

CEE212 – Solid and Structural Mechanics (4 Credits)
Fall Semester 2009-2010
Course Description

- Instructor:** [Jerome P. Lynch](mailto:jerlynch@umich.edu)
2380 G. G. Brown
jerlynch@umich.edu
- Assistant:** Philip Park (Teaching Assistant)
parkph@umich.edu
- Lectures:** Mondays, Wednesdays and Fridays
9:30 -10:30 am
2315 G. G. Brown Building
- Recitations:** Fridays
2:30 - 4:30 pm
2315 G. G. Brown Building
- Office Hrs:** Sundays, 4:00 – 6:00 pm (Mr. Park)
1371 G. G. Brown

Friday, 4:30 – 6:30 pm (Mr. Park)
2315 G. G. Brown
- Website:** www.engin.umich.edu/class/cee212

Catalog Description:

Fundamental principles of solid and structural mechanics will be presented. Application of the principles to civil engineering structures will be emphasized. The course will further develop the concepts introduced in Statics and Dynamics (CEE211). In particular, the notion of internal forces, and the concepts of stress and strain will be introduced. Mechanical properties of solids will be discussed, and the notion of statical indeterminacy will be introduced. The methods of structural analysis will be presented, including those based on energy concepts.

Textbook:

- Mechanics of Materials, R. C. Hibbeler (Prentice Hall, 2008) – 7th Edition

Course Requirements:

- Regular attendance
- Weekly homework assignments
- Midterm exam (Details will be provided later)
- Final exam (Details will be provided later)

Homework:

Homework will normally be assigned each Monday and due the following Monday *in class*. **Late homework will not be accepted.** You are allowed to discuss the homework problems with peers, but you must write up your own homework to hand in. Please submit homework assignments in a neat and presentable manner with all calculations shown. **Submission of homework on engineering pad paper is preferred.** Homework will be graded on a scale of 100. Please abide by the University of Michigan Honor Code – it will be strictly enforced, including on homework.

Role of the Weekly Recitation Period:

The two hours of the recitation period (2:30-4:30 pm) on Fridays are reserved for review of the course material with the Teaching Assistant. No new course material will be covered, unless otherwise stated by the instructor in class before the recitation period. While attendance in the Teaching Assistant's review session is optional, it is strongly urged that you attend the session to enhance your understanding of course material and appreciation for its application to practical settings in engineering.

The instructor also reserves the right to use this recitation period for making-up missed classes (due to unavoidable travel of the instructor), catching-up with the course material (should we fall behind) and for reviewing material before the midterm and final exam. Should the recitation period be used for any of these purposes, the instructor will announce to the class that the recitation will be covering new material and attendance will be mandatory.

Grading:

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

Prerequisites:

- CEE211 - Statics and Dynamics (strictly enforced)