Course Prefix and Number: CIV 226

Course Title: Soil Mechanics Laboratory

Course Description: Introduces practical soil sampling; classification of unified, ASTM, and ASSHTO specifications; laboratory testing of soils to predict engineering performance. Co-requisite: CIV 225. Laboratory 2 hours per week.

General Course Purpose: Allows student to experience hands-on testing and research of soil properties as applied to a civil engineering assignment.

Course Prerequisites and Co-requisites:
Co-requisite: CIV 225

Course Objectives:
Upon completing the course, the student will be able to
a. Demonstrate a working knowledge of classifying a soil to identify its engineering properties;
b. Demonstrate a general understanding of the fundamentals of geotechnical engineering; and
c. Have a basic understanding of the performance requirements of the soil laboratory or soil field technician.

Major Topics to Be Included:
a. Soil: origin and nature
b. Soil classification
c. Soil index properties
d. Stress analysis and engineering properties
e. Interpretation of soils reports (exploration procedures)
f. Foundation types and application
g. Moisture–density relationship
h. Soil stabilization

Effective Date of Course Content Summary: August, 2008