

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

Course Prefix and Number: DRF 233

Credits: 3

Course Title: Computer-Aided Drafting III

Course Description: Introduces programming skills and exposes student to geometric modeling. Focuses on proficiency in production drawing using a CAD system.

Prerequisite: DRF 232. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

General Course Purpose: An introduction to the process of customization of a CAD system through creation of macros and sub-routines via programming.

Course Prerequisites and Co-requisites:

Prerequisite: DRF 232

Course Objectives:

Upon completing the course, the student will be able to

- a. Customize a CAD system (AutoCAD) to better suit the user's specific drawing needs;
- b. Develop macros that eliminate duplication that occurs in the drawing process;
- c. Produce drawing take-offs and other reports; and
- d. Apply graphic manipulation language that will provide direct access to the drawing database.

Major Topics to Be Included:

- a. Menu customization
- b. Creation of shapes and fonts
- c. Macros and script files
- d. Structure of the drawing file
- e. Introduction to programming (AutoLisp)
- f. Use of attributes

Effective Date of Course Content Summary: August, 2008