

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

Course Prefix and Number: BLD 231

Credits: 3

Course Title: Construction Estimating

Course Description: Focuses on materials take-off and computing quantities from working drawings and specifications. Includes methods for computing quantities of concrete, steel, masonry, roofing, excavation. Deals with pricing building components, materials, and processes, as well as transportation and handling costs, markup discount procedures, equipment costs, and labor rates. Prerequisites: ARC 131 and ARC132 or instructors approval. Lecture 3 hours per week.

General Course Purpose: Course serves to educate the student in the economics of building construction in terms of the cost of materials and services, as well an understanding of the potential impact on a construction project by local financial factors.

Course Prerequisites and Co-requisites:

Prerequisites: ARC 131 and ARC 132 or instructor's approval

Course Objectives:

Upon completing the course, the student will be able to

- a. Apply knowledge gained to estimate a residential construction through quantity take-off and using means, cost estimate; and
- b. Utilize a computer-aided-estimating application to generate a cost take-off of a typical residential project.

Major Topics to Be Included:

- a. Site work
- b. Excavation
- c. Foundation
- d. Subfloor
- e. Superstructure
- f. Roof
- g. Through finish construction

Effective Date of Course Content Summary: August, 2008