

Hazards & Humans

IDS 2935

Course Description

Natural disasters such as earthquakes, volcanoes, hurricanes, and floods have devastating impacts on human lives. We will examine how geologic principles such as plate tectonics provide a framework for evaluating earthquake and volcanic hazards, the limits of our predictive abilities, the challenges of forecasting weather disasters in a changing climate, and the necessity for decision-making despite scientific uncertainty. By analyzing recent and historical disasters, we will explore the interactions of natural and built environments before, during, and after major events. This course lays out the geologic mechanisms behind disasters, as well as the role of key players - scientists, engineers, developers, government officials, reporters, first responders, and the public in disaster preparedness and response.

The following questions will be examined during this course:

- How can scientific understanding help us prepare for and minimize the impacts of natural disasters?
- What are the cultural and historical ties to hazardous landscapes and how do those ties influence how populations deal with disasters?
- How do disasters impact different economic/social populations?
- How do our actions (collectively and individually) reduce or exacerbate the impact of a disaster?

Textbook:

Natural Disasters, 11th Edition, 2017 Patrick L. Abbott. Any format (digital or print, new or used) is fine. Any additional readings will be freely available online or provided by the instructor.



When and Where

MWF 1:55 – 2:45 pm

Williamson Hall 210*

*See Fall 2021 note on pg. 5

Contact Info

Dr. Anita Marshall (she/her)

Email: anita.marshall@ufl.edu, or message through Canvas.

Office Phone: See Canvas page

Office Location:
Williamson Hall 255

Office Hours: Mon 10 – 11 am and
Tue 2-3 pm. See canvas for details.

Key Dates

Reflection 1: Wed 9/29

Reflection 2: Wed 11/3

Reflection 3: Wed 12/8

Final Essay Due: 12/16

Fulfills

Hazards and Humans fulfills Quest 2 course requirements, Physical Science (P) and International (N) Gen Ed Requirements.

COURSE DETAILS

Format: There are no prerequisites for this course. Hazards and Humans is an in-person course*. We will also utilize the Canvas course page for online activities that complement the course. Weekly quizzes will be online, as will some Activities and Discussions. * See Fall 2021 note on pg. 5.

Content Warning: 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 and human suffering - 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.

Goals: 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:

1. Examine the current state of scientific understanding about natural disasters.
2. Analyze scientific data and using case studies to understand how hazards can impact human lives and how preparation for and response to disasters can be improved.
3. Reflect on the social context in which disasters occur and how those social contexts interact with disaster preparation and response.
4. Explore how human actions reduce or exacerbate the impact of disasters.
5. As a Quest 2 course, you will also be challenged to reflect on your intellectual, personal, and professional development at UF and beyond.

COURSE MATERIALS

Textbook: Natural Disasters 11th edition by Patrick L. Abbott in any format (digital or print). You won't need access codes for supporting material, so used copies are fine. You may purchase the book through the UF bookstore or rent/buy through 3rd party sellers. Supplementary reading material will be provided by the instructor.

Materials & Supplies: There is no Supply Fee associated with this course. You will need a way to keep notes in class. Paper notebooks, tablets or laptops are all good options, whatever works best for you. Be aware you may have your computer privileges taken away if you are using your computer for things unrelated to the course during class time. PowerPoint files for lectures will be posted before class starts on the class Canvas page. Any other needed materials will be provided by the instructor.

YOUR RESPONSIBILITIES

- Check the announcements and your e-mail regularly - it is the only way I can directly communicate with you outside of class.
- Complete course deliverables in a timely fashion.
- Attend and participate in class discussions and activities to the best of your ability.* See Fall 2021 note on pg. 5

COURSE DELIVERABLES

Quizzes: Weekly online quizzes will encourage you to keep up with text readings and assigned videos to be prepared for the week's activities. Quizzes will be due on Wednesday each week before the start of class. Each quiz is worth 20 points. Your lowest quiz grade will be dropped, even if it's a zero/missing. Quizzes are worth 20% of your overall grade.

