

**TULANE UNIVERSITY**

**Instructor:** Dr. Stephen A. Nelson

Office Hours - MWF 8:00 AM - 5:00 PM, Room 302B, Dinwiddie Hall

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**Required Textbooks:**

*Dangerous Earth, An Introduction to Geologic Hazards*, by Barbara W. Murck, Brian J. Skinner, and Stephen C. Porter. John Wiley & Son's, Inc., 1997

**Course Grading:**

Your grade in this course will be determined on the following percentage distribution:

Midterm Exam	30%
Final Exam	40%
Homework	15%
Disaster Log	15%

**Homework and Exams:**

The midterm and final exams will be mostly objective in nature with questions coming from the reading material, lectures, and homework assignments. **No make-up exams will be given.** The **Final Exam will be cumulative.** Homework assignments will consist of exercises designed to help the student gain practical experience in examining information about the occurrence and effects of natural disasters. **All homework answers should be typewritten.** Due dates are firm, and absolutely no exceptions will be made for late assignments.

**Disaster Log:**

Students will be required to find information on natural disasters that occur during the time period of the course. Information to keep and update this log will be found in newspapers, magazines, and on the internet. The log should include all natural disasters that occur during the course with information on the type, details, effects, death/injury toll, and economic impact of each disaster. The **typewritten** log will be turned in at the end of the semester and compared with a log kept by the instructor to determine the grade on the log. Further information on the disaster log, including an example from last year can be found on the World Wide Web, as discussed below.

**Web Site:**

Further course materials, including a copy of this syllabus, all homework assignments, lecture notes, disaster log information, announcements from the instructor, and World-Wide-Web links can be found on the World Wide Web at:

<<http://www.tulane.edu/~sanelson/geol204/>>

Be sure to check this web page regularly throughout the course for important announcements and updates.

**Honor Code:**

All students are expected to follow the Tulane Honor Code. If you are unfamiliar with the Honor Code or have any questions about it, get a copy of the Honor Code from your Dean's office. In short, the Honor Code states that all work turned in for credit must be your own work in your own words, unless clear and explicit acknowledgement of the sources of the work is given. This does not mean that collaboration on assignments is discouraged. You may collaborate, just make sure that the work you turn in is in your own words, and not just a copy of the work of your collaborators.

Schedule of Lectures and Assignments		
Date	Topic	Reading
Jan 13	Introduction and Planetary Setting <b>Homework Assigned: I. Disaster Info on the Internet</b>	Introduction & pp. 3-18
Jan 18	Earth Structure, Materials, Systems, and Cycles	pp. 19-59
Jan 20	Earth Structure, Materials, Systems, and Cycles	pp. 19-59
Jan 25	Assessing Hazards and Risk	pp. 61-67
Jan 27	Earthquakes: Causes and Measurements <b>Homework I Due</b>	pp. 69-80
Feb 1	Earthquake Hazards and Risks <b>Homework Assigned: II. Seismological Exercises</b>	pp. 80-91
Feb 3	Earthquake Prediction and Control	pp. 91-97
Feb 8	Earthquake Case Histories <b>Homework II Due</b>	Lect. Notes
Feb 10	Volcanoes, Magma, and Volcanic Eruptions <b>Homework Assigned: III. Volcanological Exercises</b>	pp. 101-110
Feb 15	Volcanic Landforms, Volcanoes and Plate Tectonics	pp. 110-117
Feb 17	Volcanic Hazards, Beneficial Aspects, and Predicting Eruptions	pp. 118-129
Feb 22	Volcanic Case Histories	Lect. Notes
Feb 24	Volcanic Case Histories <b>Homework III Due</b>	Lect. Notes
Feb 29	<b>Midterm Exam</b>	
Mar 2	Tsunamis	pp. 131-143
Mar 7-9	Mardi Gras Break	
Mar 14	Mass Wasting and Mass-Wasting Process <b>Homework Assigned: IV. Mass Wasting Exercises</b>	pp. 145-154
Mar 16	Slope Stability, Triggering Events, Mass Wasting Hazards	pp. 154-171