50	E
49	E
48	E
47	E
46	E
45	E
44	E
43	E
42	E
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22	E
21	E
20	E
19	E
18	E
17	E
16	E
15	E
14	E
13	E
12	E
11	E
10	E
9	E
8	E
7	E
6	E
5	E
4	E
3	E
2	E
1	E
0	E

Course Summary:

Date	Details	
Mon Aug 31, 2020	📅 **First Day of Class** [(https://ufl.instructure.com/calendar?event_id=1611858&include_contexts=course_407972)](https://ufl.instructure.com/calendar?event_id=1611858&include_contexts=course_407972)	12am
Mon Sep 7, 2020	📅 **Labor Day** [(https://ufl.instructure.com/calendar?event_id=1611927&include_contexts=course_407972)](https://ufl.instructure.com/calendar?event_id=1611927&include_contexts=course_407972)	12am
Wed Sep 9, 2020	📝 **First Week Student-Instructor Meeting** [(https://ufl.instructure.com/courses/407972/assignments/4411220)](https://ufl.instructure.com/courses/407972/assignments/4411220)	due by 11:59pm
Wed Sep 23, 2020	📝 **Project Pitch** [(https://ufl.instructure.com/courses/407972/assignments/4411224)](https://ufl.instructure.com/courses/407972/assignments/4411224)	due by 11:59pm
Wed Sep 30, 2020	📝 **Inspiration Reflection** [(https://ufl.instructure.com/courses/407972/assignments/4411221)](https://ufl.instructure.com/courses/407972/assignments/4411221)	due by 11:59pm
Sat Oct 3, 2020	📅 **Homecoming** [(https://ufl.instructure.com/calendar?event_id=1611878&include_contexts=course_407972)](https://ufl.instructure.com/calendar?event_id=1611878&include_contexts=course_407972)	12am
Wed Oct 7, 2020	📝 **Lit Review Exercises** [(https://ufl.instructure.com/courses/407972/assignments/4411222)](https://ufl.instructure.com/courses/407972/assignments/4411222)	due by 11:59pm
Wed Oct 14, 2020	📝 **Project Plan** [(https://ufl.instructure.com/courses/407972/assignments/4411225)](https://ufl.instructure.com/courses/407972/assignments/4411225)	due by 11:59pm
Wed Oct 21, 2020	📝 **Status Report 1** [(https://ufl.instructure.com/courses/407972/assignments/4411227)](https://ufl.instructure.com/courses/407972/assignments/4411227)	due by 11:59pm
Wed Nov 4, 2020	📝 **Simple Site Map** [(https://ufl.instructure.com/courses/407972/assignments/4411226)](https://ufl.instructure.com/courses/407972/assignments/4411226)	due by 11:59pm
Wed Nov 11, 2020	📅 **Veterans Day** [(https://ufl.instructure.com/calendar?event_id=1611862&include_contexts=course_407972)](https://ufl.instructure.com/calendar?event_id=1611862&include_contexts=course_407972)	12am
	📝 **Status Report 2** [(https://ufl.instructure.com/courses/407972/assignments/4411228)](https://ufl.instructure.com/courses/407972/assignments/4411228)	due by 11:59pm

Date	Details	
Wed Nov 18, 2020	📅 **Happy GIS Day!** (https://ufl.instructure.com/calendar?event_id=1611882&include_contexts=course_407972)	12am
	📝 **Status Report 3** (https://ufl.instructure.com/courses/407972/assignments/4411229)	due by 11:59pm
Thu Nov 26, 2020	📅 **Thanksgiving** (https://ufl.instructure.com/calendar?event_id=1611866&include_contexts=course_407972)	12am
Wed Dec 9, 2020	📅 **Last Day of Class** (https://ufl.instructure.com/calendar?event_id=1611886&include_contexts=course_407972)	12am
	📝 **Final Presentation** (https://ufl.instructure.com/courses/407972/assignments/4411218)	due by 11:59pm
	📝 **Final Write Up** (https://ufl.instructure.com/courses/407972/assignments/4411219)	due by 11:59pm
Wed Dec 16, 2020	📝 **Peer Review Reflection** (https://ufl.instructure.com/courses/407972/assignments/4411223)	due by 11:59pm
Mon Dec 21, 2020	📅 **Grades Due by Noon** (https://ufl.instructure.com/calendar?event_id=1611874&include_contexts=course_407972)	12am
Fri Jan 8, 2021	📅 **University of Florida GatorEvals – Summer 2020** (https://ufl.instructure.com/calendar?event_id=1611889&include_contexts=course_407972)	11:59pm