Assignments: Assignments compliment the reading and lecture material and enable a deeper connection to the concepts of the course. Assignments do not have a standard format and incorporate a variety of ways of engaging with the material. Some assignments will be completed as homework, and others will be completed in class. Each assignment is worth 50 points. The lowest Assignment grade is dropped, even if it is a zero/missing. Assignments are worth 25% of your overall grade.

Discussions: We will have frequent class discussions on the assigned material. There will be multiple modes of participation so that those of you who may be uncomfortable with the standard live discussion format can still contribute. Discussions are worth 20 points each, lowest grade will be dropped. These are easy participation points, so share your thoughts and get your points. Discussions are worth 15% of your overall grade.

Section Reviews: 3 course sections (see class schedule) end with a short writing assignment. These assignments will ask students to revisit the ideas covered in the section and think about the themes presented across the readings, activities, and class discussions. Each review is worth 100 points. Section Reviews are worth 15% of your overall grade.

Florida Coastal City Hazard Analysis: The primary experiential component of this course is a hazard analysis of a Florida coastal city. You will choose from a list of cities and do research and synthesize data to create a hazard assessment summary. We will build these assessments step by step through several assignments. These Hazard Assessment activities count towards 15% of your total grade.

Reflection Essay: There is no final exam for this course. Instead, a reflection essay will give you the opportunity to demonstrate your knowledge and reflect on what you've learned in the course. You will be encouraged to revisit your Section Reviews and consider how your thinking about disasters changed (or not) during the course. More specifics on how to put this essay together will be provided, but if you keep up with the Section Reviews, this final essay should not be hard to construct. The final reflection essay is worth 10% of your overall grade.

GRADES

Weighting: Grades for each type of activity are weighted, to balance out how they impact your final grade:

- Quizzes 20% of total
- Assignments 25% of total
- Discussions 15% of total
- Section Reviews 15% of total
- Hazard Assessment 15% of total
- Reflection Essay 10% of total

Grading Scale: See <https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx> for UF grading policies. Final grades for this course will be assigned with the following criteria:

% Grade	Letter Grade	GPA Value
90 +	A	4.0
85-90	B+	3.5
80-84.9	B	3.0
75-79.9	C+	2.5
70-74.9	C	2.0
65-69.9	D+	1.5
59-65.9	D	1
< 58.9	E	0

Late Policy & Missed Work: Homework Assignments, Quizzes and Section Reviews have a one-week grace period with no penalty. But do your best to keep us so you are ready for class activities. In-person activities are much harder to make up, but I will work with you as best as possible if you need to miss class.

Religious Observances, Military Duty & other Unavoidable Absences: Students who anticipate the necessity of missing deadlines and discussions due to religious observances must provide notice of the date(s) to the instructor, in writing at least one week in advance of the missed class days so accommodations to be made for missed work. For other unavoidable absences you know of in advance, contact me as soon as you know the dates. Please do not wait until after you have missed assignments to ask for an exception, as I may not be able to help - especially near the end of the semester.

ACCESSIBILITY, INCLUSION & RESPECT

Respect & Inclusion: Everyone should feel welcome to share their thoughts in a respectful way in this class. 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. I will do my best to ensure you are called by the name you prefer and with the correct pronunciation. You can specify your pronouns in the introductory discussion thread on the Canvas course page, or privately to me. Please correct me if I write or say your name or pronouns incorrectly – I will likely make mistakes, but I want to get it right!

UF Statement on Accommodating Students with Disabilities: Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center. Click here to get started with the Disability Resource Center: <https://disability.ufl.edu/get-started/>. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

My Personal 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. Please let me know if something in the course material presents a barrier to your full participation in the course so we can work together to find a reasonable solution – *even if you don't have, or don't yet have, a formal accommodation letter*. And please contact me during the semester if your accommodation needs change. I can wear a clear mask and/or use live captioning in class for those that struggle to understand speech through cloth masks.

