

ENVS 103 01 W Natural Disasters, Section #20711

COURSE SYLLABUS: Spring 2022

INSTRUCTOR INFORMATION

Instructor: Dr. Lucina Kuusisto

Office Location: Science Building (STC), 208

Office Hours: T from 3:30-4:45 PM

Online Office Hours (Intermittently): M-Th. 8:00 AM-8:00 PM;

F 8:00 AM-5:00 PM

Office Phone: 903.886.5221 Office Fax: 903-886-5997

University Email Address: Lucina.Kuusisto@tamuc.edu

Preferred Form of Communication: Email

Communication Response Time: Weekdays: 1-24 hours; Evenings, Weekends: 5-~48 hours

COURSE INFORMATION

Materials – Textbooks, Readings, Supplementary Readings

Textbook(s) Required: Natural Disasters by Patrick Abbott, Tenth (10th) Edition. McGraw Hill

Software Required: MS Office

Optional Texts and/or Materials: Handouts and Academic worksheets

Course Description

The course goals are designed to increase your awareness about global natural disasters. The Earth is definitely on the move today, and this course will increase your appreciation of the immense power of our planet.

The material and information for <u>lecture</u> will come from the 10th textbook edition, and will be the primary focus of information on your weekly, unit tests.

This course is fairly intensive because you will spend time studying geographic locations around the globe. If you are on campus, it is worthwhile to study the maps and globes in the library. You can also compare the various world maps found on the Internet with the information within each book chapter.

As a result of this course curriculum, you will be able to list the names of countries worldwide, locate them on a world map, and calculate and compare how natural disasters affect global populations.

Course Goals

In the first part of this course, you will be able to describe the ways natural disasters affect the human, cultural landscape;

- 1. In the second part of this course, you will be able to list the ways human beings influence the "impact" of natural disasters, and analyze the ways modern societies alter the natural landscape;
- 2. During the entirety of the course, you will be able to describe geographic locations and list <u>where</u> natural disasters are occurring today; explaining *why* natural disasters are increasing, and analyzing *where* they may occur in the future.

Student Learning Outcomes

- 1. Describe both natural and man-made factors that alter the severity of natural disasters:
- 2. Analyze what effects natural disasters have on human populations, worldwide;
- 3. Explain how natural Earth processes result in earthquakes, volcanoes, tsunamis, and other geologic natural disasters;
- 4. Describe the physical methodologies that create both normal and extreme weather patterns;
- 5. List the factors that contribute to man-made disasters.

COURSE REQUIREMENTS

Minimal Technical Skills Needed

Using the learning management system, Microsoft Word and PowerPoint, presentation and graphics programs, etc.

Instructional / Methods / Activities Assessments

- A. Read each weekly unit's overview, lecture, and textbook assignments.
- B. Complete a scheduled exam after each weekly unit, beginning with Unit One.

Penalty enforcement (I reserve the right to adjust your grade for violation of the minimum expectations).

Otherwise, missing academic work will be counted as zeroes in the overall grade computation

Unit Assignments

- Each unit exam must be completed prior to starting the next unit, and will be available to take within a designated 48-hour period that is posted in the **Test** Section within each Unit;
- Each Quiz is timed, and exams can be open book. This means NO MAKE UP TESTS.
- You will have ten (10) Quizzes + 1 "Word" Paper; no Midterm and no Final exams will be given for this class;
- You have 48 hours to schedule a time to take your weekly tests; no make-up tests are accepted after this 48-hour period;
- Make sure you are using a reliable Internet server; if your computer goes down
 during an exam, no additional make-up time will be granted. I suggest confirming
 a good connection before each exam. If you do go down, your previous work will
 be automatically saved, contact IT ASAP, and do not log off.

<u>Note:</u> the 48-hour scheduling of your weekly exams teaches problem solving skills; *i.e., don't wait until the last minute to take your tests in case something unexpected occurs;* take the time to secure using a dependable Internet; do not log off once you open your test, and contact campus IT if hardware or software issues arise.

