



Course Outline

2026-2027 Catalog

CNST 1 - Introduction to Construction

Catalog Description

Transfer Status: CSU

Unit(s): 3.00

Lecture: 51.00 Contact hours/102.00 Out of class hours/153.00 Total hours/3.00 Unit(s)

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Course Description: This course is designed to teach students a broad overview of the construction industry and the opportunities available in this field. Emphasis will be on developing an understanding of the trades, processes, terminology, practices, and documents in the construction field. The student will be introduced to time, equipment, and materials and their relationship to estimating, cost, and performance.

Objectives

Upon successful completion of this course, the student should be able to:

1. Use common construction specific vocabulary terms.
2. Explain the life cycle of a construction project, including the conception and design, construction, and completion/turnover of the project.
3. Communicate through basic written forms used in the construction industry.
4. Identify the most basic project players and their roles using various project delivery systems.
5. Describe the basic functions of multiple project control processes.
6. Discuss the construct of business ethics code of conduct and analyze ethical decision-making best practices.
7. Discuss: Project safety planning; Project estimating; Project scheduling; Ethical decision making; Cost control; Quality Assurance/Quality Control; and Major mandatory legislative regulation.

Course Content

Topic Titles / Suggested Time Topic	
	<u>Lecture</u>
<u>Topics</u>	<u>Lec Hrs</u>
Introduction to construction management and construction safety	6.00
The disciplines within the construction field	3.00
Introduction to labor, the trades and crafts	3.00
Introduction to civil construction	3.00
Introduction to residential construction	3.00
Introduction to commercial construction	3.00
Introduction to industrial/specialty construction	3.00
Common construction terminology	4.00
Common construction documents	6.00
Introduction to construction costs and contracting	4.00
Introduction to estimating and cost accounting	6.00
Introduction to construction scheduling	4.00
Project quality control	3.00
Total Hours: 51.00	

Methods of Instruction

- A. Guest Speakers
- B. Homework: Students are required to complete two hours of outside-of-class homework for each hour of lecture
- C. Lecture
- D. Multimedia Presentations

Methods of Evaluation

- A. Exams/Tests
- B. Quizzes
- C. Homework

Examples of Assignments

Reading Assignments

1. Read provided material on current construction trends and be prepared for a quiz or class discussion.
2. Read assigned trade journal article and be prepared to discuss in class.

Writing Assignments

1. Write a paper explaining the advantages and disadvantages of design build contracts as compared to hard bid contracts.
2. Create a list of schedule based construction activities from the provided project description.

Out-of-Class Assignments

1. Find a public works bid advertisement online or in a local publication and summarize the active trades that would be required for the project.
2. Go to an active construction work site and from a safe distance summarize all of the activities taking place during that particular hour that you view the site.

Recommended Materials of Instruction

Other Learning Materials

There is no required textbook for the class. Reading material will be provided for the student, as required, and will be distributed in class or on Canvas.

Minimum Qualifications

Construction Management
Construction Technology
Engineering (Masters Required)
Engineering Technology (Masters Required)
Industrial Technology
Manufacturing Technology
Building Codes And Regs

Created/Revised by: Williams, Tom

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