

SOUTHEAST COMMUNITY COLLEGE
CONSTRUCTION MANUFACTURING AND TECHNOLOGY DIVISION
Design & Drafting Technology Program
Revision Date: August 26, 2019

I. CATALOG DESCRIPTION

Course Number: DDRT1350
Course Title: Estimating for Light Construction
Prerequisite(s): None
Catalog Description: You will use your knowledge of light construction materials to calculate the quantities of the materials in a structure. You will apply cost data to the material quantities to calculate a total cost of construction. You will have a better understanding of the estimating profession and the various skills an estimator must possess.
Credit Hours: 2.5
Class Hours: 30
Lab Hours: 23
Total Contact Hours: 53

II. COURSE OBJECTIVES: *Course will:*

- A. Introduce a variety of types of estimates.
- B. Describe the role of the estimator.
- C. Demonstrate the steps used to complete a residential estimate.
- D. Discuss building codes and their impact on estimating.
- E. Provide commonly used formulas and procedures for estimating.

III. STUDENT LEARNING OUTCOMES AND GENERAL EDUCATION LEARNING OUTCOMES:

- A. Student Learning Outcomes: *Student will be able to:*
 - 1. Discuss the purpose of the different types of estimating.
 - 2. Perform steps in completing a residential estimate.
 - 3. Read and apply the formulas commonly used in residential estimating.
 - 4. List the duties, qualities, and characteristics of an estimator.
 - 5. Use a variety of quantity take-off forms.
 - 6. Interpret information found on construction drawings.
 - 7. Identify materials commonly found on a residential blueprint.
 - 8. Estimate material quantities for residential construction from a blueprint.
 - 9. Apply portions of the building codes for residential construction.
 - 10. Convert pricing information into useable cost data.
- B. General Education Learning Outcomes (GELOs)
 - 1. GELO #5: Analytical, Quantitative, and Scientific Reasoning
Outcome 4: Manipulate formulas, data sets, graphs, tables, etc. in a way to produce a meaningful outcome.

IV. CONTENT/TOPICAL OUTLINE

- A. The Estimating Process
- B. Excavation
- C. Concrete and Reinforcement
- D. Masonry
- E. Floor Framing
- F. Wall Framing

- G. Ceiling Framing
- H. Roof Framing

V. INSTRUCTIONAL MATERIALS

- A. Required Text(s): None
- B. Other Resources: Basic Estimating handouts from instructor.
- C. Supplies: Calculator with some memory, Pencil and Eraser

VI. METHODS OF PRESENTATION/INSTRUCTION

- A. Methods of presentation typically include a combination of the following:
 - 1. Lecture with the use of overhead projector and/or whiteboard
 - 2. Classroom demonstration
 - 3. Classroom discussion
 - 4. Video presentation
 - 5. Slide/Computer presentation
 - 6. Field Trips

VII. METHODS OF EVALUATION

- A. Methods of evaluation, although determined by the individual instructor, traditionally includes a combination of the following:
 - 1. Attendance and participation
 - 2. Daily assignments
 - 3. Written exams and/or quizzes
 - 4. Performance and observational assessment

VIII. SPECIFIC COURSE REQUIREMENTS

- A. Students must meet all of the following:
 - 1. Achieve passing grade of 60% or higher, based on SCC grading scale.
 - 2. Submit own work. Students turning in homework by someone other than themselves will receive a grade of 0% and will be referred to the Dean of Students for further disciplinary action.