

EARTHQUAKES, VOLCANOES & OTHER HAZARDS

UNIVERSITY OF FLORIDA, GLY1880 SPRING 2020

CONTACT

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Office Hrs: Mon/Wed,
10:00-11:00 a.m. or by
appointment.

COURSE MATERIALS:

Text: Natural Disasters
11th Ed. by Patrick L.
Abbott

KEY DATES

Exam 1: February 24th

Exam 2: April 6th

Projects Due: April 22nd

Welcome to Geologic Hazards! And if you are new to geology all together, welcome to the best science discipline (in my very biased opinion). In this course we explore the dangerous side of Earth's natural processes. Please read through this syllabus for important info about the course.

COURSE MATERIAL:

The textbook for this course is Natural Disasters 11th edition by Patrick L. Abbott. You may use any format for the book and if you can find it used, go for it! You won't need digital access to supporting material, so if you can find it used, go for it!

TECHNOLOGY REQUIREMENTS

Computer & Internet: Competency in the basic use of a computer is required. Course work will require use of a computer and many assignments will be turned in online through the Canvas course page. For additional information on UF College of Liberal Arts and Sciences policy regarding computer requirements you can visit: <http://it.clas.ufl.edu/policies/student-computer-requirement/>

COURSE DETAILS

Prerequisite Knowledge: This is a GenEd physical science (P) course. This course does not have prerequisites, but a basic knowledge of mathematics (middle school math, occasional basic algebra) is helpful.

Course Description & Goals: Natural disasters such as earthquakes, volcanoes, hurricanes, and floods have devastating impacts on human lives. Natural disasters such as earthquakes, volcanoes, hurricanes, and floods have devastating impacts on human lives. Major topics will include how plate tectonics provides a framework for evaluating earthquake and volcanic hazards, the limits of our predictive abilities, the challenges of forecasting floods and hurricanes in a changing climate, and the necessity for decision-making despite scientific uncertainty. Students will analyze recent and historical disasters and explore the interactions of humans with natural and built environments before, during, and after major events. The goals of this course include:

- Examining the current state of scientific understanding about natural disasters.
- Analyzing scientific data and using case studies to understand how disasters impact human lives and how preparation for and response to disasters can be improved.
- Reflecting on the social context in which disasters occur and how those social contexts interact with disaster preparation and response.
- Practicing and improving written and oral communication skills.

Course Responsibilities:

- Complete all assignments in a timely fashion.
- Actively participate in class discussions as specified in each module.
- Complete online multiple-choice quizzes for each module (except module 7).
- Complete the course project, which transpires during modules 8-12.
- Check the course announcements and class e-mail *regularly*.

Content Warning: *This class is about hazards and natural disasters. People get hurt and die in disasters. While we will not dwell on macabre details, it is impossible to discuss hazards without talking about death; disasters are called disasters because of the impact on human lives. If you feel you may struggle with this aspect of the course, please contact me as soon as possible so we can determine the best course of action.*

Schedule: Each week we will have some combination of reading assignments, quizzes and activities. The table below is a tentative outline of the course topics, subject to change as the semester progresses. See the class website for the most up to date information on reading assignments and due-dates.

Week	Topics
1: 1/6-1/10	Course Introduction & Frameworks
2: 1/13-1/17	Plate Tectonics
3: 1/20*-1/24	1/20 MLK holiday, campus closed.

	Earthquakes
4: 1/27-1/31	Earthquakes
5: 2/3-2/7	Earthquakes
6: 2/10-2/14	Volcanoes
7: 2/17-2/21	Volcanoes, prep for Exam 1
8: 2/24-2/28	2/24 Exam 1 Landslides
9: 3/9-3/13	Sinkholes
10: 3/16-3/20	Floods
11: 3/23-3/27	Hurricanes
12: 3/30-4/3	Weather & Climate extremes
13: 4/6-4/10	Sea level rise, prep for Exam 2 4/6 Exam 2
14: 4/13-4/17	Disaster preparedness & resiliency
15: 4/20-4/24*	Wrap up and turn in projects. 4/24 is a reading day – no classes.

COURSE ACTIVITY CATEGORIES

Assignments: Assignments are designed to enhance the reading and lecture material.

Earth Science is a broad discipline, and these exercises incorporate a variety of methods to assist you in learning the concepts presented. Some assignments will be submitted online, and some will take place in class. Assignments range in point value depending on the amount of time and effort involved for each one. The lowest two assignment grades are dropped, even if those grades are zeroes.

Readings and Quizzes: There are assigned readings and/or viewings for each week of class.

On the schedule, they are broken down by each relevant class meeting (Mon = reading relevant to Monday's activities, etc.). You may choose to do the reading all at once or in the smaller sections, it is up to you. These reading/viewings should take less than 2 hours total (often much less than that) to complete for the week. Most weeks, there will be a short quiz due on Wednesday by the start of class to encourage you to keep up with the assigned readings. These quizzes are not designed to be difficult and if you have read/viewed the material you should do well. The lowest quiz grades are dropped, even if those grades are zeroes.

