

NVCC COLLEGE-WIDE COURSE CONTENT SUMMARY

CIV 226 - SOIL MECHANICS LABORATORY (1 CR.)

COURSE DESCRIPTION

Introduces practical soil sampling; classification of unified, ASTM and ASSHTO specifications; laboratory testing of soils to predict engineering performance. Laboratory 2 hours per week.

GENERAL COURSE PURPOSE

To provide an understanding of and practical experience in field and laboratory testing of soils, laboratory testing procedures, fill control testing, and standard test specifications.

ENTRY LEVEL COMPETENCIES

Designed to be taken in conjunction with a course in soil mechanics. Co-requisite: CIV 225.

COURSE OBJECTIVES

The student will be able to properly sample soil, conduct field and laboratory tests following standard procedures, and relate the results to engineering performance characteristics.

MAJOR TOPICS TO BE COVERED

- A. Sample preparation
- B. Grain size analysis
- C. Liquid limit and plasticity index
- D. Soil classification
- E. Specific gravity
- F. Compaction tests
- G. Field density testing