

GLY2030c-Environmental and Engineering Geology; Fall Semester 2015; 3 credit hours

Sections 01D4 (lab M per. 3-4), 01D5 (lab T per. 8-9), 01EB (lab W per. 3-4) and 21F3 (lab F per. 3-4)
Lecture Meets T, R 3rd period (9:35-10:25) in Williamson Hall Room 100. All labs meet in Wm 141.

Instructor: Dr .Matthew Smith
269 Williamson Hall
mcsmith@ufl.edu, 392-2106

Office hours: MW per. 5, T per 7, or by appt.
Dept. Office: 241 Williamson Hall (392-2231)

Lab Instructor(s):

Mr. Rory Kates (section 01D4, 01EB), Wm 257, roryjsk@ufl.edu , **Office Hours:** W and F 9:00-10:00 am or by appt.

Mr. Daniel Fisher (sections 01D5, 21F3) , Wm264, fischerman@ufl.edu , **Office Hours:** M and T 1:30-3 pm, or by appt.

You will receive a separate lab syllabus detailing the lab.

Course Objectives:

1. To learn about the processes and events that shape the planet around you, so you can better understand the environment in which you live.
2. To investigate how geology relates to and affects modern engineering and environmental issues

Required Course Materials:

1. Environmental Geology 9th Ed. by Edward Keller, Prentice Hall publishing. Bundled with access to the Pearson Pub. Mastering Geology website.

Note: We will not use this site for a few weeks. If you have otherwise procured the book, Mastering Geology access can be purchased separately. Detailed info to come.

Course Description: The focus of this course is how processes operating within the Earth system shape its surface, control its environment, influence the evolution of systems operating within it, and ultimately relate to modern environmental and engineering concerns. Scheduling for specific lecture topics and reading assignments will be posted on the class Sakai website, and you should check this site frequently for updates or announcements. The lecture course meets 2 times per week and the lab section meets once/week. The lab period provides a smaller class-size environment, and it is intended to examine, in detail, a small number of issues that are related to the lecture topic at hand and to provide an opportunity for you to engage in “hands-on” investigations that will give you experience in applying concepts discussed in class. In some cases, these labs may be field based, and for those times you should be sure to dress appropriately for walking about in the field. Hopefully, these labs will help you to relate the material from the book and lecture class to the real world surrounding you. Your lab-section leader (TA) will provide you with a separate syllabus. At times in lab and lecture, readings and/or short assignments may be assigned (and should be completed!) prior to lab (or lecture) meetings. Sakai will be used to report your grades and to make class announcements. The class schedule and course notes will be posted to Sakai as well. **To use Sakai you must have a GatorLink ID.** Course notes will generally be available through the Sakai web site shortly before or after the class meeting. Your mastery of the material will be assessed by two in-class examinations and a final. In-class exams are not cumulative, however the final is cumulative.

Grading: Your semester grade will be determined as follows. The 2 in-class exams will make up 35% of your grade (20% for your higher score and 15% for your lower score). The comprehensive final and lab class each count as 25% of your grade. Homework will make up the remaining 15% of your grade. Attendance will be taken randomly throughout the term for extra credit which can raise your final term grade up to 3%. Letter grades will be assigned as follows: A = 93% or above, A- = 90-92%, B+ = 87-89%, B = 83-86%, B- = 80-82%, C+ = 77-79%, C = 73-76%, C- = 70-72%, D+ = 67-69%, D = 63-66%, D- = 60-62%, E = 59% or below.

Attendance and Makeup Policy: Attendance and active participation is highly recommended (and comprises a part of your final grade), as some of the material that will be covered is not in the book. You are responsible for all material covered in class. Truly attending class means coming to class in both body and mind. You should come to class prepared to learn, which means having read the assigned materials and having briefly reviewed your notes from last time. If you have a preexisting conflict with one of the scheduled exams, an alternative meeting with Dr. Smith must be made at least one week prior to the exam. In case of sudden illness or family emergency, please notify the instructor as soon as possible (within no more than 1 week). Appropriate documentation may be required.

Etiquette, email etc. : No cell phones, pagers, radios, etc are allowed to be on during class. Please show courtesy to both your instructors and classmates by arriving and leaving on time (NOT EARLY) and avoiding unnecessary disturbances during class. All students are expected to adhere to the honor code (<http://www.dso.ufl.edu/judicial/honorcode.php>). Cheating or plagiarism will not be tolerated. Students with disabilities should contact the instructor as soon as possible to discuss appropriate accommodations. ALL email communications MUST be sent from (and will be sent to) your gatorlink accounts or from Sakai. I try to respond to emails in a timely fashion, however, I do get a lot of email traffic. Accordingly, before sending me a question via email please check the syllabus and class website for the answer to your query. This will help me attend emails quickly.

University Policy on Accommodating Students with Disabilities: Students requesting accommodation for disabilities must first register with the Dean of Students Office (is <http://www.dso.ufl.edu/drc/>). The Dean of Students Office will provide documentation to the student who must then provide this documentation to the instructor when requesting accommodation. You must submit this documentation prior to submitting assignments or taking the quizzes or exams. Accommodations are not retroactive, therefore, students should contact the office as soon as possible in the term for which they are seeking accommodations.

