

NVCC COLLEGE-WIDE COURSE CONTENT SUMMARY

CIV 229 - CONCRETE LABORATORY (1 CR.)

COURSE DESCRIPTION

Focuses on mixing, curing, testing and quality control of concrete. Laboratory 2 hours per week.

GENERAL COURSE PURPOSE

To acquaint the student with the methods and procedures for field and laboratory testing of concrete and constituent materials.

ENTRY LEVEL COMPETENCIES

Designed to be taken in conjunction with a course in concrete technology. Co-requisite: CIV 228.

COURSE OBJECTIVES

Upon completion of this course, the student will be able to:

- A. understand the procedures and related specifications for the field and laboratory quality control testing of plastic concrete
- B. understand the laboratory testing of constituent materials
- C. understand proportioning trial mixes
- D. understand curing test specimens
- E. understand testing hardened concrete test specimens and in-place concrete
- F. perform these test

MAJOR TOPICS TO BE COVERED

- A. Laboratory procedures
- B. Concrete characteristics
- C. Testing of concrete aggregates
- D. Testing of plastic concrete
- E. Proportioning mixes
- F. Testing hardened concrete