CONS 70A Course Outline as of Fall 2019

CATALOG INFORMATION

Dept and Nbr: CONS 70A Title: INTRO TO PROJ ORG & MGT

Full Title: Introduction to Project Organization and Management

Last Reviewed: 10/8/2018

Units		Course Hours per Week		Nbr of Weeks	Course Hours Total	
Maximum	1.50	Lecture Scheduled	1.50	17.5	Lecture Scheduled	26.25
Minimum	1.50	Lab Scheduled	0	4	Lab Scheduled	0
		Contact DHR	0		Contact DHR	0
		Contact Total	1.50		Contact Total	26.25
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 52.50 Total Student Learning Hours: 78.75

Title 5 Category: AA Degree Applicable

Grading: Grade Only

Repeatability: 00 - Two Repeats if Grade was D, F, NC, or NP

Also Listed As:

Formerly: CONS 70

Catalog Description:

This course is an introduction to the organization and management of construction projects, including principles of contracts, estimating, bidding, scheduling, project management cycle, and responsibilities of participants.

Prerequisites/Corequisites:

Recommended Preparation:

Eligibility for ENGL 100 or ESL 100

Limits on Enrollment:

Schedule of Classes Information:

Description: This course is an introduction to the organization and management of construction projects, including principles of contracts, estimating, bidding, scheduling, project management cycle, and responsibilities of participants. (Grade Only)

Prerequisites/Corequisites:

Recommended: Eligibility for ENGL 100 or ESL 100

Limits on Enrollment:

Transfer Credit: CSU;

Repeatability: Two Repeats if Grade was D, F, NC, or NP

ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:

AS Degree: Area Effective: Inactive: CSU GE: Transfer Area Effective: Inactive:

IGETC: Transfer Area Effective: Inactive:

CSU Transfer: Transferable Effective: Fall 1981 Inactive:

UC Transfer: Effective: Inactive:

CID:

Certificate/Major Applicable:

Certificate Applicable Course

COURSE CONTENT

Student Learning Outcomes:

At the conclusion of this course, the student should be able to:

- 1. Explain the organization of the construction industry and the role of the construction manager.
- 2. Describe the fundamentals of construction contracts.
- 3. Define the stages of the construction project cycle.

Objectives:

During the course, students will:

- 1. Analyze the construction project cycle.
- 2. Document the roles of participants in the project process.
- 3. Describe the responsibilities of the construction manager.
- 4. Interpret and write a simple contract.
- 5. Interpret construction documents, including contract general conditions.
- 6. Correctly utilize construction terminology.

Topics and Scope:

- I. Introduction to the Design and Construction Process
 - A. Roles and responsibilities of owner and architect during design
 - B. Roles and responsibilities of owner, contractor, subcontractor, architect and construction manager during construction
 - C. California construction industry organization
 - D. Sustainability issues
- II. The Construction Project Cycle
 - A. Overview
 - B. Stages in the process
 - C. Documentation of the process
- III. Contract Documents: Working Drawings, Specifications and Regulatory Authority Documentation

- A. Contents and interpretation
- B. Retrieving information
- C. Using working drawings
- D. Adenda
- IV. Contracts
 - A. Elements of a contract
 - B. Types of construction contracts: Stipulated sum contracts, cost-plus-fee contracts, unit price contracts and contracts with quantities
 - C. General Conditions of a contract
 - D. Supplemental Conditions of a contract
 - E. Subcontracts and supply contracts
- V. Bonding and Insurance
 - A. Types of bonds and insurance
 - B. Owner and contractor responsibilities
- VI. The Bid Process: Competitive and Negotiated
 - A. Types of bidding
 - B. Examination of contract documents
 - C. Role of the quantity survey and the estimate
 - D. Preparing for bidding or negotiating
 - E. Bid selection
 - F. Pre-construction planning and scheduling
- VII. Building the Project
 - A. Roles and responsibilities of owner, contractor, subcontractor, architect and construction manager
 - B. Types of schedules: time, labor, materials, money
 - C. Site management
 - D. Building inspection
 - E. Project closeout procedures
- VIII. Typical Construction Reports
 - A. Change Orders and contract extras
 - B. Construction costs
 - C. Common construction claims and their documentation
- IX. Dispute Resolution Options
 - A. Arbitration
 - B. Mediation
 - C. Legal actions

Assignment:

- 1. Reading (20-30 pages each week)
- 2. Written homework involving analysis and synthesis of course material (6-10)
- 3. Research and prepare one simple contract
- 4. Research paper (3-5 pages)
- 5. Quizzes (2-3)
- 6. Final exam and/or final project and presentation

Methods of Evaluation/Basis of Grade:

Writing: Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

Homework, research paper, and simple contract

Writing 40 - 60%

Problem Solving: Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

None

Problem solving 0 - 0%

Skill Demonstrations: All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

None

Skill Demonstrations 0 - 0%

Exams: All forms of formal testing, other than skill performance exams.

Quizzes and/or exams

Exams 20 - 40%

Other: Includes any assessment tools that do not logically fit into the above categories.

Class participation and/or presentation of final project

Other Category 0 - 20%

Representative Textbooks and Materials:

Construction Project Management: A Complete Introduction. 2nd ed. Dykstra, Alison. Kirschner Publishing. 2018

Managing the Construction Process. 4th ed. Gould, Frederick. Pearson. 2011 (classic) Instructor prepared materials