



Broward Community College

Course Outline

STATUS: A

COMMON COURSE NUMBER: BCT 1770

COURSE TITLE: Construction Estimating I

CREDIT HOURS: 2

CONTACT HOURS BREAKDOWN:

Lecture/Discussion 32

Lab

Other

Contact Hours/Week 2

CATALOG COURSE DESCRIPTION:

Prerequisite: None

Corequisite: None

An analysis and determination of building construction costs. Commences with the classification of materials, labor, and sub-contracted work into the smallest manageable units; Development of a simple estimate for a residential structure.

General Education Requirements - Associate of Arts Degree, meets Area(s):
 General Education Requirements - Associate in Science Degree, meets Area(s):

UNIT TITLES:

1. Basic Cost Estimating Techniques
2. Take-off Procedures and Quantifying
3. Estimating Labor and Mechanical Equipment Cost
4. Basic Technique in Final Cost Analysis Methods

I. Course Overview:

Upon successful completion of this course, the students should be able to demonstrate a proficiency in the basic principles of cost estimating techniques including quantity take-offs and pricing according to accepted professional standards.

II. Units:

Unit 1. Basic Cost Estimating Techniques

General Outcome:

- 1.0 The students should be able to demonstrate a proficiency in the basic methods of cost estimating techniques.

Specific Learning Outcomes:

Upon successful completion of this unit, the students should be able to:

- 1.1 Identify blueprints.
- 1.2 Describe and apply different estimating methods.
- 1.3 Identify the different types of basic building structures.

Unit 2. Take-off Procedures and Quantifying

General Outcome:

2.0 The students should be able to demonstrate a proficiency in the basic methods of take-off procedures and quantifying.

Specific Learning Outcomes:

Upon successful completion of this unit, the students should be able to:

- 2.1 Describe the take-off procedures for concrete block and steel structures.
- 2.2 Describe the take-off procedures for wood frame buildings.
- 2.3 Describe the different types of quantifying units used in different stages of building estimating.

Unit 3. Estimating Labor and Mechanical Equipment Cost

General Outcome:

3.0 The students should be able to demonstrate a proficiency in the basic methods of labor and mechanical equipment cost estimating.

Specific Learning Outcomes:

Upon successful completion of this unit, the students should be able to:

- 3.1 Describe the manuals used to identify mechanical equipment costs.
- 3.2 Describe the methods used in identifying labor and mechanical equipment costs.
- 3.3 Describe the procedures used for establishing different labor costs for different geographic areas.

Unit 4. Basic Techniques in Final Cost Analysis Methods

General Outcome:

- 4.0 The students should be able to demonstrate a proficiency in the basic techniques of final cost analysis methods.

Specific Learning Outcomes:

Upon successful completion of this unit, the students should be able to:

- 4.1 Describe the different methods used at arriving at the final cost for a building.
- 4.2 Describe the cost estimating research materials available for estimating costs.
- 4.3 Describe the different methods used at arriving at the final cost for a building.