

GEOLOGY 303 – NATURAL DISASTERS – FALL 2005
Section 1 and 3 – MWF – COM 207

Textbook: “*Natural Hazards and Disasters*”, by Hyndman and Hyndman

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Office hours: MWF, 11.30 – 12.30, or by appointment

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The Course:

This course examines natural events that dramatically affect life on Earth. The emphasis will be upon the *geological principles* underlying natural events, such as earthquakes, tsunamis, volcanoes, landslides, stream and coastal floods, severe weather, and asteroid/comet impacts. Examples will be drawn from all over the world. Please note: This is an upper division science course that requires critical thinking and a fair amount of studying time. Please do keep pace with the lectures and readings. You will find that it will be difficult to achieve good grades if you start lagging behind. It is also important to understand the interdisciplinary nature of this course, not just the terminology. Exam questions will reinforce this.

Policies and Grading:

3 Exams (at 100 points each), 2 out of 3 count.....	200	
Final exam.....	200	
Paper	60	
In-class writing assignments (4 at 10 points each).....	40	Total Points: 500

Grades are based on a percentage of the total points achieved as follows:

90-100%=A; 80-89%=B; 70-79%=C; 60-69%=D, below 60%=F.

(Grades within few percent of a boundary will receive + or -, depending on improvement, participation, and attendance.)

- Exams will consist mostly of MC and matching questions. The lowest or missed exam score will be dropped for your convenience. The final exam is not dropped. It will be *cumulative*. Exam questions primarily will be drawn heavily from the lectures, as well as the textbook and documentary films.

- The term paper is a very important assignment and a University-mandated *writing* requirement. No late papers accepted at all. Penalty of *30% each day* if you insist on turning your paper after the due date. The 4 in-class writing samples are unannounced and you must be present, in class, to get credit.

- Attendance will be noted weekly. Attendance is found to be directly proportional with overall grade quality. Please do not miss class! If you miss classes, it is your responsibility to get notes from a fellow student and not to fall behind. The instructor will not provide notes personally or electronically outside of class time.

- Note: No extra credit given. Exams will not be rescheduled for your convenience. Exams cannot be made up. If you choose to miss an exam, then that is the exam that you will drop.

- Grading errors, if any, must be brought to my attention within 1 week of receiving an exam score.

- If you are taking the course CR/NC, and want to pass the class, you must obtain a C or above.

Scantrons: You need the large red scantron form Parscore F-288 (enrollment form) for the first exam only. Thereafter, you will need the smaller red scantron form Parscore F-289.

TENTATIVE CLASS SCHEDULE

Note that the following lecture and exam schedule is subject to change depending upon the progression of the course. You will be notified in class.

WEEK OF

29 Aug – Introduction to the course

Introduction to Geology, Origin of the Earth, Scientific Method

Chapt. 1, part of Chapt. 2

5 Sept – Monday- 5 Sept – holiday!

Energy Sources of the Earth. Population Growth

Chapt. 1

12 Sept – Characteristics of Natural Disasters

Impacts with space objects

part of Chapt 1

Chapt. 17

WEEK OF

19 Sept – Impacts with space objects. Review.	Chapt. 17
26 Sept – Plate Tectonics: Sea floor spreading, Plate boundaries	Chapt. 2
<u>Mon, 26 Sept – EXAM 1 (on or around this date) - (chapters 1, 2, 17, and lectures) – Bring scantron!</u>	
3 Oct – Earthquake Geology	Chapt. 3
Earthquakes and Tectonics	Chapt. 3
Earthquakes and Tsunami	Chapt. 5
10 Oct – Earthquakes and Tsunami	Chapt. 5
Historical Earthquakes	Chapt. 3, 4, 5
17 Oct – Historical Earthquakes. Review	Chapt. 3, 4, 5
24 Oct – Volcanoes and Tectonics	Chapt. 6, 7
Historical Volcanoes	Chapt. 6, 7
<u>Fri – 28 Oct – EXAM 2 (on or around this date) - (chapters 2, 3, 4, 5, and lectures) – Bring scantron!</u>	
31 Oct – Historical Volcanoes	Chapt. 6, 7
7 Nov – Mass Extinctions	Chapt. 17
Mass Movements (Landslides)	Chapt. 8
14 Nov – Historical Mass Movements. Review	Chapt. 8
<u>Wed – 23 Nov - EXAM 3 (on or around this date) - (chapters 6, 7, 8, 17, and lectures) - Bring scantron!</u>	
21 Nov – Weather principles	Chapt. 10
<u>24-25 Nov – Thanksgiving recess</u>	
28 Nov – Severe weather.	Chapt. 10, 13, 14, 15
<u>Friday, 2 Dec - Term Papers due</u>	
5 Dec – Severe weather.	Chapt. 10, 13, 14, 15
Floods	Chapt. 11, 12
12 Dec – Floods. Review. Last day of classes: Wed, 14 Dec.	Chapt. 12

FINAL EXAM: 9 am class – Monday, 19 Dec at 8 am.

1 pm class – Monday, 19 Dec at 1 pm.

The final is cumulative but emphasizes the last part of semester (Chapt.10, part of 11, 12, part of 13, 14, 15) Total points: 200. The **final cannot be re-scheduled!** The **final cannot be dropped!**

Note: Please no mobile phone handling during lecture or exams.

Important date: 21 Sept – last day to add classes, drop classes, change grading basis.