

**NorthWest Arkansas Community College
Workforce & Economic Development Division
Construction Technology Department Course Outline**

Course Number and Title

CST 2223 CONSTRUCTION METHODS II (F, S)

Catalog Description

This course offers the student insights into Commercial construction process. Topics include Site Evaluation/Layout and Development, Excavations and Foundations, Formwork, Concrete, Structural Timber, Structural Steel, Floor and Roof Systems, Insulating and Finishing. Lab work includes but is not limited to forming and pouring concrete.

Prerequisite

CST 2213

Credit Hours/Contact Hours/Load Hours

3/3/3

Target Audience / Transferability

This course is placed in the curriculum to build on the understanding of basic building materials and to establish a foundation for understanding how to manage the field operations of a commercial project and apply this in upper level scheduling and contracting courses.

Student Learning Outcomes

Upon completing this course, the student should be able to:

- Analyze the formwork required for a reinforced concrete wall system
- Analyze the rigging sizes to make a heavy construction lift
- Apply basic SWPPP principles to a construction site
- Analyze the reinforcing requirements for a concrete building
- Analyze site plan information to verify grading and sewer design data
- Plan the temporary facilities for an industrial construction project
- Analyze earthmoving equipment production rates for various types of equipment

Topics

- Site Evaluation and Layout
- Excavations
- Foundations
- Concrete Formwork
- Reinforcing Concrete
- Steel Construction
- Structural Timber Framing

Forms of Assessment

Exams covering multiple aspects of concrete and steel within construction, lab exercises to reinforce coursework, and an oral presentation covering the contents of a term paper.

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