

GEOG 560

GEOGRAPHY OF NATURAL HAZARDS AND DISASTERS

Spring 2009

Dr. Mary (Lemcke) Stampone

Welcome to Geography of Natural Hazards and Disasters!

There are few things in nature that impact society on such a large scale as natural disasters and catastrophes. The purpose of this course is to introduce you to a variety of naturally occurring phenomena that negatively impact human society over a variety of temporal and spatial scales. In this course, we will discuss, examine, and analyze the elements of natural processes and what makes them hazardous to humans.

The course will begin with a discussion of risk and the human perception of risk followed by explanations of the natural processes that result in human disasters. We will then divide the most hazardous, naturally occurring processes on earth into two types based on the source that drives each process. Many natural hazards, such as earthquakes, volcanoes, and related events such as tsunamis and landslides, are driven by processes within the earth's interior and are considered "internal." Others are driven by the interactions between the earth's atmosphere, oceans, and land surface. These processes are considered "external" and include severe weather, floods, and coastal processes. Although each type is the result of very different physical mechanisms, both internal and external processes adversely affect human life, property, and activities. Therefore, class discussions, homework, and student projects will emphasize community vulnerability.

Concepts will be reinforced quantitatively through homework exercises using basic mathematical (+, -, ×, ÷), trigonometric (sine, cosine etc...), and algebraic operations including fractions and exponents. Data will be analyzed graphically using graphs, tables, and maps.

I hope you enjoy this course and take with you a better understanding of the natural environment that surrounds you. Do not hesitate to contact me with any questions or comments you may have about this course.

BASICS

Time & Place	Monday/Wednesday/Friday 1:10-2:00 pm 308 McConnell Hall	
Instructor Info	Mary D. Stampone 102A Huddleston Hall	Mary.Stampone@unh.edu (603) 862-3136
Office Hours	Monday/Friday Tuesday/Thursday By Appointment	10:00-11:00 am 1:30-2:30 pm
Blackboard	All course documents will be located under Course Documents on Blackboard.	
Textbook	Hyndman, D. & D. Hyndman, <i>Natural Hazards and Disasters</i> , 2 nd Edition, 2006. (Recommended)	
Materials	Calculator with trigonometric functions (sin, cos, tan etc...) Ruler with English and metric units, protractor, compass	
ACCESSIBILITY	In accordance with university policy, if you have a documented disability and require specific accommodations, notify me at the beginning of the semester or prior to the assignment of course material for which an accommodation is required. (http://www.unh.edu/disabilityservices/disabilityservices.html)	
UNIVERSITY POLICIES	All students should know and understand university policies and procedures regarding academic performance including, attendance and academic dishonesty. If you are unfamiliar with these policies, please refer to the University of New Hampshire Student Rights, Rules, and Responsibilities for more information. (http://www.unh.edu/student/rights/)	
COMMENTS	The following procedures, policies, and schedules may change during the course semester. Any changes will be announced in class and posted on blackboard. Announcements may also be distributed via email. It is your responsibility to check your university email account and blackboard regularly.	

CLASS CONDUCT

- GENERAL** Being a student is your profession and you are expected to conduct yourself in a professional manner concerning all matters of this course.
- COMMUNICATION** All forms of communication directed toward your instructors and classmates should be conducted in a professional manner. Emails should be addressed appropriately, contain complete sentences, capital letters, and proper punctuation. All communication directed toward your instructors must contain your **name**, the **course** and **section number**.
- ELECTRONIC DEVICES** The use of mobile phones, pagers, walkie-talkies, mp3 players, video games, electronic pets etc... is prohibited while in class. You may use a computer in lecture for note taking purposes only.
- A calculator is the only electronic device that can be used in lab and on exams. Cell phones may not be used as calculators. You may not share calculators with another student on an exam. Either action will be considered cheating and will result in an exam score of "0."
- BEHAVIOR** Immature, rude, and inappropriate behavior in the classroom will not be tolerated. This includes talking during lecture as well as text, instant, or email messaging during the class period. Anyone caught engaging in such activity will be asked to leave immediately and will be given an unexcused absence regarding any missed coursework. This is your warning.
- Class is not over until the professor has completed the day's lecture. Remember, class ends 2:00 pm (not 1:55 pm) so do not expect, nor prepare, to leave before you are dismissed. Early departure is incredibly disruptive and rude, and may cause you, and your classmates, to miss important material.

