

COCONINO COMMUNITY COLLEGE
COURSE OUTLINE

Revised by Ken Myers
Status: Permanent
Effective Term: Fall 2018

February 2, 2018

A. Identification:

1. Subject Area: Construction Technology Management (CTM)
2. Course Number: 130
3. Course Title: Blueprint Reading and Estimating
4. Credit Hours: 3
5. Course Description: Provides the basic knowledge of how to read and interpret construction drawings and specifications. Students will develop an understanding of construction documents, schedules, and symbols to create a comprehensive estimate for a construction project. Three lecture.

B. Course Goal: To provide the students with the necessary skills to understand and read blueprint documents and estimate the amount of materials needed for a building project and to prepare the apprentice with knowledge and experience in reading blueprints and estimate the materials to construct projects. The course will cover reading and interpreting architectural schedules, symbols, and specifications.

C. Course Outcomes

Upon successful completion of this course, students will be able to:

1. read schedules and legends;
2. interpret architectural symbols;
3. read and interpret:
 - a. sections and details;
 - b. shop drawings;
 - c. written specifications;
 - d. mechanical, electrical, and plumbing drawings;
 - e. architectural, structural, and site drawings;
4. draw sketches of blueprint segments and false work;
5. build according to local codes, specifications, and blueprints;
6. estimate quantity take-offs and labor pricing;
7. relate the estimating process to a set of blueprints and specifications;
8. develop a basic understanding of estimating software applications.

D. Assessment of Course Outcomes will include a variety of quizzes, tests, and hands-on demonstrations.

E. Course Content will include:

1. read schedules and legends;
2. interpret architectural symbols;
3. read and interpret:
 - a. sections and details;
 - b. shop drawings;
 - c. written specifications;
 - d. mechanical, electrical, and plumbing drawings;
 - e. architectural drawings.
4. draw sketches of blueprint segments and false work;

5. build according to local codes, specifications, and blueprints;
6. estimate quantity take-offs and labor pricing;
7. relate the estimating process to a set of blueprints and specifications.