Instructional Methods

Conducting lectures, resorting to videos and visual-aid presentations, e.g., "PowerPoint" and "You tube", expecting student participation in discussions, assigning Quizzes, and Homework assignments, etc.

Student Responsibilities or Tips for Success in the Course

Turn-in all the assigned academic work; actively participate in written discussions; take all assigned written Exams; log into the course website, regularly; complete the assigned weekly study.

GRADING

Final grades in this course will be based on the following scale:

A = 90%-100%

B = 80% - 89%

C = 70% - 79%

D = 60%-69%

F = 59% or Below

TECHNOLOGY REQUIREMENTS

LMS

All course sections offered by Texas A&M University-Commerce have a corresponding course shell in the myLeo Online Learning Management System (LMS). Below are technical requirements

LMS Requirements:

https://community.brightspace.com/s/article/Brightspace-Platform-Requirements

LMS Browser Support:

https://documentation.brightspace.com/EN/brightspace/requirements/all/browser_support.htm

YouSeeU Virtual Classroom Requirements:

https://support.youseeu.com/hc/en-us/articles/115007031107-Basic-System-Requirements

ACCESS AND NAVIGATION

You will need your campus-wide ID (CWID) and password to log into the course. If you do not know your CWID or have forgotten your password, contact the Center for IT Excellence (CITE) at 903.468.6000 or helpdesk@tamuc.edu.

Note: Personal computer and internet connection problems do not excuse the requirement to complete all course work in a timely and satisfactory manner. Each student needs to have a backup method to deal with these inevitable problems. These methods might include the availability of a backup PC at home or work, the temporary use of a computer at a friend's home, the local library, office service companies, Starbucks, a TAMUC campus open computer lab, etc.

COMMUNICATION AND SUPPORT

If you have any questions or are having difficulties with the course material, please contact your Instructor.

Technical Support

If you are having technical difficulty with any part of Brightspace, please contact Brightspace Technical Support at 1-877-325-7778. Other support options can be found here:

https://community.brightspace.com/support/s/contactsupport

You will be utilizing various forms of learning tools available on-line, through your textbook and on-line discussions. You will be required to monitor specific websites throughout this course, and I will email you those links when applicable.

VERY IMPORTANT:

If you experience computer issues during a test, do NOT log out of your test immediately contact campus IT or the e-college hotline 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.

Note: when you quit a test session, always click on the "Exit Course" button at the bottom of your screen to save your work.

Each unit's material will consist of:

- An overview of the unit topic and the unit objectives. When you click on a unit, you will be taken first to the requirements.
- Lecture consists of both instructor emails and your chapter reading assignments.
- The tests will be based on book material, recommended Internet resources, and my lecture. There will be no Mid-Term Exam or Final Exam for this course. 100% of your grade comes from the tests.
- There is **no extra credit work** offered for this on-line course, but if you have not missed any tests, I will give you 2 points extra credit on your final average.
- There are no make-up exams.

If the course software is new to you, it may help to go through the software tutorial.

How to get started:

1. Read through the syllabus;

This syllabus/schedule is subject to change.

- 2. Click Unit 1 to read the unit overview;
- 3. Read your chapter and the lecture notes for Unit 1;
- 4. Don't hesitate to contact e-college with any questions. The "D2L"

 HelpDesk is available 24 hours a day, seven days a week. The on-campus

 HelpDesk can be reached by sending an email to helpdesk@online.tamuc.org

 or by calling 1-866-656-5511.

Students taking online classes at Texas A&M University-Commerce have the same rights as students enrolled in on-ground classes. The A&M-Commerce Student Guidebook details those rights and explains complaint and grievance procedures, as well as the Student Code of Conduct. Students have the right to appeal course grades, admissions committee decisions, or any adverse action taken by any *online* faculty against any student. The appeals process is the same for all types of appeals.

The student should first attempt to resolve non-tech problems directly with the involved faculty member.

