CEE 142L: REINFORCED CONCRETE STRUCTURES LAB

**Professor:**
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**Course Information:**
Enrollment number:  147-570-200
Lecture  2 hours/week; Laboratory 4 hours/week (4 units)
Time/Room:  Tue/Thur.  12:00- 3:50PM  1000B Boelter Hall
Final:  Final Examination Code: 14 - Tuesday, June 10, 2008, 3:00pm-6:00pm

**Course Objective and Outline:**
The objective of the course is to improve student understanding of the behavior of reinforced concrete structural elements by conducting four experiments. The experiments include: (A) Simply-supported beam with a point load at mid-span, (B) Pinned-end, slender column test subjected to flexure and axial load, (C) Slab – column connection subjected to gravity load and simulated earthquake loading protocol, and (D) Beam-column-joint test under simulated earthquake loading protocol. Experimental results are compared with theoretical/analytical results and building code requirements to assess the validity of these approaches. Writing and presentation skills are honed through the preparation of laboratory reports and oral presentations.

**Course Organization:**
Homework will be assigned for each experiment and submitted by each individual student prior to execution of the experiment. Late homework will not be accepted (no exceptions).

The experiments and lab reports will be conducted in groups of four. The lab report will be due for each experiment approximately one week after the completion of the experiment. One lab report will be submitted by each group – late lab reports will be marked down 10% for each day late beyond the due date. Although each laboratory report must be well-organized and presented, individuals responsible for preparing and reviewing each section of the report must be identified in the Table of Contents for each report (or a supplemental document).

Each group also will responsible for preparing and delivering a presentation (e.g., Powerpoint) on one experiment (for the final). All group members must participate approximately equally in the oral presentation, and each presenter is responsible for the quality and accuracy of the material they present.

**Office Hours:**
John Wallace  M/W  4:00 – 5:00 pm  5731C Boelter Hall  
Anne Lemnitzer  TBA  3066B Engineering I

**Grading:**
Lab Reports  50%  Midterm(s)  15%
Homework  15%  Final Presentation  20%

**Prerequisites:**
C&EE142 – Reinforced Concrete Design

**Texts (recommended – Same texts as CEE 142):**