

**53:086 Civil Engineering Materials
Spring 2008**

Lab Instructor:

Robert Williams, Graduate Student
Email: rwillia@engineering.uiowa.edu

Lab Schedule:

Week of:	Lab Activity
1/22-1/25	No Lab
1/28-2/1	Introduction – Set up groups
2/4-2/8	1.1 Tensile Testing of Structural Metals
2/11-2/15	1.2 Torsion Testing of Structural Metals
2/18-2/22	1.3 Charpy Impact Test ¹ PCA: PCC Mix Design
2/25-2/29	2.1 Sieve Analysis and Specific Gravity of Aggregates*
3/3-3/7	2.2 Portland Cement Concrete Mixing and Initial Tests*
3/10-3/14	2.3 PCC 7-day Compression Test
3/17-3/21	SPRING BREAK
3/24-3/28	2.4 PCC Tensile Strength (Split-cylinder & 3-point bend)
3/31-4/4	2.5 PCC 28-day Compression Test ²
4/7-4/11	3.1 Asphalt Binder Test*
4/14-4/18	3.2 Asphalt Mixing; Gyrotory Compaction; Specific Gravity & Strength Tests*
4/21-4/25	No Lab
4/28-5/2	4.1 Tensile Testing of Composite Materials ⁴
5/5-5/9	No Lab
5/12-5/16	FINALS WEEK

* Please wear old clothes that you don't mind getting dirty.

¹ Lab report due by 4:30 Friday February 29, 2007

² Lab report due by 4:30 Friday April 11, 2007

³ Lab report due by 4:30 Friday April 25, 2007

⁴ Lab worksheet to be completed in class

Lab Materials:

Lab write-ups and other materials will be made available on the following website:
www.engineering.uiowa.edu/~rwillia/coursemat.htm. Please printout and read the materials before you come to class. Some labs will require a lot of work in a relatively short amount of time, being prepared before class will help.

Lab Rules:

- Safety, Safety, Safety!!!
- Attendance is required for every lab session.
- If you have questions, please be patient – the instructor will be with you as soon as possible.
- If you have problems with any equipment, tell the instructor immediately!

Lab Reports:

- Must follow the format outlined in the first class. **Use both SI and US units!**
- One report will be turned in for each group. Every group member is expected to do his/her fair share. Lab reports must be signed by each member on the cover sheet, acknowledging their work.
- Must be turned in by the time and date mentioned above. Late reports will not be accepted – no exceptions.