

Environmental Science 103 Natural Disasters
TAMU-C Spring, 2015

Instructor: L. Bradshaw, M.S.

Office Hours: By Appointment

Phone: 903/468-8153 (You can leave a message here but I will get it much quicker if you use email.)

Email: Lanna.Bradshaw@tamuc.edu

Class: Online

Days : MTWRFSU

Textbook: Natural Disasters, by Patrick L. Abbott Ninth ed.
ISBN 978-0-07-802287-6

ENVS 103 US-Natural Disasters 3 Hours. – Three semester hours. Scientific principles and case studies of natural disasters, including those related to geological, meteorological, biological, cosmological, and man-made hazards and disasters. Assignments and activities in this class will contribute to the portfolio required of all Environmental Science Majors. Note, this is a university studies course.

Student Learning Outcomes

1. In the first part of this course, you will learn how natural disasters affect the cultural landscape.
2. In the second part of this course, you will learn how human beings influence the “impact” from natural disasters by altering the natural landscape.
3. During the entirety of the course, you will learn global geographic locations and become familiar with where natural disasters occur today, why they are increasing, and where they may occur in the future

Grading:

Quizzes:	60%	A = 100-90
Assignments	40%	B = 89-80
		C = 79-70
		D = 69-60
		F = <60

The type of questions on the exams and quizzes will be true/false, fill in the blank, or multiple choice questions. You must learn the material to do well in the class. Please over study for the first quiz. Then you will know how the quizzes and exams are structured.

Make-up Tests: You will be allowed to make up a quiz or exam if you have an absence that is approved by the university (See the student handbook).

You will be expected to provide documentation that your absence is approved by the university.

Attendance: Students are expected to read, do assignments, and check the website often. A student who does not do these things cannot expect to do well in this class. If you are unable to log on regularly you should withdraw. If you do not withdraw from the class, you will not be “dropped”.

Obligatory Statements:

Plagiarism is a criminal activity. You must cite all sources of information. Copying of material, whether parts of sentences, whole sentences, paragraphs, or entire articles, will result in a score of zero for your assignment and can result in further disciplinary action.

Collusion: Is intentionally aiding or attempting to aid another in an act of scholastic dishonesty, including but not limited to, providing a paper or project to another student; providing an inappropriate level of assistance; communicating answers to a classmate during an examination; removing tests or answers from a test site, and allowing a classmate to copy answers.

Students with Disabilities:

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation for their disabilities. If you have a disability requiring an accommodation, please contact:

Office of Student Disability Resources and Services, Texas A&M University – Commerce, Halladay Student Services Building

Last date to withdraw: April 16th.

How to use the class website:

On the left side of the webpage there are a series of weeks, you will start with week one.

Inside each week are the assignments for that week.

Usually there is a reading assignment, a PowerPoint to supplement it, a lab, and a quiz.

The reading assignment, the PowerPoint, and the assignment are open all week. (you can access them at any time from Monday at 12am thru the following Monday at 11:59pm) You can access them at any time but assignments must be turned in by Monday at 11:59. Quizzes can only be taken on Monday from 12am to 11:59pm.

For example: Our class starts today (Monday 1/20/15). You can access everything but the quiz. The assignment is due by Monday 1/27/15 at 11:59 (you can turn it in early), at 11:59 the dropbox will close and will no longer accept assignments. The quiz will open at 12am on Monday morning and stay open until that night at 11:59pm giving you 24 hours to access it. You can take the quiz anytime during those 24 hours but at 11:59 the quiz will close and you can no longer access it.

The quiz is only open for a 24 hour period. You must access the quiz during this time period or it will close and you will no longer have access. You will receive a zero for any quizzes that you miss.

For questions about the work please use virtual office so I can address everyone at once. If you have questions about you personally (grades etc.) please email.

If you have an approved absence we will decide upon a time for you to make up the quiz.

VERY IMPORTANT:

If you experience computer issues during a test, do NOT log out of your test-immediately contact college so they can witness the issues occurring at that time using screen share. If you log out, no one can help you resolve any problems, and you will not get credit for missing the test.

For questions about the work please use virtual office so I can address everyone at once. If you have questions about you personally please email.

If you have an approved absence we will decide upon a time for you to make up the quiz.

COURSE OUTLINE

Course Content by Week:

Week 1 - Ch.1 Intro. Global geographic introduction into populations and their locations.

Week 2 - Ch. 2 Internal Earth Forces - Knowledge of the Earth's internal processes enhances a deeper understanding of earthquakes, tsunamis, volcanoes, and violent storms.

Week 3 - Ch. 3 Seismology - What is an earthquake? This unit requires understanding the different types of earthquakes, where they occur, and why.

Week 4 - Ch. 4 Plate Tectonics - The theory of Plate Tectonics and crustal movement provides the core to understanding many natural disasters.

Week 5 - Ch. 5 Earthquakes in US and Canada - Studying past earthquakes in USA and Canada helps us predict future disasters, and hopefully, prevents human devastation in North America.

Week 6 - Ch. 8 Tsunamis - Earthquakes cause tsunamis, which are one of the most damaging natural disasters on Earth.

Week 7 - Ch. 6 Volcanic Eruptions - Introduces how a volcano forms, and where they are found along plate boundaries.

Week 8 - Ch. 7 Volcanoes From the Past - You will learn about past volcanic eruptions to increase awareness for what can occur again in the future.

Week 9 - Ch. 9 Weather and Climate - This unit introduces the mechanics driving the atmosphere, our climate and local weather. Before weather patterns can be understood, the energy systems fueling our air and water must be studied.

Week 10 - Ch.10 Tornadoes and Storms - This unit introduces how tornadoes and thunderstorms form.

Week 11 - Ch.11 Hurricanes - This unit introduces how hurricanes form and where they are the most common.

Week 12 - Ch.12 Climate Change - With the knowledge you have gained from the previous unit studies, this unit brings all the current issues of climate change to the forefront.

Week 13 - Ch.13 Floods - One of the biggest disasters caused by climate change is flooding. This unit explains why and where floods occur worldwide.

Week 14 - Ch.14 Fire - Human beings do not always start wildfires. Nature, through lightening and climate changes, ignite some of the most deadly wildfires known to man. These disasters occur when humans build neighborhoods and cities within natural areas prone to wildfires.

Week 15 - Ch. 17 Space Objects - This unit introduces the types of extraterrestrial objects that can impact the Earth and cause global natural disasters.

Week 16 – Mass Extinctions