

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

Course Prefix and Number: DRF 111

Credits: 3

Course Title: Technical Drafting I

Course Description: Introduces technical drafting from the fundamentals through advanced drafting practices. Teaches lettering, metric construction, technical sketching, orthographic projection, sections, intersections, development, fasteners, theory, and applications of dimensioning and tolerances. Includes pictorial drawing and preparation of working and detailed drawings. Part I of II. Lecture 2 hours. Laboratory 3 hours. Total 5 hours per week.

General Course Purpose: Students will learn how to visualize and communicate three-dimensional objects using a two-dimensional medium. Students will develop a skill for using drawing instruments that include line weights, angular lines, French curves, circles (both template and compass), architectural scales and others. These skills will establish a basis upon which to learn computer-aided drafting. This course is considered a Technical Elective for the Contemporary Technology for Design and Building Construction Management specializations of the Architectural and Engineering Technology AAS degree.

Course Prerequisites and Co-requisites:

None

Student Learning Outcomes:

Upon completing the course, the student will be able to

- a. Draw each of the object types listed below using proper centering techniques;
- b. Use drawing instruments with confidence in communicating objects and ideas;
- c. Recognize the importance of clarity in drawing presentation; and
- d. Develop these skills to the point of being able to use them in employment.

Major Topics to Be Included:

- a. Drawing instruments and their use
- b. Multi-view drawings
- c. Isometric views
- d. Dimensioning
- e. Plain orthographic views
- f. Auxiliary views
- g. Full section drawing
- h. Architectural elements
- i. Architectural floor plans

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