

Department of Geosciences Spring 2012

GEO-SCI 250 *Natural Disasters Online*

Three (3) credit hours. **General Education: Science Interdisciplinary (SI)**

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Virtual OFFICE HOURS: M/F 7:00 PM – 8:00 PM EST, or by Appointment.

Natural Disasters is a systematic and geographic approach to understanding the human population-earth systems relationship inherent in natural disasters. Themes include geophysical and hydro-meteorological hazards, physical exposure of populations to such hazards, and vulnerabilities of physically exposed populations to the effects of natural disasters. The course explores geographic distribution patterns, and relationships of and between the various themes. Our objective is to enhance our earth and human systems geographic literacy, and our understandings of why natural disasters occur where they occur; with a focus on profiling events, assessing risk, and minimizing casualties. In application, such geographic intelligence enhances our academic and professional activities.

This semester we re-introduce demonstrations of the latest HAZ-US MH 2 Risk Assessment Platform, ArcGis Explorer, and Stella 9.1 Dynamic Systems Models. We also have a guest Speaker from the Climate Systems Research Center at UMass Geosciences. Preview the course starting 1/16/12.

Text: Abbott, P.L., 2008. *Natural Disasters*: 7th ed. London: McGraw-Hill. Paper Used. Text also available in new digital format. Bookstore: \$35.00 (we transit to the 8th ed. Fall 2012)

A Textbook Online Learning Center website includes quizzes and supporting course material.

Format: Online course progresses through select textbook chapters with a weekly chapter quiz and short-answer questions. A short research exercise using a pre-done example template, and several Risk Assessment short-answer questions are completed once per month. Weekly video tutorials cover chapter material and current-events; view on your own schedule as needed. The semester ends with informative case-studies, guest speakers, and a brief 2-page summary Final report. Students have the initiative and support-guidance as needed.

Grading is based on 1600 total points in 12-weekly assignments, 3 research exercises, and a 2-page Final Report. We use flexible assignment 'suggested' due-dates.

A = 1440+ points

B = 1280-1439 points

C = 1120-1279 points

D = 960-1119 points

Plus and Minus Letter Grades are calculated at the end of the semester.