

**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 cost and labor rates. 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/Corequisites (Entry-level competencies **required** for enrollment)

ARC 131, 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.
- 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