University Policy on Academic Misconduct: Academic honesty and integrity are fundamental values of the University community. Students should be sure that they understand the UF Student Honor Code at <http://www.dso.ufl.edu/students.php>.

Netiquette: Communication Courtesy: All members of the class are expected to follow rules of common courtesy in all email messages, threaded discussions and chats. [Describe what is expected and what will occur as a result of improper behavior – <http://teach.ufl.edu/docs/NetiquetteGuideforOnlineCourses.pdf>

GLY2030C-Tentative Schedule

| <u>Week</u> | <u>Date</u> | <u>Topic</u> | <u>Keller Reading/Lab Manual Reading</u> | <u>Lab</u> | <u>Homework</u> |
|--|-------------|---|--|--|---|
| 1 | 25-Aug | Introduction -Philosphy and Concepts | Ch 1 | No Lab Meeting Week 1 | |
| | 27-Aug | Philosophy cont./ Intro to Earth's Interior and Plate Tectonics | Ch 1 | | |
| 2 | 1-Sep | Philosophy cont./ Intro to Earth's Interior and Plate Tectonics | Ch 1 | Plate Tectonics | |
| | 3-Sep | Plate Tectonics | Ch 2 | | |
| 3 | 8-Sep | Plate Tectonics | Ch 2 | FLMNH self-guided Field Trip, (No Lab Monday) | |
| | 10-Sep | Plate Tectonics/ Intro to Earth Materials | Ch 2 | | |
| 4 | 15-Sep | Minerals, Rocks and the Rock cycle | Ch 2, AGI Manual Lab 3 | Quiz 1 (Plate Tectonics), Minerals Lab | |
| | 17-Sep | Minerals, Rocks and the Rock cycle | Ch 2 | | |
| 5 | 22-Sep | Minerals, Rocks and the Rock cycle | Ch 2 AGI Manual Lab4-5 | Rock cycle and Rocks Part 1 | |
| | 24-Sep | Soils-weathering | Ch 3 | | |
| 6 | 29-Sep | Soils | Ch 3, AGI Manual Lab6-7 | Quiz 2 (minerals and rock classification) Rocks Part 2 | |
| | 1-Oct | Soils | Ch 3 | | |
| 7 | 6-Oct | 1st Hourly Exam | Ch 1-3, AGI Manual Lab 9 | Topographic Maps | Intro toHazard City assignment due 10/3 (extra credit), Hazard City Assignment 1: Topo Maps due Sun 10/4 @ 11:59pm, |
| | 8-Oct | Ecology and Geology | Ch 4 | | |
| 8 | 13-Oct | Natural Hazards Intro | Ch 5, 8/9, AGI Manual Lab 10 | Quiz 3 (topo maps quiz), Geologic Maps | Hazard City Assignment 2-Landfill Hazard Assessment Due 10/11, |
| | 15-Oct | Natural Hazards Intro | Ch 5, 8/9 | | |
| 9 | 20-Oct | Rivers and Flooding | Ch 6, AGI Manual Lab 11 | Stream Processes Lab | Hazard City Assignment 3: EQ and Volcano Hazards due 10/18 |
| | 22-Oct | Rivers and Flooding | Ch 6 | | |
| 10 | 27-Oct | Landslides and Landslide hazards | Ch 7 | Hogtown Creek Field Trip | Hazard City Assignment 4: Flood Insurance Rates Assessment due 10/26 @11:59pm |
| | 29-Oct | Landslides and Landslide hazards | Ch 7 | | |
| 11 | 3-Nov | Coastal Geology and Hazards | Ch 10 | Coastal Hazards (No Lab Friday) | Hazard City Assignment 5: Landslide Hazard Assessment due 11/1 |
| | 5-Nov | 2nd Hourly Exam | Ch 4-9 | | |
| 12 | 10-Nov | Veterans Day- No Classes | | No School Wed (Veteran's Day), only Friday lab Meets to do Coastal Hazards Lab | |
| | 12-Nov | Coastal Geology and Hazards | Ch 10 | | |
| 13 | 17-Nov | Water resources | Ch 12, TBA | Quiz 4 (coastal Hazards) Fl Karst-Lab | Hazard City Assignment 6: Coastal Property and Tsunami/Storm Surge Assessments Due 11/16 |
| | 19-Nov | Groundwater processes and karst Geology | Ch 14,Ch 7 (sinkhole fm), | | |
| 14 | 24-Nov | Groundwater processes and karst Geology | Ch 15 | No Lab (No Class Fri) | Hazard City Assignment 7: Groundwater Contamination Assessment due 11/23, Florida Karst Takehome assignment given |
| | 26-Nov | Thanksgiving- No classes | | | |
| 15 | 1-Dec | Global Change | Ch 16, TBA | Batcave Trip | Florida Karst Takehome assignment due in lab |
| | 3-Dec | Global Change | Ch 16, TBA | | |
| 16 | 8-Dec | TBA/Catchup | TBA | No Lab This Week (No class Friday Misses) | |
| | 10-Dec | Reading Day- No classes | | | |
| Final Exam is Mon December 14th 7:30am-9:30 pm in our normal classroom (Exam group 14A) | | | | | |