CE 462 (562) FOUNDATION ENGINEERING

Fall, 2009

Instructor: Tang-Tat Ng, Ph.D., P.E., Professor

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Textbook: Principles of Foundation Engineering: Braja M. Das, Thomson Brooks/Cole Company, 2007, Sixth Edition.

Class Time: MW 4:00-5:15 1026 CENT

Class Announcement URL: http://geolab.unm.edu/teach.html

Tentative Outline

Week	Topic	Reading Assignment
1	Introduction of Foundation Design	1
2	Geotechnical Properties of Soil	1
3	Subsurface Exploration	2.10 ~ 2.22
4	(EXAM 1) **9/21 Closed book exam**	
	Shallow Foundation	
5-6	Bearing Capacity	3 and 4
7	Settlement	5
8	Mat Foundations	6
9	(EXAM 2) **10/28**	
	Deep Foundation	
10-12	Piles Foundations	11.1-11.15
12-13	Drilled Shafts	12.1-12.9
13	Pile Driving Formula	11.19
14	(EXAM 3) **11/23**	
	Retaining Structure Design	
14-15	Lateral Earth Pressure	7
15-16	Cantilever Retaining Wall Design	8.1-8.9
*	Introduction to Reinforced Earth	8.10-8.14
	Review **12/7**	
	Final (**12/14 1:00-3:00 pm**)	

*** Only if time permits**

CONDUCT OF THE COURSE

Learning requires personal commitment and participation. At the minimum, this means regular class attendance and completion of assignments. I expect and encourage questions and discussion from every student during the class period or at any time in my office.

Participation in class will be weighed positively and can make a difference if you are on the borderline between grade levels.

There are about 8-10 individual homework assignments and they are due one week after the assigned date. Problems should be done in standard engineering format and late homework will not be accepted unless previously and mutually agreed to. Take advantage of class time to ask questions and get help. Students who are taking the graduate credit are required to complete a final design project.

The final course grade will be based on your performance and participation in the course, measured approximately as follows:

Undergraduate credit:

First Exam (10%) + Two Hourly Exams (40%) + Homework (20%) + Final Exam (30%)

Graduate credit:

First Exam (10%) + Two Hourly Exams (36%) + Homework (20%) + Final Exam (25%) + Design Project (9%) [due 12/10]