

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

Course Prefix and Number: ARC 211

Credits: 3

Course Title: Computer-Aided Drafting Applications

Course Description: Utilizes computer hardware and software to create orthographic and pictorial drawings. Requires creation of working drawings by adding the necessary sections, dimensions, and notes to the computer-generated views. Prerequisite: DRF 231 or equivalent. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

General Course Purpose: To develop the student's knowledge of computer-assisted-design technology beyond the introductory level as applied to architectural specific projects and applications.

Course Prerequisites and Co-requisites:

Prerequisite: DRF 231 or equivalent

Course Objectives:

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

- a. Develop competency in the use of computer-assisted-design technology through hands-on use;
- b. Better integrate the use of computer-aided design into the architectural design process via the use of a third party application specifically designed for this type of application;
- c. Reveal the potential productivity of AutoCAD when customized for use in a particular field; and
- d. Improve the accuracy and speed with which a set of working drawings can be produced by a designer/draftsman using state-of-the-art computer applications.

Major Topics to Be Included:

- a. Review of AutoCAD fundamentals
- b. Software configuration for architectural design and document creation
- c. Menu structure
- d. Wall creation
- e. Window and door insertion
- f. Display options
- g. 3D walk-throughs, i.e., visualization

Effective Date of Course Content Summary: August, 2008