COMMUNICATION AND SUPPORT

Interaction with Instructor Statement:

I regularly monitor my email, and I like to remain active with the class through emails, so you can send me a message at any time. I will answer you as soon as I can. You can email at Lucina.Kuusisto@TAMUC.EDU.

The time you spend for this course will be equal to the time spent for an on-ground 3-hour course. There are fourteen (14) units to complete for the course; one unit each week. How you organize your daily schedule is completely up to you, but you must finish one unit each week. A unit test will be given after each unit every week. This course isn't hard, but it does consume a lot of time. If you don't get behind, you'll make it through O.K. If you fall behind, there are no make-up opportunities.

Learner Support:

The One Stop Shop was created to serve you by providing as many resources as possible in one location. http://www.tamuc.edu/admissions/onestopshop/

The Academic Success Center provides academic resources to help you achieve academic success.

http://www.tamuc.edu/campusLife/campusServices/academicSuccessCenter/

COURSE OUTLINE

Course Content by Unit:

- 1. <u>Human Disasters Unit 1</u>. Global geographic introduction into populations and their locations.
- 2. <u>Internal Energy Unit 2</u>. Knowledge of the Earth's internal processes enhances a deeper understanding of earthquakes, tsunamis, volcanoes, and violent storms.
- 3. <u>Seismology Unit 3</u>. What is an earthquake? This unit requires understanding the different types of earthquakes, where they occur, and why.
- 4. <u>Plate Tectonics Unit 4</u>. The theory of Plate Tectonics and crustal movement provides the core to understanding many natural disasters.
- 5. <u>Earthquakes in US and Canada Unit 5</u>. Studying past earthquakes in USA and Canada helps us predict future disasters, and hopefully, prevents human devastation in North America.
- 6. <u>Volcanic Eruptions Unit 6.</u> Unit 6 introduces how a volcano forms, and where they are found along plate boundaries. Unit 6 requires daily monitoring of current volcanic eruptions.
- 7. <u>Volcanoes from the Past Unit 7.</u> You will learn about past volcanic eruptions to increase awareness for what can occur again in the future.
- 8. <u>Tsunamis– Unit 8.</u> Earthquakes cause tsunamis, which are one of the most damaging natural disasters on Earth. Not every earthquake spawns a tsunami, and Chapter 8 (in your book) explains how they form and their dangers.
- 9. <u>Weather and Climate Unit 9.</u> 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.
- 10.<u>Tornadoes and Storms Unit 10.</u> This unit introduces how tornadoes and thunderstorms form.
- 11. <u>Hurricanes Unit 11.</u> This unit introduces how hurricanes form and where they are the most common.

12. <u>Climate Change – Unit 12.</u> With the knowledge you have gained from the previous unit studies, this unit brings all the current issues of climate change to the forefront.

- 13. Floods Unit 13. One of the biggest disasters caused by climate change is flooding. This unit explains why and where floods occur worldwide.
- 14. Fire Unit 14. 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.
- 15. Space Objects- Unit 15 (Chapter 17). This unit introduces the types of extraterrestrial objects that can impact the Earth and cause global natural disasters. (Chapter 17 in your book)

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Course Specific Procedures:

On-line courses are dependent on your course syllabus. Make sure you read the syllabus carefully! The #1 key to success on-line is to keep up with your assignments every day. Do not procrastinate on any assignments or you will fall behind.

The tests for each unit will be given every week, and all unit tests will be open book. The tests are timed, however, so you must know this material **before** each exam. No tests will be accepted late, after the unit test has closed.

Interaction with Instructor Statement

M-Th. 8:00 AM-8:00 PM; F 8:00 AM-5:00 PM

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Course Specific Procedures/Policies

NOTE #1: Late assignments are not accepted. Very, very extreme circumstances may or may not provide a warranted exception. This course moves very fast and there is not enough time to catch up. In case of extreme

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circumstances, I may accept late work. However, 10 points will be deducted from late assignments.

