GEOG 4/581 Introduction to GIS *(DRAFT, Revised: May 5)*

Course Instructor

Megen Brittell
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Office Hours:
> TBD
> Reed Room, Knight Library
> and by appointment

Laboratory Instructor (GTF)

TBD
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Class Schedule and Resourcess

Class Meeting: 1:00 – 3:50 pm, Monday through Thursday, June 20 – July 14

Lecture: 206 Condon
Typically* 1:00 – 1:50 pm

Lab: 442 McKenzie, Social Sciences Instructional Laboratory (SSIL)
Typically* 2:00 – 3:50 pm

* Days on which we have quizzes, exams, or presentations: the lecture time will be extended and lab time shortened. The move from Condon to McKenzie may be delayed, but overall the total class meeting will occur in the scheduled three hour block. A detailed weekly schedule will be posted on Canvas.

Lab Hours: *Check the calendar for availability: http://ssil.uoregon.edu/calendars/*
SSIL Classroom
Reed Room, Knight Library

Server Access: Remote access to the SSIL Network Drives
http://ssil.uoregon.edu/ssil/ssil-network-drives-and-connecting-remotely/

VPN access to the UO Network
https://it.uoregon.edu/vpn

Required Text: An Introduction to Geographical Information Systems (4th Edition)
By Heywood, Cornelius, and Carver.
Supplemental reading will be posted on Canvas or available on reserve in the Knight library.

Course Objectives:

- Plan and execute a GIS analysis using a software framework
- Communicate the results of a GIS analysis through language and graphics
- Identify significant events in the development of GIS as a discipline and science
- Articulate the characteristics and relative differences between data representations
- Identify and critique the choices that were made in map design
- Describe data by its type and distribution
- Critically evaluate geospatial arguments in popular media
- Develop skills in information seeking (on campus and online)

Schedule (overview):

Week 1:   Introduction: What is GIS?; Geo-spatial and non-geospatial data

Week 2:   Databases; Data analysis

Week 3:   Process Models; Cartography

Week 4:   Data quality and computation; Surfaces and Networks; Future of GIS

Grading:

Map of the Day	50 points	$10\,days \times 5\,points$
In-class Activities	50 points	$5\,activities \times 10\,points$
In-class Quizzes	75 points	$3\,quizzes \times 25\,points$
Final Exam (July 14)	75 points	
Final Project	80 points	
Lab Assignments	170 points	$4 \times 30\,points + 1 \times 50\,points$
Total	**500 points**	

Lab Sections:

There is a lab section every day, which will include both instruction in applied GIS and delivery of lab assignments. By registering in the course, you are also registered for the specific lab time. During that time the SSIL computer lab is reserved for your use and the GTF will be available to present material and answer questions.

Please plan ahead and **save your files often** while you are working; computers may freeze and software may crash without warning and any unsaved work is likely to be lost. Please save your files in your student folder on the SSIL server. Feel free to also save files on a laptop, a thumb drive, or other storage device.

All online submissions (digital copies of maps and responses to questions) are due at 12:45 pm (fifteen minutes before the start of lecture) and must be uploaded to Canvas by that time. All printed copies of maps are due at the beginning of lab (within the first 10 minutes).

> _* Late work will be penalized by reduced credit of 20% per day late._
> _* In-class assignments must be completed in person and during the_
>   _class session to receive credit._
> _* No late quizzes, exams, or final projects will be accepted._

Graduate students:

In addition to the work listed above, graduate students will also complete a research activity. You may choose to compile an annotated bibliography (10 peer reviewed articles, 300-400 words each) or write a paper that describes the analysis done in your final project (5-10 pages, minimum 3 peer reviewed references). In Week 4 graduate students will also give a brief presentation of their final projects to the class during the regularly scheduled lecture.

Presentation	10 points
Research Activity	50 points
Total	**560 points**

Extra credit:

Extra credit will be awarded for the first response to questions on the Canvas forum that resolves the question or substantially improve the previous solution (up to 3 points per solution up to a maximum of 12 points).

Student Responsibilities:

Previous knowledge:

There is no prerequisite of previous experience with GIS, but there is an assumption of familiarity with using a computer. As described by Heywood regarding the level of the textbook: "This book assumes basic familiarity with PC computing. […] Familiar with terms such as hardware and software, the Internet and the major components of a computer: for example, monitor, keyboard, hard disk drive,CD-ROM drive, processor and memory. We make no other assumptions" (p. xvi)

Conduct:

All students are expected to adhere to the Student Code of Conduct and conduct themselves accordingly in the classroom and lab settings; students who are disruptive will be asked to leave the classroom.

Academic Honesty:

Unless explicitly stated in the instructions, students are expected to complete their own work on all assignments. Students may discuss lab assignments, but each student is responsible for completing their own work. Work done by others must be appropriately cited.

The complete code of conduct can be found on the University of Oregon website: http://uodos.uoregon.edu/StudentConductandCommunityStandards/StudentConductCode.aspx.

Students with Disabilities:

To encourage an inclusive environment, we will make reasonable accommodations to provide all students with the resources to participate in class activities. Students with disabilities who require accommodations to participate in class or meet course requirements are encouraged to first contact the Accessible Education Center (http://aec.uoregon.edu, 164 Oregon Hall, 346-1155) and then contact me as soon as possible.

[Section content and wording adapted from the syllabus for GEO481/581 by Amy Lobben]

Where to get help:

Canvas Discussion Board "FAQ": watched by the teaching staff, but also available as a reference for the entire class. Please clearly articulate your questions and provide any relevant details.

>   _If you have a solution, please reply to questions that have been posted in the forum. Extra credit will be awarded for the first response that resolves the question or substantially improves the previous solution (up to 3 points per solution up to a maximum of 12 points)_

Email: Please address questions to the entire teaching staff – this will ensure the most timely response.

Office Hours: Each member of the teaching staff has scheduled office hours; please stop by with questions.

Online help pages, forum postings: There are a number of good references online. For example, ESRI, the company that developed and maintains ArcMap, hosts a website with extensive help resources. Links will be provided in the lab instructions, but also feel free to search the internet (be sure to note the sources if you find solutions _**and cite them appropriately**_).