

# BI 0005 - INTRODUCTION TO THE BUILT ENVIRONMENT

## Catalog Description

Formerly known as CET 5

Hours: 54 lecture

Description: Introduction to the building industry: trends, organizations, construction processes, contracting laws, regulations, business aspects and career pathways. (CSU)

## Course Student Learning Outcomes

- CSLO #1: Develop in detail a logical construction project process.
- CSLO #2: Evaluate the feasibility of a speculation house project, including permits, fees, financing and anticipated profit.
- CSLO #3: Develop the feasibility of a construction project.

## Effective Term

Spring 2021

## Course Type

Credit - Degree-applicable

## Contact Hours

54

## Outside of Class Hours

108

## Total Student Learning Hours

162

## Course Objectives

1. Develop in detail a logical construction project process.
2. Construct a complete list of up-front costs for a construction project.
3. Compare and contrast three different types of business ownership in regard to financial and legal implications.
4. Develop the labor rate for an employee to include employer labor burden.
5. Construct a chart that illustrates the sequence and timeline to file a mechanics lien.
6. Develop a career pathway and timeline.
7. Evaluate the feasibility of a speculation house project, including permits, fees, financing and anticipated profit.
8. List the principle players in a construction project and describe their roles.
9. Select a construction career and describe the skills and educational requirements.

## General Education Information

- Approved College Associate Degree GE Applicability
- CSU GE Applicability (Recommended-requires CSU approval)

- Cal-GETC Applicability (Recommended - Requires External Approval)
- IGETC Applicability (Recommended-requires CSU/UC approval)

## Articulation Information

- CSU Transferable

## Methods of Evaluation

- Problem Solving Examinations
  - Example: Students will be tested on reading and lecture material. Sample question: Identify and describe three different construction related associations. Points will be assigned to each question and converted to a letter grade.
- Projects
  - Example: Students are required to make a 15-minute presentation to the class. The presentation includes a summary of key points from interviewing various agencies, support data, and research on an assigned construction topic. The grading is determined by a grading rubric.

## Repeatable

No

## Methods of Instruction

- Lecture/Discussion
- Distance Learning

Lecture:

1. Lecture:
2. Instructor facilitates classroom discussion referencing the building department permit application process. Students will perform research and outline the permit application process in the jurisdiction that they live. (Objective 7)
3. Instructor facilitates classroom discussion on the pros and cons of various types of business ownership. Students will use this information for their business model class project. (Objective 3)  
Guest Speakers:
4. Industry experts present lectures on various industry topics and career pathways. Students will take notes and ask relevant questions. (Objective 6)

Distance Learning

1. Students in online classes participate, individually and in groups, in discussion boards and respond to weekly assignments via the Learning Management System. The instructor will provide documented material (including videos) explaining or exploring the course content and provide individual feedback on all assignments. The instructor will lecture and provide examples of trades associated with building construction. Student will select a construction career, describe its skills and educational requirements, and develop a career pathway and timeline. (Lecture Objective 6 and Lecture Objective 9).

## Typical Out of Class Assignments Reading Assignments

1. Read assigned pages in the textbook and be prepared to discuss the three types of business organization. Identify the primary ways corporations differ from sole proprietorships and partnerships. 2. Read articles from the media on the current status of the construction industry

and create a housing forecast. 3. Research and prepare a written report on project feasibility.

## **Writing, Problem Solving or Performance**

1. Calculate the correct cost of labor burden in regard to employee payroll. 2. Prepare a written report on project feasibility. 3. Write a career plan.

## **Other (Term projects, research papers, portfolios, etc.)**

1. Present a project feasibility report summarizing your conclusions based on data derived.

## **Required Materials**

- California Contractors License Law and Reference Book
  - Author: Contractors State License Board State of California
  - Publisher: Matthew Bender & Co.
  - Publication Date: 2016
  - Text Edition:
  - Classic Textbook?: No
  - OER Link:
  - OER:
- Construction Process Planning and Management: An Owner's Guide to Successful Projects
  - Author: Sidney M. Levy
  - Publisher: Butterworth-Heinemann
  - Publication Date: 2009
  - Text Edition: 1st
  - Classic Textbook?: No
  - OER Link:
  - OER:
- The Construction Industry: Processes, Players, and Practices
  - Author: Ralph W. Liebing
  - Publisher: Prentice Hall
  - Publication Date: 2000
  - Text Edition: 1st
  - Classic Textbook?: No
  - OER Link:
  - OER:

**Other materials and-or supplies required of students that contribute to the cost of the course.**