NVCC COLLEGE-WIDE COURSE CONTENT SUMMARY

CIV 172 – SURVEYING II (3 CR.)

COURSE DESCRIPTION
Introduces surveys for transportation systems including the preparation and analysis of topographic maps, horizontal and vertical curves, earthwork and other topics related to transportation construction. Lecture 2 hours. Laboratory 3 hours. Total 5 hours per week.

GENERAL COURSE PURPOSE
To introduce the student to the principles of surveying, surveying equipment, surveying procedures, the analysis of field data, and the preparation of topographic maps.

ENTRY LEVEL COMPETENCIES
Competency in algebra and geometry. Corequisite: MTH 115.

COURSE OBJECTIVES
The student will have a thorough knowledge of the basic instruments of surveying and their use, be able to analyze field data, and be able to prepare topographic maps.

MAJOR TOPICS TO BE INCLUDED

A. Mathematics of Surveying
B. Measurement of Distances
C. Measurement of Angles
D. Analysis of Traverses
E. Vertical Curves
F. Basic and Complex Horizontal Curves
G. Stadia Surveying
H. Analysis and Preparation of Topographic Maps