

GLY 1880 – Earthquakes, Volcanoes, and Other Natural Disasters

Dr. Liz Screaton, email in Canvas or screaton@ufl.edu.

Virtual Office Hours: Tues 1-2 pm and Thurs 2-3 pm

TA: Brian Kelly, Virtual Office Hours: Mon and Weds 11:45-12:35pm

Virtual Office Hours: Because this is an online course, all office hours will be online. Based on past experience, students generally email with questions. If you would prefer meeting via Zoom, just let us know. We're happy to set up sessions during office hours or at another time that works.

Overall Course Goals and Outcomes

- To gain an overview of the physical geological sciences as viewed through the lens of natural hazards.
- To get a better understanding of the concepts of risk, hazard, and vulnerability and how they affect you both day to day, and over a longer term.
- To convey the importance of scientific and critical thinking not only to science, but to the rest of your life as well. *This course fulfills the UF General Education Physical Science (P) requirement. For more information, see the last page of this syllabus.*

Textbook There is no required textbook purchase for this course. Readings will be linked from each module in Canvas. The class will use chapters from open educational resources and readings from the web.

Class Format

GLY 1880 is an online course using Canvas. The course is asynchronous, meaning that there will not be regular online meetings or zoom lectures. The class consists of 11 modules. Each module will contain:

- A background reading chapter and one or more short recorded video lectures to introduce and reinforce the concepts, terms, and skills.
- A 5-pt **reading quiz**. Questions are usually multiple-choice, but sometimes T/F, fill-in-the-blank, or multiple answer. The questions are mostly based on the chapter but some will ask you to integrate what you are learning with material from previous modules. Questions are randomly drawn from pools of questions of similar difficulty. *You are allowed to look back at the readings and notes during the quiz and the best score of 2 attempts is allowed. Partial feedback will be immediately available after submission.*
- An 8-point **assignment**, where you'll look in-depth at one or more case study examples of places where hazards struck or are likely in the future. Format will vary and can include multiple choice answers, short essays, and short (1 min) recorded presentations for the class. Unless otherwise specified, you are allowed to discuss assignment questions with others but must produce your own answers. Essay and presentation submissions will be reviewed using Turnitin, which is an online service to help prevent and identify student plagiarism.

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- In each module, the **discussion (3 pts)** provides a place to consider the implications of the material, apply concepts, and examine issues. The discussions will include student written posts and responses to other students.

During the semester, there will also be two exams. Each will have a portion with essay questions (20 pts each; open book, untimed) and a part with multiple-choice questions (50 pts each; **proctored; 60 minutes**). The exams will review terms and concepts, and some of the questions will ask you to integrate material from readings, discussions and/or presentations. *For the proctored exams, you'll be allowed to have an 8.5 x 11 inch one-sided sheet of paper with any notes that you want. You can find information about ProctorU at [this web page](#).*

Grading

<p>302 Points</p> <ul style="list-style-type: none">• Introductory Quiz and Discussion 10 pts• Module Quizzes 45 pts (best 9@5 pts)• Module Discussions 27 pts (best 9@3 pts)• Module Assignments 80 pts (best 10 @8 pts)• Exam Essay Questions (open book): 40 pts (2@20 pts)• Exam Multiple Choice: 100 pts (2@50 pts)	<ul style="list-style-type: none">• A: $\geq 93.4\%$;• A- 90.0-93.3%;• B+ 86.7 – 89.9%,• B: 83.4 – 86.6 %,• B-: 80.0 – 83.3 %,• C+ 76.7 – 79.9 %;• C: 73.4 – 76.6%,• C-: 70.0 – 73.3%,• D+: 66.7 – 69.9%,• D: 63.4 – 66.6%,• D- 60.0 – 63.3%• E 59.9% and below.
<p>These grade criteria are firm. At the end of the semester, the points you earn determine your grade. There will be at least 5 extra credit points (>1%) available to all students during the semester. We do not negotiate the final grade or offer special extra credit opportunities to individual students.</p> <p><i>Information on how UF calculates GPA based on letter grades can be found at: https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx)</i></p> <p>How to do your best:</p> <ul style="list-style-type: none">• Set aside time each week to complete the course material, just as you would plan time for an “in person” course. To allow time for questions to be answered, I suggest starting your work at least a day before deadlines.• Ask any questions you have before you submit quizzes, discussions, and assignments. We’re here to help you learn!• Mark the deadlines on a calendar that you frequently use. In general, the deadlines are every Tuesday and Thursday at 11:59 pm.• Pay attention to announcements and any emails from the prof or TA.• Complete all the work. Although you can drop two quizzes, two of the discussions, and one of the assignments, modules can build on previous learning, and all the material will be on the exams.• Review graded work, look at any feedback, and ask questions.	

