

Basic Information:

Class: Digital Earth

Number: GEOG 150

Place: 125 Brooks

Time: Class—TR 11:30-12:45

Labs—M&R 4:00-5:00 & 5:00-6:00

Office hours—M 2:30-3:30, T 10:00-11:00

and by appointment

Contact: Jamison.Conley@mail.wvu.edu

293-6352

347 Brooks Hall

TA: Jennifer Smith

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127 Brooks Hall

Office hours—MR 2:30-4:00

Welcome to GEOG 150, Digital Earth. This class provides an introduction to the field of geographic information science. By the end of this semester, you should be able to:

- 1) Tell me how a computer can be used to store, display, analyze and model geographic data.
- 2) Create maps with GIS software.
- 3) Use GIS software to examine a problem that interests you, such as discovering and interpreting disease patterns, identifying wildlife habitat areas, and locating areas for potential economic development.
- 4) Learning how to master software by using the help documentation and electronic users' manuals to find analysis and mapping functions in any GIS software package.
- 5) Recognize how geospatial technologies have changed and continue to change our daily lives.

Course Structure and Grading:**1) Contacting me**

I strongly encourage you to come to my office hours if you have any questions or need assistance. The first office hour of the week is before the Monday lab sessions and the second is before Tuesday's class. As the course instructor, my main goal is to help you learn, so if you have any questions about the material, or the class in general, you are more than welcome to come speak with me during office hours. If you are not available during those times, email me or ask me after class to set up an appointment. In addition, if my office door is open (even just open an inch), you can stop in without an appointment. I will be checking my email regularly during business hours (M-F 9am-5pm), and will reply as soon as I can. I may check email on evenings and weekends, but not as regularly, and may not have a chance to respond until the next business day.

2) Readings, exams, and labs

There is a text book for this course, *Fundamentals of Geographic Information Systems, Fourth Edition* by Michael DeMers. The daily class readings will come from this textbook. Information in the readings that is not discussed in the lecture is still testable material. The lectures will draw on major themes from the readings and will include material not discussed explicitly in the readings. The exams will cover material from both the lectures as well as the readings.

As you can see from the schedule at the end of this syllabus, there are three exams. The first two will take place during class time, and are not cumulative. The third exam will take place during finals week and will be cumulative. They will be a combination of multiple choice, short answer, and longer essay and activity questions. Exams cannot be re-taken. Make-up exams will be entirely comprised of essay and activity questions. Consistent with WVU guidelines, if you cannot take a regularly scheduled exam because of authorized University activities, you will have the opportunity to take a make-up exam at an alternate time. Make-up exams for absences due to any other reason will be at the discretion of the instructor.

In addition to the exams, there are lab assignments, which will give you an opportunity to work with software. Ideally, the labs will take one to two lab sessions each, but because this is the first time the labs have been used, please be patient as your comments and suggestions are welcome. We may have to spend an extra week on a lab or skip a lab. You may work in small groups of 2-3 under the following conditions: 1) each person in the group turns in a separate assignment using their own words—if I receive two identical labs, that looks like plagiarism, which is a serious problem—and 2) you tell me who you worked with. If you would rather do the lab assignments alone, you may do that too. Because this is only a 3-credit class with lab sessions, there are no homework assignments beyond the labs and the readings.

Late assignments will be marked down one partial letter grade for every day that they are turned in after the due date. For example, an assignment that would get a B+ but is a day late will only get a B. If it is two days late, it gets a B-. Grading appeals must be submitted to me in writing (e-mail accepted) on the day the assignment or exam is returned.

3) Clickers and attendance

Through the clicker questions that will occur in many lectures, I will be taking attendance, and this will contribute a small but important part of your grade. All students are required to attend the course lectures. You are permitted four absences for any reason. There will be material discussed in lectures that is not covered in the course readings, which will be tested on the exams, so I recommend you attend all the lectures, though.

4) Grading

The contribution of each of these components to the final grade is as follows:

Labs:	8 x 5% each for a total of 40%
Exam 1:	15%
Exam 2:	15%
Final exam:	25%
Attendance:	5%

The grading scale will be:

>= 90%	A
80-89.9%	B
70-79.9%	C
60-69.9%	D
< 60%	F

Social Justice: “West Virginia University is committed to social justice. I concur with that commitment and expect to maintain a positive learning environment based upon open communication, mutual respect, and nondiscrimination. Our University does not discriminate on the basis of race, sex, age, disability, veteran status, religion, sexual orientation, color or national origin. Any suggestions as to how to further such a positive and open environment in this class will be appreciated and given serious consideration.

If you are a person with a disability and anticipate needing any type of accommodation in order to participate in this class. Please advise me and make appropriate arrangement with Disability Services (293-6700).”

Academic Dishonesty. The integrity of the classes offered by any academic institution solidifies the foundation of its mission and cannot be sacrificed to expediency, ignorance, or blatant fraud. Therefore, I will enforce rigorous standards of academic integrity in all aspects and assignments of this course. For the detailed policy of West Virginia University regarding the definitions of acts considered to fall under academic dishonesty and possible ensuing sanctions, please see the Student Conduct Code at <http://www.arc.wvu.edu/rightsa.html>. Should you have any questions about possibly improper research citations or references, or any other activity that may be interpreted as an attempt at academic dishonesty, please see me *before* the assignment is due to discuss the matter.

Schedule:

This schedule is preliminary, and may change depending on the needs of the class. If there are any changes, I will announce those in class and hand out a revised schedule.

Week	Topic	Readings	Lab
1	What is geography? What is GIS?	chap. 0, chap. 1	n/a
2	How does a computer view space?	chap. 2	1
3	What makes a map? What are the parts of a map?	chap. 3	n/a*
4	How does a computer read a map?	chap. 4	2
5	Midterm review (T) and midterm 1 (R)		3
6	How does a computer store geographic data?	chap. 5	4
7	How does a computer use satellite images?	chap. 6	4
8	How can we manage geographic data in a computer?	chap. 7	5
9	So much data, how do I find things in it?	chap. 8	6
10	How can I analyze this data by describing it?	n/a	6
11	Midterm review (T) and midterm 2 (R)		6
12	How can I analyze this data mathematically?	pp. 290-293	7
13	How can I analyze this data visually?	pp. 314-328	7
Thanksgiving			
14	What might the future of GIS look like?	n/a	8 or 9
15	More on the future of GIS & final exam review	n/a	8 or 9
	Final Exam Week		

*Since the Monday of this week is Labor Day, there can't be any Monday labs, and the Thursday labs just get lucky.