COURSE SYLLABUS (2 Page)

Course Number: CEGR 3258
Course Name: Geotechnical Laboratory

Credits and Contact Hours: 2

Instructor: Vincent Ogunro

Textbook:  
Title: Soil Properties: Testing, Measurement and Evaluation (6th ed.)
Authors: Liu and Evett
Year: 2008

Catalog Description: Test to determine engineering properties of soils; consistency, permeability,
shear strength, and consolidation. Data analysis, presentation, and report
writing. One and a half hours of lecture and three hours of laboratory per week.
Most Recently Offered (Day): Spring 2016, Fall 2015, Summer 2015
Most Recently Offered (Evening): Course has not been offered in 3 years

Pre-Requisites/Co-Requisites: CEGR 3278 (Pre- or Corequisite)

Course is: Required (R)

Goals: To introduce the character and behavior of soils through ASTM and
AASHTO geotechnical tests. Through hands-on lab work and report
preparation, students will gain and display an understanding of soil testing and
behavior.

Student Outcomes Addressed:
In this course, students will develop the following Student Outcomes:
A. an ability to apply knowledge of mathematics, science, and engineering
B. an ability to design and conduct experiments, as well as to analyze and interpret data
E. an ability to identify, formulate, and solve engineering problems
F. an understanding of professional and ethical responsibility
G. an ability to communicate effectively
K. an ability to use the techniques, skills, and modern engineering tools necessary for
   engineering practice

Course Topics:
Moisture content, grain size distribution, specific density, consistency limits (liquid and plastic
limits), moisture-density relationships, permeability, consolidation, and shear strength
(unconfined compression, direct shear and triaxial tests).