Academic Honor Code Students must follow the University of Florida Honor Code. On all work submitted for credit by students of the University of Florida, the following pledge is either required or implied: "*On my honor, I have neither given nor received unauthorized aid in doing this assignment.*" Before submitting any work for this class, please read the policies about academic honesty at <https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/>

- **Specifics for this class:**
 - Except for the exams, you are allowed to discuss course material with other students and to ask the prof or TA for help. All work submitted must be your own.
 - Having anyone else complete any work for you, completing any work for another student, or receiving/providing answers is not allowed and is subject to being reported as an honor code violation.
 - Written work will be evaluated with Turnitin. Turnitin is an online service to help prevent and identify student plagiarism by comparing your submission to other material and student submissions. Substantial overlap with other submissions/material will be considered an honor code violation.
- **How to not endanger your grade (or risk an honor code violation):**
 - Don't copy and paste any text from the web or from another person.
 - Don't provide any answer text to another student –even if it is verbal. Because we won't be able to tell who did the work and who copied, both students will face an honor code violation. In addition, providing answers does not help the other student learn.
 - Give credit where due. If you found another student's explanation or discussion post helpful, or used information from the internet, *summarize* rather than copy what they said and credit the source.
 - If you use quotes, you must cite the source. To effectively answer questions, you'll need to provide additional text, providing context and/or explanation for the quote.

Course announcements and email: Announcements and Canvas Email will be used to contact you and to inform you of updates, reminders, and corrections to course deadlines or content. **Make sure that you either have Notification Preferences set to "ASAP" for Announcements and for Canvas email Messages, or that you check these frequently.**

Getting answers to your questions

Questions are normal in any college-level class, and asking questions is an important part of the learning process.

- Emails sent during virtual office hours will receive a rapid (<30 min) response unless we are helping others. Other weekday daytime (9 am -5 pm) emails will receive a response within several hours. Emails sent during evenings, holidays, or weekends will receive a response by the morning of the next weekday.
- By past student request and for consistency, all deadlines are at 11:59 pm on Tuesdays and Thursdays. Be sure to start work far enough in advance so that you can ask any questions by 5 pm of the deadline day.

- To report course-specific errors such as a broken link in an assignment or missing information, send an email. We'll correct any problems and will credit you 1 point if you are the first to report a problem and **the problem is reported to us by 5 pm on the due date.**
- For content questions, the first place to go is to Course Question and Answer Discussion Board. Check whether the question has already been answered. If not, send an email **or** post your question.
- For questions that are specific to you, such as about your grade or an upcoming conflict with a deadline, please email me or the TA.
- For problems with the Canvas system: call 352-392-4357 or via e-mail at helpdesk@ufl.edu.

Deadlines and Policies

- Deadlines in Canvas are 11:59 pm. Please be aware that the Canvas clock might differ from your clock and also that Canvas considers the deadline to be 11:59:00 (not 11:59:59).
- Be sure to carefully read through assignments and ask any questions well before the deadline. In addition, be sure to view any files after submission to check that it is the correct file and that it uploaded without error.
- For *pre-existing conflicts* (e.g., athletic, religious, academic): email the professor **at least 1 week before a deadline** to set an alternate deadline.
- For *sudden, unexpected major issues that affect one deadline*: email the professor no later than 5 pm the day of the deadline.
- For long-lasting illnesses or other issues that affect more than one course or more than one deadline in this course, contact the [Dean of Students Office](#), who will verify and then inform all the student's professors. You'll then work with me (and your other professors) to arrange new deadlines.
- Mistakes happen and bad days happen. That's why the lowest assignment score will be dropped and the lowest two quiz scores and discussion scores will be dropped.

