Course Syllabus

EARTHQUAKE HAZARD AND EMERGENCY MANAGEMENT

<Fall/Spring> <Semester/Quarter> <Year>

Instructor(s):

<Name>
<Room>
Office Hours: <days, time>

Teaching Assistant(s):

<Name>
<Room>
Office Hours: <days, time>

Grading Criteria:

The course grade will be based on:

- Class participation and presentations - 25%
- Homework - 25%
- Term Project - 25%
- Final Exam - 25%

Texts and Teaching Aids:

A set of course notes and handouts produced specifically for this class is required. Currently, there is no single text that covers the material envisioned for this course; however, a number of texts and articles that contain much of the course content are available and suggested as a references where appropriate. Reference materials used throughout the course include:

Mileti, Dennis S. 1999. *Disasters by Design: A Reassessment of Natural Hazards in the United States*. Washington, DC: Joseph Henry Press.

Other Resources:

The course will be supplemented by a website available at <web address>. You should check this site daily for announcements, references, and other resources.

Final Exam:

The final exam will be <date, time, location>.

I. Why this course is important:

Trends for disaster losses are increasing rapidly, and earthquake disasters are among the highest threats. Projected losses are unsustainable, and there must be greater emphasis placed on mitigation of hazards, as opposed to the traditional approach that placed most emphasis on response and recovery. This course is intended to help create a new generation of earthquake hazard managers who are better informed and better prepared to make decisions, obtain relevant information, and better understand how to make effective impacts on reduction of earthquake hazards.

II. Lecture Topics (and approximate Duration):

1. **Introduction:** purpose of course, requirements (1.5 hrs.)
2. **Causes of Earthquakes:** basic cause of earthquakes (2 hrs.)
3. **Distribution of Earthquakes:** where earthquakes tend to occur (1.5 hrs.)
4. **Earthquake Hazard and Risk in the US:** What is the overall level of earthquake hazard hazard in the US, especially the relative hazards between regions (2 hrs.)
5. **Characteristics of Earthquakes:** measuring sizes of earthquakes, etc. (2 hrs.)
6. **Earthquake Research and Information:** Why is earthquake research important for hazard reduction, what do we know and what are the contemporary research issues (prediction, etc.)? (3 hrs.)
7. **The Nature and Effects of Earthquake Hazards:** How earthquake hazards are unique and what effects they produce (2 hrs.)
8. **Disaster Phases and Earthquake Policies:** review of earthquake disaster phases and history and current status of earthquake policy (2 hrs.)
9. **Mitigation:** what mitigation involves, typical mitigation procedures, and the importance of this concept (4 hrs.)
10. **Earthquake Preparedness** what mitigation involves, typical mitigation procedures, and the importance of this concept (3 hrs.)

11. **Earthquake Disaster Response and Recovery**: Overview and basic principles and issues associated with earthquake response and recovery (3 hrs.)

12. **Nature of Earthquake DisasterVulnerability:** what factors affect earthquake vulnerability and why is there a growing trend for disaster losses? (2 hrs.)

13. **Communication Strategies and Public Outreach:** Why effective communication of risks is important and key for effective communication (3 hrs.)

14. **Earthquake Disaster Planning:** Importance of good planning, planning tools, etc. (3 hrs.)

15. **Earthquake Issues and Roles – Classroom Skit:** earthquake issues and concern for various entities – classroom role playing skit and "capstone" assignment (2 hrs.)

Total Lecture Hours:	33.5 hrs.
Classroom Skit:	2.0 hrs.
Outside Guest Speakers	2.0 hrs.
Discussion of Homework Assignments:	5.5 hrs.
Exams	2.0 hrs.
	Total 45 hrs.

III. Please Note:

- The course outline is subject to change and time estimates are approximate.
- Any students requiring special assistance during lectures, examinations, or other aspects of the course are encouraged to see the instructor(s).
- Strive to be an active class participant!