GEOG 4/581: Geographic Information Science I

Lecture:	Monday and Wednesday 2:00-2:50am 204 Tykeson Hall Winter 2020
Labs:	Section 1 (26311): Thursday 10:00-11:50am in 445 McKenzie Hall- SSIL Section 2 (22567): Thursday 12:00-1:50pm in 442 McKenzie Hall- SSIL Section 3 (22566): Friday 8:00-9:50am in 442 McKenzie Hall- SSIL Section 4 (27113): Friday 4:00-5:50pm in 445 McKenzie Hall- SSIL SSIL = Social Science Instructional Lab
Professor:	Dr. Carolyn Fish Assistant Professor of Geography 165 Condon Hall cfish11@uoregon.edu Office Hours: 4-5 on Monday and Wednesdays, or by appointment
Teaching Assistant (GE):	Devin Lea PhD Candidate in Geography dlea@uoregon.edu Office Hours: Wednesday 3-5pm in SSIL Lindsey Kurtz Masters Student in Landscape Architecture lkurtz@uoregon.edu Office Hours: Tuesday 2-4pm in SSIL
Textbook:	Not required, but if you are someone who learns well by reading, then it may be helpful. If you are someone who doesn't read your textbooks, it may not be worth it. No exam questions will be explicitly taken from the textbook. Longley, Paul A., Michael F. Goodchild, David J. Maguire, and David W. Rhind. *Geographic information systems and science*. John Wiley & Sons, 2005. A copy of the textbook is available on Course Reserve at the Knight Library for up to four hours. Renting the textbook on Amazon is far less expensive than buying it.
Course Description:	This class is an introduction to concepts behind organizing, analyzing, and visually presenting geospatial information. This class addresses three major questions: 1. How can one sense and represent the variation in the world around us? 2. How to record, recall, and analyze this information? 3. How to communicate and discuss this information with others? GIScience I explores these questions though the applied use of software designed to facilitate the collection, analysis, symbolization, and communication of information

Lab Assignments: There are seven lab assignments. Each lab assignment will be introduced by the GE during your lab session. Most lab assignments are due one week after they were introduced and assigned. These will be turned in on Canvas.

Labs turned in late (beginning at one minute late) will be penalized by 10% deduction per day. After 10 days late, students will receive a zero for an assignment.

Graduate Students: Graduate students taking the course for 581 credit will be graded on a different grading scale. These students are also required to do an additional 40 hours of work, per university policy. To account for this, graduate students will need to complete a book review and participate in peer-review of labs. The instructor will meet with graduate students early in the quarter to go over the additional requirements for 581 credit.

Student Accessibility: The University of Oregon is working to create inclusive learning environments. Please notify the professor if there are aspects of the instruction or design of this course that result in disability-related barriers to your participation. You are also encouraged to contact the Accessible Education Center (AEC) in 360 Oregon Hall at 541-346-1155 or uoaec@uoregon.edu.

Students registered with AEC must send a notification letter to the professor during Week 1 or 2 of the term and must meet with the professor during this time to assure that the professor is providing appropriate accommodations for the student.

Student Conduct: The University Student Conduct Code (available at https://dos.uoregon.edu/conduct) defines academic misconduct. Students are prohibited from committing or attempting to commit any act that constitutes academic misconduct. Students should not give or receive (or attempt to give or receive) unauthorized help on assignments or examinations without express permission from the instructor. Students should properly acknowledge and document all sources of information (e.g. quotations, paraphrases, ideas) and use only the sources and resources authorized by the instructor. If there is any question about whether an act constitutes academic misconduct, it is the students' obligation to clarify the question with the instructor before committing or attempting to commit the act. Additional information about a common form of academic misconduct, plagiarism, is available at researchguides.uoregon.edu/citing-plagiarism.

The professor of this course reserves the right to change aspects of this syllabus at any time during the term. Students will be informed if and when this occurs.

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	Date			Lectures	Readings	Labs
1	Jan 6	M	1	Introduction to GIScience I		Lab 1
	Jan 8	W	2	The History & Nature of GIS	Ch 1	
2	Jan 13	M	3	Projections & Coordinate Systems	Ch 2	Lab 2
	Jan 15	W	4	Vector Data Model	Ch 4	
3	Jan 20	M		NO LECTURE: MLK Day		Lab 3
	Jan 22	W	5	Vector Operations	Ch 3	
4	Jan 27	M	6	Selection and SQL	Ch 7	Lab 4
	Jan 29	W	7	Joins & Spatial Analysis	Ch 13	
5	Feb 3	M	8	Georeferencing & Editing	Ch 9	Lab 5
	Feb 5	W	9	Review of concepts	Ch 14	
6	Feb 10	M		**Test 1**		Lab 6
	Feb 12	W	10	Raster Data Models	Ch 11	
7	Feb 17	M	11	Raster Analysis	TBD	Lab 6
	Feb 19	W	12	Data Acquisition	Ch 8	(cont)
8	Feb 24	M	13	Spatial Modeling	Ch 15	Lab 7
	Feb 26	W	15	Cartography & Geovisualization	Ch 11 &12	
9	Mar 2	M	16	Cartography & Geovisualization	TBD	Lab 7
	Mar 4	W	17	TBD		(con't)
10	Mar 9	M	18	Guest Lecture: Riley Moore		
	Mar 11	W	19	Review of concepts		
Finals Week				**Test 2: Thursday of Finals week March 19 @ 2:45**		