Project: During the second half of the course, we will work on science communication skills by creating disaster-related outreach & education materials for a specific hazard and a target audience. For those of you who dislike standing up and presenting to the class, don't worry – it isn't that sort of a project! There are many acceptable formats for this project including print, web and video options. We will work on this in the final

weeks of class, but it doesn't hurt to be thinking about potential topics as we go. More details about the project will be available in a separate handout.

Exams: There are two exams and each one will be a combination of multiple choice to test for mastery of basic vocabulary and concepts, and a short written portion to encourage you to think a little deeper about the course material. The written portion will be completed outside of class, to allow you to take your time and write thoughtfully. You, the students, will help me create the exams, as each of you will contribute a question for the exam during our test-prep and review activities.

Extra Credit: There will be a few opportunities for extra credit throughout the course, not to exceed 1% of the total grade for the course. These will be made available to everyone. Individual extra credit assignments will not be available.

GRADING

See <https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx> for general UF grading policies. Grades will be based on points accumulated through course activities:

Assignments, in and out of class	40% of total grade
Reading Quizzes	20% of total grade
Exam 1	10% of total grade
Exam 2	10% of total grade
Project	20% of total grade

Grading Scale for Overall Course Grade:

Course Points Earned	% Grade	Letter Grade	GPA Value
5400	90 +	A	4.0
5100	85-90	B+	3.5
4800	80-84.9	B	3.0
4500	75-79.9	C+	2.5
4200	70-74.9	C	2.0
3900	65-69.9	D+	1.5
3540	59-65.9	D	1
3480	< 58.9	E	0

Late work: Work submitted after the stated deadline will be penalized. A 2% grade penalty is assessed for each day late; up to one week. This policy applies to Assignments and Reading Quizzes only; it does not apply to Exams or the Project.

ACCESSIBILITY, INCLUSION & RESPECT

Respect & Inclusion: In this classroom (physical or on our Canvas page), everyone should feel welcome to share their thoughts in a respectful way. Treat your classmates the way you would like to be treated. You deserve to be called by the name you prefer and have me pronounce it correctly. Please don't let me keep saying your name (or pronouns) incorrectly! If something in the course material, instruction or class interactions make you feel excluded or uncomfortable, please let me know so I can address it.

UF Statement on Accommodating Students with Disabilities: Students requesting accommodation Students with disabilities requesting accommodations should first register with the Disability Resource Center by calling 352-392-8565 or by computer at: www.dso.ufl.edu/drc/ and provide 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, as *accommodations are not retroactive*.

My Statement on Accessibility: We all learn differently. You don't have to have a formally recognized disability to find yourself having difficulty with some aspect of the college learning environment. For example, colorblindness is not typically recognized in formal accommodations, but very much impacts a student's ability to process visual information. Please let me know if something in the course material presents a barrier to your full participation in the class so we can work together to find a reasonable solution – *even if you don't have a formal accommodation letter*.

Religious Observances, Military Duty & other Unavoidable Absences: Students who anticipate the necessity of missing homework deadlines and discussions due to religious observances *must provide notice of the date(s) to the instructor*, in writing at least two weeks in advance of the missed class days so accommodations to be made for missed work. For National Guard, Jury duty, scheduled medical treatments or other unavoidable absences, contact me as soon as you know the dates. Do not wait until after you have missed assignments to ask for an exception, as these requests may not be honored!

STUDENT FEEDBACK AND COURSE EVALUATION

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.bluer.com/ufl/>. Summaries of course evaluation results are available to students at <https://gatorevals.aa.ufl.edu/public-results/>.

UF POLICIES

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. More information at: <http://teach.ufl.edu/docs/NetiquetteGuideforOnlineCourses.pdf>

UF Online Handbook: Available at: <http://handbook.ufonline.ufl.edu/>

NEED HELP?

Technical Support: For issues with technical difficulties on Canvas, please contact the UF Help Desk: <http://helpdesk.ufl.edu>, or (352) 392-4357 and select option 2. If you miss a submission deadline due to technical issues, requests for extensions or make-up activities MUST be accompanied by the ticket number received from The Help Desk when the problem was reported to them. The ticket number will document the time and date of the problem.

Help from me: While I have a short window of time listed for office hours, I will be in my office most weekdays and you can always set up an appointment to make sure I am in. Office hours are for your benefit - ask questions, get assignment help, discuss geoscience degrees and career options, etc. Or just stop by and say hello! I also have a cabinet with pens, notebooks, hair ties, snack bars and other odds and ends that if forgotten, can really mess up your day. If you need it, just come get it.

Food Pantry: The Field and Fork Pantry is a resource on the University of Florida campus committed to supporting students, staff, and faculty who are experiencing food insecurity. The Pantry will be expanding during the summer and fall of 2019. During that time, we will be temporarily located in Rawlings Hall.

Counseling and Wellness Center: <http://www.counseling.ufl.edu/cwc/Default.aspx> , 392-1575.