

# **COCONINO COMMUNITY COLLEGE**

## **COURSE OUTLINE**

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A. Identification:

1. Subject Area: Construction Technology Management
2. Course Number: CTM 130
3. Course Title: BLUEPRINT READING AND ESTIMATING
4. Credit Hrs: 3
5. Catalog Description:

Reading blueprint construction documents and estimating the amount of building materials needed for building projects. Reading and interpreting architectural schedules, symbols, and specifications. 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:

Students will:

1. Read schedules and legends.
2. Interpret architectural symbols.
3. Read and interpret:  
Sections and details  
Shop drawings  
Written specifications  
Mechanical, electrical, and plumbing drawings  
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.

D. Course Content:

Will include:

1. Read schedules and legends.
2. Interpret architectural symbols.
3. Read and interpret:  
Sections and details  
Shop drawings

Written specifications

Mechanical, electrical, and plumbing drawings

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.