

# Minnesota State University Moorhead

## CM 335: Estimating II-Pricing and Productivity

### A. COURSE DESCRIPTION

Credits: 3

Lecture Hours/Week: 2

Lab Hours/Week: 2

OJT Hours/Week: \*.\*

Prerequisites:

This course requires the following prerequisite

CM 230 - Estimating I: Quantity Survey

Corequisites: None

MnTC Goals: None

Students will learn the fundamentals of pricing out a quantity survey and the relationship of how productivity factors are used to formulate unit pricing. They will estimate the material, labor, equipment, subcontractor, and overhead cost of the commercial building project that was completed in CM 330. "Timberline" estimating software is utilized extensively as a basis for learning principles of computerized estimating. Job cost accounting procedures are emphasized.

**B. COURSE EFFECTIVE DATES:** 08/22/2011 - Present

### C. OUTLINE OF MAJOR CONTENT AREAS

1. Labor and Equipment Productivity Factors
2. Types of Estimates
3. Pricing and Pricing Databases
4. Bid Preparation and Bid Submission
5. Quantity Survey, Productivity, and Pricing
6. Computer Applications
7. Bidding and Procurement Practices
8. Forecasting Costs and Cash Flow Requirements

### D. LEARNING OUTCOMES (General)

1. The student can demonstrate knowledge of the science of materials and methods of construction as they apply to the Construction Specifications Institute (CSI) Divisions designated for the construction industry.
2. The student can demonstrate estimating skills including interpreting plans, construction documents, performing quantity take-offs, analyzing productivity and pricing, identifying appropriate codes, identifying site conditions, applying value engineering, and developing detailed project proposals and documentation necessary for construction job acquisition and completion.

### E. Minnesota Transfer Curriculum Goal Area(s) and Competencies

None

### F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

**G. SPECIAL INFORMATION**

None noted