COURSE SCHEDULE*

This schedule is subject to change as the semester progresses. Weekly reading and/or viewing assignments, activities and assignments will be listed on the class website at least one week in advance of the due date. **See Fall 2021 note below schedule.*

Week	Topic	Notes
1: 8/23 - 8/27	Introduction to Disasters	
Section 1: Tectonic Hazards		
2: 8/30 - 9/3	Plate Tectonics & Earthquakes	
3: 9/6* - 9/10	Earthquakes	<i>*Mon 9/6 is Labor Day, no class meeting</i>
4: 9/13 - 9/17	Volcanoes	
5: 9/20 - 24	Volcanoes	
Section 2: Weather & Climate Hazards		
6: 9/27 - 10/1	Severe Weather	Section 1 Reflection Due Wed 9/29
7: 10/4 - 10/8 ⁱ	Hurricanes & Typhoons	<i>ⁱ Fri 10/8 is Homecoming, no class meeting</i>
8: 10/11-10/15	Coastal Hazards	NOTE: I may be away at field work and a conference for parts of weeks 7 & 8. Those classes will be virtual or I'll have a sub if so.
9: 10/18 - 10/22 10/23	Floods St. Augustine Hazards FIELD TRIP	See Field Trip info page on Canvas for details
10: 10/25 - 10/29	St. Augustine wrap-up	
Section 3: Surface Hazards		
11: 11/1 - 11/5	Other flooding types	Section 2 Reflection due Wed 11/3
12: 11/8 - 11/12	Heatwaves, droughts and wildfires	
13: 11/15 - 11/19	Landslides and Mass Movements	
14: 11/22 - 11/26 ⁱ	Sinkholes	<i>ⁱ Thanksgiving Holiday Nov 24-27, no class meeting on Wednesday or Friday.</i>
15: 11/29 - 12/3	Disaster prep and planning	
16: 12/6 - 12/10 ⁱ	Wrap up	Section 3 Reflection Due Wed 12/8 <i>ⁱ12/10 is a Reading Day, no class meeting</i>
17: 12/13 - 12/17	FINALS WEEK	Final Essay Due Dec 16

FALL 2021 NOTE

I don't need to explain the situation we find ourselves in; it is a constantly changing, incredibly challenging environment to try and plan things a week out, let alone a whole semester. We may have to adapt. The schedule may change, some class meetings may take place online, and we may have to modify activities – who knows? You may find yourself needing to adapt – missing classes if you are sick or if you need to take care of a family member. I will offer other ways for you to engage with the course if you need it, please don't come to class sick. **Masking indoors is expected by UF policy.** Please give folks their space as best you can in our finite classroom space. Let's approach this semester with a flexible, compassionate, problem-solving mindset.

NEED HELP?

Instructor Help: Office hours are for your benefit - ask questions, get assignment help, discuss class topics or geoscience degrees and career options, or just say hello. Office hours are hosted on Zoom with live captioning available. Unless I announce otherwise, I will be in my office for in-person drop-ins during Office Hours as well. While I have a limited window of time listed for office hours, you can always set up an appointment at another time.

Technical Support: For issues with technical difficulties with the Canvas page, your UF email or other online resources, please contact the UF Help Desk: <http://helpdesk.ufl.edu>, or (352) 392-4357.

Mental Health and well-being: Sometimes being a college student can take a toll on your mental health. If you are mentally or emotionally struggling for any reason, you can contact the [Counseling and Wellness Center](#). They have one-click access to people who can help you connect to the right resources for your situation. If these struggles are negatively impacting your performance your courses, I encourage you to contact the [Dean of Students Care Area](#) to connect with a support team that can help with temporary accommodations, authorization to make up missing course work, etc. Additionally, if you are comfortable doing so, please reach out to me and I will provide any accommodations in this course that I can.

Food Pantry: The Field and Fork Pantry is a resource on the University of Florida campus committed to supporting anyone in the UF community experiencing food insecurity. <https://pantry.fieldandfork.ufl.edu/>

Financial Assistance: UF's [Aid-A-Gator](#) program has small grants available to help students with unexpected financial needs.

STUDENT FEEDBACK & 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.bluera.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 Conduct Code: <https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/>, which includes the Honor Pledge.

UF Undergraduate Student Handbook: The student handbook has all the details on UF policies for students. <https://dso.ufl.edu/resources/student-handbook/>