GLY 1880 – Earthquakes, Volcanoes, and Other Natural Disasters

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

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Virtual Office Hours: Mon 12:50-1:40 pm and Weds 11:45-12:35pm

Virtual Office Hours: Because this is an online course, the help hours will be online. At other times, please email us your questions. I recommend emailing through Canvas because it helps to keep all the course-related emails together, but you can use the above ufl emails if you prefer. You can also email if you'd like to arrange a time to ask questions by phone, online conference, or in person.

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.

Class Format

GLY 1880 is an online course using Canvas. The class consists of 12 modules. Each module will contain:

- A background reading chapter and one or more short video lectures to introduce 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.*
- An 8-point **assignment**, where you'll look in-depth at one or more case study examples of places where hazards struck and disasters occurred, or analyze the risks of future disasters. Format will vary and include multiple choice, 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.
- 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 **proctored exams (online, multiple choice, 60 minutes)** 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 bring an 8.5 x 11 inch one-sided notes page. You can find information about ProctorU at this web page. ProctorU signups for the exams will be available ~2 to 3 weeks after the beginning of the semester.*

Grading

358 Points • Introductory Quiz and Discussion 10 pts • Module Quizzes 50 pts (best 10@5 pts) • Module Discussions 30 pts (best 10@3 pts) • Module Assignments 88 pts (best 11 @8 pts) • Practice Exams: 20 pts (2@10 pts) • Proctored Exams: 160 pts (2@80 pts)	• A: ≥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**.**

These grade criteria are firm. At the end of the semester, the points you earn determine your grade. There will be 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.

Information on how UF calculates GPA based on letter grades can be found at: https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx)

How to do your best:

- Set aside time each week to complete the course material, just like you would plan time for an "in person" course.
- Mark the deadlines on a calendar that you frequently use.
- Pay attention to announcements and any emails from the prof or TA.
- Complete all the work, even though you can drop two quizzes and one of the discussions and assignments.
- Ask any questions you have before you submit quizzes, discussions, and assignments. We're here to help you learn!
- 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, but 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. Providing answers also 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.

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. 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, email both the professor. I'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 before any deadline.**

- 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 to me (the prof) and the TA **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 watch and also that Canvas considers the deadline to be 11:59:00 (not 11:59:59).
- Be sure to carefully read the assignment 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 **no later than 1 week before a deadline** to set an alternate deadline.
- For *sudden, unexpected major issues:* email the professor no later than 5 pm the day of the deadline. Documentation may be requested.
- 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, TAs, 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	Jan 9: Introductory Quiz and Discussion
Module 1: Geology and the Earth	Jan 14: Quiz Jan 16: Assignment and Discussion
Module 2: Plate Tectonics	Jan 21: Quiz Jan 23: Assignment and Discussion
Module 3: Earthquake Basics	Jan 28: Quiz Jan 30: Assignment and Discussion
Module 4: Earthquake Hazards	Feb 4: Quiz Feb 6: Assignment and Discussion
Module 5: Earthquake Probabilities	Feb 11: Quiz Feb 13: Assignment and Discussion
Review and Exam: Science, Plate Tectonics, and Earthquakes	Feb 19-22: Exam 1
Module 6: Earthquake Preparation and Response	Feb 25: Quiz Feb 27: Assignment and Discussion
Module 7: Volcanoes	Mar 10: Quiz Mar 12: Assignment and Discussion
Module 8: Volcanic Hazards	Mar 17: Quiz Mar 19: Assignment and Discussion
Module 9: Monitoring Volcanoes	Mar 24: Quiz Mar 26: Assignment and Discussion
Module 10: Weather and Tropical Cyclones	Mar 31: Quiz Apr 2: Assignment and Discussion
Module 11: Floods	Apr 7: Quiz Apr 9: Assignment and Discussion
Module 12: Slope Failures and sinkholes	Apr 14: Quiz Apr 16: Assignment and Discussion
Review and Exam: Volcanoes, Cyclones, Floods, and Slope Failures	Apr 19-22: Exam 2

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.