Class Demeanor Students are expected to treat other students, the TA, and the professor with consideration.

Accommodations for Disabilities: Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, www.dso.ufl.edu/drc/) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.

Course Evaluations: Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at <https://gatorevals.aa.ufl.edu/students/>. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <https://ufl.bluera.com/ufl/>. Summaries of course evaluation results are available to students at <https://gatorevals.aa.ufl.edu/public-results/>

Course Topics and Schedule

In case of UF closure, the schedule will be adjusted.

Topic	Deadlines
Getting Started; Introduction	Sep 3: Introductory Quiz and Discussion
Module 1: Geology and the Earth	Sep 8: Quiz Sep 10: Assignment and Discussion
Module 2: Plate Tectonics	Sep 15: Quiz Sep 17: Assignment and Discussion
Module 3: Earthquake Basics	Sep 22: Quiz Sep 24: Assignment and Discussion
Module 4: Earthquake Hazards	Sep 29: Quiz Oct 1: Assignment and Discussion
Module 5: Earthquake Preparation and Response	Oct 6: Quiz Oct 8: Assignment and Discussion
Review and Exam: Science, Plate Tectonics, and Earthquakes	Oct 13: Exam 1 Essay Portion due Oct 15-17: Exam 1 Multiple Choice Exam
Module 6: Volcanoes	Oct 20: Quiz Oct 22: Assignment and Discussion
Module 7: Volcanic Hazards	Oct 27: Quiz Oct 29: Assignment and Discussion
Module 8: Monitoring Volcanoes	Nov 3: Election Day. Quiz 8 can be submitted through Nov 5. Nov 5: Quiz, Assignment, and Discussion
Module 9: Weather and Tropical Cyclones	Nov 10: Quiz Nov 12: Assignment and Discussion
Module 10: Floods	Nov 17: Quiz Nov 19: Assignment and Discussion <i>Nov 24: Catch-Up Day (if needed due to UF closure)</i>
Module 11: Slope Failures and sinkholes	Dec 1: Quiz Dec 3: Assignment and Discussion
Review and Exam: Volcanoes, Cyclones, Floods, and Slope Failures	Dec 8: Exam 2 Essay Portion due Dec 13-15: Exam 2 Multiple Choice Exam

SYLLABUS

How this course fulfills the Physical Sciences Requirement: Physical science courses provide instruction in the basic concepts, theories and terms of the scientific method in the context of the physical sciences. Courses focus on major scientific developments and their impacts on society, science and the environment, and the relevant processes that govern physical systems. Students will formulate empirically-testable hypotheses derived from the study of physical processes, apply logical reasoning skills through scientific criticism and argument, and apply techniques of discovery and critical thinking to evaluate outcomes of experiments. To fulfill the physical science requirement, this course focuses on the major developments in the field of geology including the theory of plate tectonics. This developments will be used to illustrate the scientific method. Critical thinking skills will be developed using virtual experiments and analyses of recent natural disasters. Students will evaluate data to formulate and test hypotheses.

The General Education requirements for Student Learning Outcomes are: 1) **Content:** Students demonstrate competence in the terminology, concepts, theories and methodologies used within the discipline. 2)

Communication: Students communicate knowledge, ideas and reasoning clearly and effectively in written and oral forms appropriate to the discipline. 3) **Critical Thinking:** Students analyze information carefully and logically from multiple perspectives, using discipline-specific methods, and develop reasoned solutions to problems.

In this course, the *content outcome* will be assessed through the quizzes based on terminology and concepts for each module, the assignments, and the final. The *written communication outcome* will be assessed through your discussion posts, and the assignments with essays. Discussion posts are evaluated for completeness and clarity. The *oral communication outcome* will be assessed through one or more assignment with an audio/ video presentations. The presentation will be graded on content, use of supporting material, and delivery. *Critical thinking* will be assessed through the assignments, some of which require you to integrate scientific understanding of geology with societal factors, and the exams, which will require you to apply concepts and methods to new situations.