J. Sargeant Reynolds Community College Course Content Summary

Course Prefix and Number: ARC 121

Credits: 3

Course Title: Architectural Drafting I

Course Description: Introduces techniques of architectural drafting, including lettering, dimensioning, and symbols. Requires production of plans, sections, and elevations of a simple building. Studies use of common reference material and the organization of architectural working drawings. Requires development of a limited set of working drawings, including a site plan, related details, and pictorial drawings. Part I of II. Prerequisite: DRF 231 or school approval. Lecture 2 hours. Laboratory 3 hours. Total 5 hours per week.

General Course Purpose: An introduction to the processes of architectural design and creation of working drawings for a residential structure. This will include foundations, site plan, floor plans, sections and elevations. Course required for the Contemporary Technology for Design and Building Construction Management tracks of the Architectural and Engineering Technology AAS degree.

Course Prerequisites and Co-requisites:

Prerequisite: DRF 231 or school approval

Student Learning Outcomes:

Upon completing the course, the student will be able to

- a. Produce a complete and correct set of working drawings for a residence per the topics mentioned below;
- b. Place all plans within an appropriate title block for continuity; and
- c. Incorporate a plan "revision" and label accordingly.

Major Topics to Be Included:

- a. Architectural drafting techniques including proper dimensioning
- b. Floor plan(s) design and convention including labeling of all components (first and second floors)
- c. Foundation plan design and convention with appropriate plan notes for building official
- d. A "change order" issued for a glulam step down of the main floor with appropriate detailed section
- e. Elevations of all four (4) sides of the residence
- f. A transverse building section with appropriate material locations and sizes
- g. Site plan design and convention including finish grade designations
- h. Building construction detailing to accompany foundation plans
- i. Window and door schedules as well as a f