

Northwest Arkansas Community College
(Workforce Division)

Discipline Code

CST

Course Number

1313

Course Title

Materials of Construction

Catalog Description

An introductory course that covers the materials and methods of construction. The course overviews the uses of wood, steel, and concrete and the different methods in how each is used. Additional topics include foundations, framing methods, and finish materials for interior and exterior use in buildings. Field trips to local sites share insights into how these materials are used on site.

Prerequisites

None

Credit Hours

3 credit hours

Contact hours

45 lecture contact hours

Load hours

3 load hours

Semesters Offered

Fall, Spring & Summer

ACTS Equivalent

N/A

Grade Mode

A-F

Learning Outcomes

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

- Summarize the basic technical abilities of specific construction materials.
- Interpret and use general construction terminology.
- Correlate the purposes of individuals, companies and agencies involved in the construction process.
- Articulate the appropriate utilization of construction materials according to their characteristic strengths.
- Identify the standard breakdown in the Construction Specifications Institute (CSI).
- Paraphrase the basic principles of sustainable construction.

General Education Outcomes Supported

- Students develop higher order thinking skills.
- Students demonstrate information literacy.

Standard Practices

Topics list

- Sustainability in Construction
- Soil in Construction
- Foundations
- Wood Construction
- Steel Construction
- Masonry in Construction
- Concrete in Construction
- Roofing Systems
- Flooring Systems
- Wall Systems
- Building Codes

Learning activities

- Courses must, at a minimum, cover the core learning outcomes for each topic. Faculty may add to these outcomes, but may not omit any of them.
- Activities include online discussions, photo journals, chapter reviews and quizzes, tests, and a comprehensive final exam.
- Utilizing the buildings on campus, key construction methods are observed and discussed to solidify the information from the text, lectures, and discussions.
- Since all general education outcomes are supported by specific course and program outcomes, all instructors should include learning activities that develop these outcomes in their courses and identify them in course syllabi. Instructors

should describe how these activities will be evaluated in their course syllabi and/or reflected in their gradebooks.

Assessments

Exams that include terminology, identification, and interpretations of drawing and schematics, chapter quizzes, and homework assignments.

Grading guidelines

- 90% score of all graded assignments = A
- 80% - 89% score on all graded assignments = B
- 70% - 79% score on all graded assignments = C
- 60% - 69% score on all graded assignments = D
- <60% score on all graded assignments = F

Revision Date March 4, 2022