

**CEE611 - Earthquake Engineering (3 Credits)**  
**Winter Semester 2007-2008**  
*Course Description*

**Instructor:** [Jerome P. Lynch](mailto:jerlynch@umich.edu)  
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**Lectures:** Mondays and Wednesdays, 5:00 - 6:30 pm  
G. G. Brown 2315

**Office Hrs:** Tuesday 5:00 - 6:30 pm  
2380 G. G. Brown  
[Please observe the use of office hours]

**Website:** [www.engin.umich.edu/class/cee611](http://www.engin.umich.edu/class/cee611)

**Catalog Description:**

This course is to serve as an introduction to the multi-disciplinary field of earthquake engineering. Topics covered in the course include tectonics, ground motion characterization, probabilistic hazard analysis, response spectra, inelastic structural analysis, and performance-based earthquake-resistant design.

**Textbook:**

- Geotechnical Earthquake Engineering, S. L. Kramer (Prentice Hall, 1996) - Required
- Dynamics of Structures: A. Chopra (Prentice Hall, 2000) - Required

**Optional References:**

- Earthquake Engineering Handbook, W.-F. Chen and C. Scawthorn (CRC Press, 2003)
- International Building Code 2003, International Code Council (ICBO, 2003)

**Course Requirements:**

- Regular attendance
- Homework assignments
- Small projects
- Midterm exam (TBD - In Class/Open Book)

**Homework:**

Homework will be routinely assigned during the course of the semester. **Please note, late homework will not be accepted** - make every effort to submit the assignment in a timely fashion. Homework will often involve Matlab programming. When submitting your assignments, please submit your entire Matlab routine if a problem calls for its use (otherwise points will be deducted). Please refrain from using other programming environments including Excel, among others.

**Grading:**

Homework 30%, midterm 30%, projects 40%. These weights are approximate; the right to change them later is reserved.

**Prerequisites:**

- CEE511 Structural Dynamics or equivalent