NOTE #2: Missed Quizzes are not acceptable. Very, very extreme circumstances may or may not provide a warranted exception. This course moves very fast and there is not enough time to catch up. In case of extreme circumstances, I may accept let you take a missed Exam or submit a missed Homework. However, 20 points will be deducted from the missed Exam or from the missed Homework.

Syllabus Change Policy

The syllabus is a guide. Circumstances and events, such as student progress, may make it necessary for the instructor to modify the syllabus during the semester. Any changes made to the syllabus will be announced in advance.

University Specific Procedures

Student Conduct

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. The Code of Student Conduct is described in detail in the Student Guidebook.
http://www.tamuc.edu/Admissions/oneStopShop/undergraduateAdmissions/studentGuidebook.as
px

Students should also consult the Rules of Netiquette for more information regarding how to interact with students in an online forum: https://www.britannica.com/topic/netiquette

TAMUC Attendance

For more information about the attendance policy please visit the <u>Attendance</u> webpage and <u>Procedure 13.99.99.R0.01</u>.

http://www.tamuc.edu/admissions/registrar/generalInformation/attendance.aspx

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/academic/13.99.99.R0.01.pdf

Academic Integrity

Students at Texas A&M University-Commerce are expected to maintain high standards of integrity and honesty in all of their scholastic work. For more details and the definition of academic dishonesty see the following procedures:

Undergraduate Academic Dishonesty 13.99.99.R0.03

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/undergraduates/13.99.99.R0.03UndergraduateAcademicDishonesty.pdf

Graduate Student Academic Dishonesty 13.99.99.R0.10

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/graduate/13.99.99.R0.10GraduateStudentAcademicDishonesty.pdf

Students with Disabilities-- ADA Statement

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 University-Commerce Gee Library- Room 162 Phone (903) 886-5150 or (903) 886-5835 Fax (903) 468-8148

Email: studentdisabilityservices@tamuc.edu

Website: Office of Student Disability Resources and Services

http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndServ

ices/

Nondiscrimination Notice

Texas A&M University-Commerce will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

Campus Concealed Carry Statement

Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in Texas A&M University-Commerce buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and A&M-Commerce Rule 34.06.02.R1, license holders may not carry a concealed handgun in restricted locations.

For a list of locations, please refer to the <u>Carrying Concealed Handguns On Campus</u> document and/or consult your event organizer.

Web url:

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf

Pursuant to PC 46.035, the open carrying of handguns is prohibited on all A&M-Commerce campuses. Report violations to the University Police Department at 903-886-5868 or 9-1-1.

COURSE OUTLINE / CALENDAR

Course Schedule

Week	Date	Unit	Assignment
1	Jan 12 W	1 Disasters & Humans	Quiz #1
2	Jan 19 W	2 Internal Energy	Quiz #2
3	Jan 24 M	3 Seismology	Quiz #3
4	Jan 31 M	4 Plate Tectonics	Quiz #4
5	Feb 07	5 Earthquakes	
6	Feb 14	6 Volcanic Eruptions	Quiz #5
7	Feb 21	7 Volcanoes	
8	Feb 28	8 Tsunamis	Quiz #6
9	March 7	8 Tsunamis	Quiz #7
No	Mar14-18	Spring Break	
10	March 21	10 Tornadoes	
11	March 28	11 Hurricanes	Quiz #8
12	April 4	13 Floods	Quiz #9
13	April 11	14 Fire	
14	April 18	15 Climate	Quiz #10 + Paper: Treating and/or
			disposing contaminants after disaster
15	April 25	Temperature	
16	May 2	Research for Paper	
17	May 9	Project Due	All assignments due by April 29 th

Paper: Finalize and Upload Written Report (No class): Write a 1-page paper, ~300 words, about 1 (one) of the following: (a) Arsenic contamination in water, after an earthquake; or (b) Disposing Metal-contaminated sludge from nuclear waste treatment, after an earthquake; or (c) Ultraviolet germicidal irradiation in water treatment, after a storm. NOTE: Explain preparedness: what to do during Natural Disaster