CIVL 7137/8137
Geotechnical Earthquake Engineering

Fall 2006
THE UNIVERSITY OF MEMPHIS
http://www.ce.memphis.edu/7137

Professor's Name: Dr. Shahram Pezeshk; EN 104B
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Hours Credit: 3 Semester Hours
Office Hour: Open door policy
Course Meetings: 5:30 - 6:55 P.M., Monday & Wednesday, EN 114

COURSE DESCRIPTION
Theory and measurements of dynamic properties of soils and their applications in seismic hazard assessments, earthquake engineering design, and geophysics studies.

GRADING
The final grades for the course will be based on the following percentages:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Homework</td>
<td>35%</td>
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<tr>
<td>Exams</td>
<td>30%</td>
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<tr>
<td>Final Exam</td>
<td>35%</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
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October 14-17, 2006 – Fall Break
December 6, 2006 – Last Class
Final Exam: Dec 13, Wednesday, 5:30pm - 7:30pm

See http://www.enrollment.memphis.edu/registrar/calendars/academic/ for more detailed Academic Calendars.
TOPICS

Chapter 1. Introduction to Geotechnical Earthquakes Engineering
Chapter 2. Seismology and Earthquakes
Chapter 3. Strong Ground Motion
Chapter 4. Seismic Hazard Analysis
Chapter 5. Wave Propagation
Chapter 6. Dynamic Properties
Chapter 7. Ground Response Analysis
Chapter 8. Local Site Effects and Design Ground Motions
Chapter 9. Liquefaction