

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

Course Prefix and Number: ARC 122

Credits: 3

Course Title: Architectural Drafting II

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 II of II. Credit will not be awarded for both ARC 122 and ARC 124. Prerequisites: ARC121. Lecture 2 hours. Laboratory 3 hours. Total 5 hours per week.

General Course Purpose: Research and design a residential structure via computer-assisted-design means. Said design should be compliant with the various code requirements that govern residential construction in Virginia and also exhibit a fundamental understanding of construction principles and practices associated with typical residential construction. Students will produce a design capable of passing the review of a building official. 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:

Prerequisites: ARC121

Student Learning Outcomes:

Upon completing the course, the student will be able to

- a. Develop a design for a residential detached dwelling including necessary structural components;
- b. Generate a complete set of working drawings that would support construction of the design and approval by a building official; and
- c. Conduct a code analysis of the hypothetical project and insure all legal aspects of the project have been addressed and satisfied.

Major Topics to Be Included and/or Drawings Required:

- a. Concept/research narrative with Bubble Diagram
- b. Floor plan(s) for each floor
- c. Foundation/basement plan
- d. Elevations
- e. Transverse Section
- f. Site plan
- g. Details to support the design/reference to material specifications
- h. Door, window and finish schedules

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