ATTENDANCE

- GENERAL** Attendance is not mandatory but is highly recommended. It has been shown that students who attend class regularly perform better in class than those who do not. I do not make my class notes available to students so if you miss a class you are responsible for any missed material.
- TARDINESS** Tardiness is incredibly disruptive and rude, so be on time. Also, all announcements will be made at the beginning of class. If you are late you are responsible for any missed material.
- EXCUSED ABSCENCES** Each student must receive equal opportunity to demonstrate his/her comprehension of course material. Therefore, all students will take exams and quizzes on the same day. No make-up exams will be given, however, exceptions will be made for:
- 1.) Absences in which prior arrangements have been made. Such arrangements must be made **at least one week in advance** of the absence.
 - 2.) Absences due to family or personal medical emergencies in which **a university approved absence as been granted**. You must contact your college's Dean's office for a letter verifying your absence.
 - 3.) Absences due to serious illness or personal medical emergency **accompanied by a doctor's note**. This includes absences due to:
- I am not interested in the reason for the absence or details relating to it. I simply need verification that the absence was unavoidable.
- MISSED WORK** In all cases, it is entirely up to you to make arrangements to complete any missed exams. In the case of an excused absence without prior arrangements, you must notify me within 48 hours of the scheduled exam. If you fail to receive approval for a make-up exam within this time frame, or have an unexcused absence, you will not be allowed to make-up the exam for any reason and will be given a grade of "0" for the missed exam.

GRADING PROCEDURES

General All coursework submitted for evaluation must include your name and course number. Any paper submitted without a name will be given a "0". Any paper submitted without a course number will lose 1 point. This rule applies to tests and assignments. Failure to follow directions may also result in a point deduction.

Exams You will have **two exams** in this course, a midterm exam and a final exam, each worth 30 % of your final grade. Given the comprehensive nature of the material covered in this course, the final exam will be comprehensive, however, it will be oriented toward the section of the course most recently presented. Exams will only include material covered in lecture and on assignments. The exam format will include multiple-choice, matching, short-answer, and essay questions.

Assignments You will be assigned approximately **ten homework assignments** based on material covered in lecture. The assignments together are worth 30 % of your final grade. I encourage you to work in groups and utilize the textbook and lecture notes to complete each assignment. However, each student must turn in his/her own, original work. Assignments are due at the beginning of or before class on the due date indicated on the assignment. No late work will be accepted unless prior arrangements have been made.

Attendance/ Participation Participation in class discussions is an important way to share information and ideas and reflects your comprehension of course material. Therefore, 10 % of your final grade will be based on participation in class discussions. Regular class attendance and class participation go hand in hand.

Final Grades Final grades will be determined based on your performance on exams and laboratory assignments. Final grades will be assigned using the following grade distribution:

A	>93 %	B	83 %	C	73 %	D	63 %
A-	90 %	B-	80 %	C-	70 %	D-	60 %
B+	87 %	C+	77 %	D+	67 %	F	<60 %

Consideration of improvement, effort, and attendance may be taken into account when determining your final grade. Final grades may also be curved depending upon class performance. However, **no extra credit** will be offered in this course ... so don't ask.

***Note: Dates and topics may change. Any changes made to the schedule or syllabus will be announced in class and posted online. It is your responsibility to be aware of these changes.

CLASS SCHEDULE

<u>Week</u>	<u>Topic</u>	<u>Lab</u>
Jan 19	Chapter 1: Introduction	Exercise 1: North American Geography
Jan 26	Chapter 1: Hazard Mitigation Chapter 2: Plate Tectonics	Exercise 2: Plate Tectonics
Feb 2	Chapter 2: Plate Boundaries Chapter 3: Earthquakes	Exercise 3: Earthquakes
Feb 9	Chapter 3: Earthquake Damage Chapter 4: Earthquake Prediction	
Feb 16	Chapter 4: Earthquake Mitigation	
Feb 23	Chapter 5: Tsunamis	Exercise 4: Tsunami
Mar 2	Chapter 6: Volcanoes	Exercise 5: Volcanoes
Mar 9	Chapter 7: Volcanic Eruptions Midterm Exam (3/13)	
Mar 16	<i>No Class – Spring Break</i>	
Mar 23	Chapter 8: Landslides	Exercise 6: Landslides
Mar 30	Chapter 11: Flood Processes Chapter 12: Flood Hazards	Exercise 7: Rivers and Floods
Apr 6	Chapter 12: Flood Control & Mitigation	
Apr 13	Chapter 13: Coastal Erosion Chapter 14: Hurricanes	Exercise 8: Coastal Storms and Flooding
Apr 20	Chapter 14: Hurricane Damage & Mitigation Nor'easters	Exercise 9: Nor'easters
Apr 27	Chapter 15: Thunderstorms & Tornadoes	Exercise 10: Severe Thunderstorms
May 4	Chapter 16: Looking to the Future	
May 11	Review Final Exam – 5/	

