

CE 4541 – Soil Mechanics II – Fall 2009
TTh 12:30 p.m. - 1:40 p.m., CAST 212
Civil and Environmental Engineering
University of Connecticut, Storrs, CT 06269

Course Policies, Course Outline and Relevant Information

Your Instructor

Dipanjan Basu - CAST 318, 486 5023, dbasu@enr.uconn.edu

I have a Ph.D. in soil mechanics and geotechnical engineering. I have high expectations from my students. In other words, you have to put in significant effort in my class. I normally put in extra time and effort for my courses if you need them. I am ready to discuss with you individually about any issue or difficulty you may have. I believe that we **are a team, and together** we work toward success. I am ready to help, but you will have to deserve the help (that means, you have to work hard!). I cannot promise an easy ride. All I can promise is that, if you decide to take the journey with me, you will really learn the subject.

Your Course

The course is about learning the fundamental concepts of soil mechanics beyond what you have learned in your previous class. You will first get an opportunity to brush-up what you already know and to recognize what you don't know. You will then learn the basic principles of the mechanics of granular media from a rather different perspective. In particular, you will learn a lot about the mechanical behavior of soil. After completing the course, you will be ready to apply the principles of soil mechanics to different engineering applications. The course will prepare you for Foundation Engineering and for advanced study in Geotechnical Engineering.

Books You Need

Text Book: *The Engineering of Foundations* by R. Salgado, McGraw Hill, 1st Edition, 2006.

Reference Book (Optional): *Fundamentals of Soil Behavior* by J. K. Mitchell and K. Soga, Wiley, 3rd Edition, 2005.

Handouts may be provided to supplement the text.

Website You Should Check

HuskyCT <<http://huskyct.uconn.edu>> will be used for posting course materials (e.g., homework solutions) and for **communication** and discussions. You are strongly advised to **regularly** check the website for updates.

Things to Remember about Homework

Homework should be treated as **study guide**. Homework will not be graded for accuracy but for completeness. Solutions will be provided.

Engineering paper must be used for homework (homework will be considered not submitted if not done on engineering papers), and all diagrams and calculations must be organized and presented clearly to receive credit. For full credit, complete, clear and organized answers must be submitted.

Homeworks must be done **individually** without any external and/or improper help.

Reading Assignments

You should **read** the portions of the text book to be covered in class **before** coming to class.

Short Quiz

Prescheduled short quizzes (of approximately 15-minute duration) or similar other assignments may be administered as per my discretion. There will be no make-up quiz.

Midterm Examination

Two midterm examinations (of 2-hour durations) will be administered during the semester in the **evening** from 7 p.m. to 9 p.m. Make-up examinations may be administered only under extreme circumstances and only with prior consent (at least one day advance notice) of the instructor.

Final Examination

A final examination will be administered during the finals week.

Project Work

You will do group projects. Please meet me for your project assignments.

Grading Breakdown

Final Grade = Homework 5% + Short Quizzes/Assignments 5% + In-class Examinations 30% (15% + 15%) + Final Examination 30% + Project 30%.

Attendance

I strongly encourage you to **attend all** classes. If you have less than 90% attendance, then you will lose certain special privileges.

Academic Integrity and Behavior

If you cheat, plagiarize, misbehave, or encourage in any form of misconduct, academic or otherwise, then you will face harsh consequences. I am very serious about it. You can learn more about your responsibilities and about how to behave in an academic environment at http://www.dos.uconn.edu/student_code.html.

Office Hours

Instructor: Dipanjan Basu - TTh 2:00 p.m. to 3:00 p.m. or by appointment.

Recitation

Review sessions (outside of regular class hours) may be scheduled as required. These are optional sessions of maximum 3-hour durations from 6:00 p.m. to 9:00 p.m.

Tentative Course Outline

Number of Classes	TOPIC
1	Review of Soil Mechanics I
4	Origin, Nature and Description of Soil
4	Continuum Concept, Stress and Strain Analysis
8	Stress-Strain Response of Sands
8	Stress-Strain-Time Response of Clays
5	Critical State Soil Mechanics