

**J. Sargeant Reynolds Community College
Course Content Summary**

Course Prefix and Number: CIV 270

Credits: 3

Course Title: Utilizing Surveying Software

Course Description

Introduces computer applications for conventional coordinate-geometry (COGO) calculations. Studies and evaluates numerous COGO software and their associated drafting packages. Includes calculations and drafting of traverse adjustment, subdivision, curves, and others.

Lecture 3 hours per week

General Course Purpose

Introduces the student to the use of COGO in civil engineering design

Course Prerequisites/Corequisites (Entry-level competencies **required** for enrollment)

CIV 172 or equivalent

Course Objectives

Upon completing the course, the student will be able to:

- a. Collect and/or transfer survey data
- b. Perform survey adjustment using COGO
- c. Site design/drafting using CAD and surveying software
- d. Map surface using CAD and surveying software

Major Topics to be Included

- a. Surveying Data Collection/Data Transfer
- b. Survey Adjustments
- c. COGO and Drafting
- d. Site Design/Mapping

Effective Date of Course Content Summary: August, 2008