CIE 767/867 – Engineering Behavior of Soils

Course Syllabus, Spring 2013

General Information:

Time and Location: T R 8:10-9:30 AM, KING N121  
R 4:10-5:00 PM, KING S120

Instructor: Dr. Majid Ghayoomi, Kingsbury W175, majid.ghayoomi@unh.edu  
Office Hours: Email your questions or make an appointment.

Course Website: Blackboard (http://blackboard.unh.edu): You can login using your username and password.

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Topics:

1. General stress state
2. Key soil properties
3. Direct Shear Test
4. Triaxial Test
5. Soil Modeling overview
6. Shear strength of sands
7. Shear Strength of Clays
8. Different parameters affecting the shear strength
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10. Failure Envelopes
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Course Description: Review of stress and strain in soil. Introduction to continuum mechanics.
Development of engineering soil properties. Application of soil mechanics to shear strength and
stress-strain behavior of soils. Failure states and residual strength. Application of stress paths in
engineering problems. Unsaturated soil mechanics. Laboratory exercises using the direct shear
test, triaxial test, and soil-water retention measurements. Prereq: CIE 760; or permission. 4cr.

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Topics:

1. General stress state
2. Key soil properties
3. Direct Shear Test
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Final Exam: Date, Time, and Location to be announced
CIE 767/867 – Engineering Behavior of Soils

Course Syllabus, Spring 2013

General Information:

Time and Location:   T R   8:10-9:30 AM, KING N121
                    R      4:10-5:00 PM, KING S120

Instructor:   Dr. Majid Ghayoomi, Kingsbury W175, majid.ghayoomi@unh.edu
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