



BCT1770 Building Construction Estimating Fundamentals

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Course Description: An analysis and calculation of building construction costs. Students will learn the classification of materials, labor, and subcontracted work into the smallest manageable units. Students will develop a simple estimate for a residential structure. Laboratory fee. (3 hr. lecture)

Prerequisite: BCN1272

Course Competency	Learning Outcomes
Competency 1: The student will demonstrate knowledge of the estimating process by:	2. Numbers / Data 4. Information Literacy 8. Computer / Technology Usage 9. Aesthetic / Creative Activities
1. Identifying the role of estimating in the construction industry. 2. Identifying the Construction Specifications Institute divisions as they relate to labor and materials. 3. Listing and defining applicable types of contracts and method of estimating.	
Competency 2: The student will demonstrate the ability to evaluate various methods of estimating by:	
1. Comparing unit cost to detailed estimating methods. 2. Scheduling the estimating process. 3. Reviewing computer estimating systems.	
Competency 3: The student will demonstrate ability to measure quantities by:	2. Numbers / Data 4. Information Literacy 8. Computer / Technology Usage 9. Aesthetic / Creative Activities
1. Measuring in linear units. 2. Measuring in square units (area). 3. Measuring in cubic units (volume).	
Competency 4: The student will demonstrate ability to calculate quantities from a given set of residential working drawings by:	2. Numbers / Data 4. Information Literacy 8. Computer / Technology Usage 9. Aesthetic / Creative Activities
1. Calculating site work and excavation. 2. Calculating concrete work. 3. Calculating masonry work. 4. Calculating carpentry work.	
Competency 5: The student will provide pricing for materials cost by:	2. Numbers / Data 4. Information Literacy 8. Computer / Technology Usage 9. Aesthetic / Creative Activities

1. Obtaining quotes from suppliers and vendors. 2. Consulting standard estimating reference books.	
Competency 6: The student will demonstrate synthesis of the estimating process by:	2. Numbers / Data 4. Information Literacy 8. Computer / Technology Usage 9. Aesthetic / Creative Activities
1. Preparing written estimates for the required quantities of material. 2. Identifying appropriate CSI index divisions. 3. Composing a list of subcontracting work necessary.	