College of Science, Engineering, and Agriculture
Biological & Environmental Sciences

ENVS103/104 Natural Disasters

I. General Information

Course syllabus fall 2015
Instructor: Johanna Delgado Acevedo, Ph.D.
Office: Science Building (STC) 262
Office hours: LWF 2-3:30
Phone: 903.468.3333
Email: johanna.delgado-acevedo@tamuc.edu

Prerequisites: none

Book: Abbott, P. A. 2014. Natural Disasters. Ninth edition. The McGraw-Hill Companies Inc., New York, NY, USA.

II. Course Description

This course is designed to provide an overview of natural disasters, including an examination of the major disasters, plate tectonics, volcanism, tsunamis-hurricanes-storms, tornados, climate change, floods, and fire among others. An emphasis will also be placed on understanding on the mechanisms of why natural disasters occur.

III. Student Learning Objectives

To understand the effects of natural disasters in the landscapes and regions.
To understand the mechanisms of natural disasters occurrences.
To develop a reading tradition.
To develop communication skills and clarity to present ideas and explain them in public.

IV. Learning strategies

Lectures
Discussions and Talks
Reading assignments to be discussed in class
Analysis of Case Study Samples
Individual work, analysis of free reading
Homework
Audiovisual projections

V. Assumptions, Expectations, Philosophy

University students are a select group of students soon to be professionals.
Instructors can have high expectations of student performance.
Demanding courses benefit students more than easy courses.
Assignments are due on time unless you have made a prior arrangement with me (only granted for unusual or extenuating circumstances and in case of health issues proper medical excuse is required.
Come to class prepared, having read and thought about the assigned readings; course

materials are meant to be studied, not merely read.
Actively participate in class discussions; ask questions.

In university, a lot of your learning will occur outside of the classroom, during your own research, and in formal and informal interactions with your peers– both here and at meetings, correspondence, etc. Therefore, I expect you to take full advantage of ALL learning opportunities, including seminars and invited speakers.
Reading and assimilating information is a critical part of your current and continuing education. This will help you become a better writer, a more rounded individual, and expose you to subjects outside of your immediate knowledge.

VI. Tentative course outline

Part I. Introduction and basic principles of Natural Disasters (ch. 1)
- Most used terms
- Human landscapes
- Natural hazards
- *week: 1*

Part II. Plate tectonics and volcanism (chs. 2-8)
- Plate tectonics
- Earthquake geology and seismology
- Volcanic eruptions
- Tsunamis
- *week: 2-5*

Part III. Weather and Climate
- External energy (chs. 9-11, 13-14, 12)
- Tornados, lightening
- Hurricanes
- Floods
- Fire
- Climate Change
- *week: 6-11*

Part IV. Mass movements and Coastal Processes (chs. 15-16)
- Mass movements
- Coastal processes and hazards
- *week: 12-13*

Part V. Extraterrestrial objects (ch. 17)
- Space objects
- *week: 14*

VII. Course Requirement and Evaluation Method

Attendance and punctuality is required and non-negotiable.
Homework, quizzes, exams, and term paper are required.
Activities that distract surrounding people are inconsiderate and disrespectful.
Activities such as texting, emailing, browsing or using cellular phones are prohibited.

We encourage student contribution to the overall progress of the group. We encourage interactive participation.
It is necessary that students have a professional and ethic behavior through the entire course.
Lectures are a group activity, and so it requires social consideration and respect amongst members of the group, teachers and professors.

Grade basis:
3 tests, including final (150 points)
Case study (50 points)
3 Assignments (30 points)
3 Quizzes (30 points)
Total 260 points

Penalty enforcement (I reserve the right to adjust your grade for violation of the minimum expectations).
Make-up exams will only be given if arrangements are made with the instructor before missing the scheduled exam. A documented excuse will be required. Otherwise, missing exams will be counted as zeroes in the overall grade computation.

Grading Scale: The following scale is adhered to strictly.
90.0 – 100% = A
80.0 - 89.9% = B
70.0 - 79.9% = C
60.0 – 69.9% = D
<60.0% = F

Assignments (3)
Journal articles
Reading and assimilating information is a critical part of your current and continuing education. For each assign date, a journal is named in the right column of the table, choose and read a paper from that journal that you find interesting or relevant. These journals are available in our library (online resources). On that date, provide me a citation and a short description of the paper (10 sentences).

Date	Journal
2 OCT	Disasters
6NOV	Weather
4 DEC	Volcanology and Seismology

Case Study
Each student will identify a case study exemplifying Natural Disasters. You will be responsible of understand and apply this scenario to other potential case studies. You also will propose alternative solutions to complement and improve the example you are presenting. You will develop an essay (800-1000 words) to document your case study. Deadline is the last day of class.

Format for the case study:

I. Describe the problem or case question.

II. Describe the case

- Introduction
- Background
- Affected area, species, communities, ecosystems
- Implications

III. Conclusions

VIII. Course and University and Policies

Responsible Use of Technology — It is expected that all students will only use cellphones, PDAs, laptop computers, MP3 players and other technology outside of class time or when appropriate in class. Answering a cell phone, texting, listening to music or using a laptop computer for matters unrelated to the course may be grounds for dismissal from class and/or other penalties. Students are not allowed to use image, video, nor audio recording devices of any kind during class time without prior consent of the instructor.

University Specific Procedures:

ADA Statement-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 of their disabilities. If you have a disability requiring an accommodation, please contact:

Office of Student Disability Resources and Services Texas A&M-Commerce
Gee Library
Room 132
Phone (903) 886-5150 or (903) 886-5835
Fax (903) 468-8148
StudentDisabilityServices@tamuc.edu

Student Conduct

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment.

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Note regarding reasonable accommodation for persons with disabilities:
Any student or faculty with a disability that requires adaptations to the curriculum or reasonable accommodation should contact the:

Office of Student Disability Resources and Services Texas A&M-Commerce
Gee Library
Room 132
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StudentDisabilityServices@tamuc.edu

THIS SYLLABUS IS SUBJECT TO CHANGE WITH PREVIOUS NOTICE TO ATTENDING STUDENTS, DUE TO ANY UNFORSEEABLE CAUSE.

I HEREBY CERTIFY THAT I HAVE READ AND UNDERSTOOD THE SYLLABUS FOR THE COURSE ENVS103/104 Natural Disasters, AS DISCUSSED BY THE PROFESSOR DURING CLASS SESSION ON THE DATE SIGNED BELOW.

NAME: _____

INSTITUTIONAL E-MAIL ADDRESS: _____

PLEASE DESCRIBE ANY SPECIAL PERSONAL SITUATION OR CONDITION THAT YOU WISH THE PROFESSOR TO BE AWARE OF:

DATE / SIGNATURE: _____