



BCCM 1100

Division: Career and Technical Education

Department: Building Construction and Construction Management

Course: BCCM 1100

Title: Construction Math and Estimating

Catalog Description:

In this course students learn to compute quantities of materials, cost of materials, labor and other costs related to a residential building.

General Education Requirements: N/A

Semesters Offered: Fall

Credit/Time Requirement: Credit: 3; Lecture: 3; Lab: 0

Clock/Hour Requirements: 0

Offered for Non-Credit: No

Prerequisites: Prior or concurrent enrollment in BCCM 1150 or BCCM 2010, or previous residential construction experience, or equivalent.

Corequisites: N/A

Justification:

This course provides essential skills needed by students who want to pursue a career in building construction and related fields. The program advisory committee has recommended this course.

Student Learning Outcomes:

Upon successful completion of this course, students will:

- develop, understand, and/or review the basic math skills needed for the building construction industry
- understand and be able to use the essential skills needed to manually complete a profitable bid for a residential home
- understand and be introduced to basic computerized estimating.

Content:

This course will include:

- review of basic math skills
- general rules of estimating

- manual estimating procedures
- contracts and bids
- introduction to computerized estimating.

General Education Outcomes:

6) Apply computational skills to a variety of contexts.

Students will review basic math skills as they pertain to construction related problems. These computational skills will be applied as students compute estimates for labor and material items needed for a complete residential house bid.

Key Performance Indicators:

Outcome assessment will be determined by:

- performance on faculty developed basic construction math test (15%)
- scores on faculty developed tests designed from the objectives of the course (45%) Attendance (10%), and Written Assignments from workbook (30%).

Percentages are approximate.

Representative Text and/or Supplies:

- *Construction Estimating Workbook*, developed by instructor.

Optimum Class Size: 12

Maximum Class Size: 16

Signatures:

I hereby submit this course syllabus:

Officer Robert Wright, ,

I hereby find this course consistent with the goals and resources of the Building Construction and Construction Management Department:

Marlin Christensen, M. Ed., Instructor, Chair

I hereby find this course consistent with the goals and resources of the Career and Technical Education Division:

Michael P. Medley, MBA, Assistant Professor, Dean

I have discussed the need for library resources related to this class with the person submitting the syllabus:

Lynn Anderson, MLIS, Technical Services Librarian (Main Campus)

Michelle Olsen, MLS, Campus Librarian (Richfield Campus)