CONS 105 Course Outline as of Fall 2024

CATALOG INFORMATION

Dept and Nbr: CONS 105 Title: CONTRACT DOCS Full Title: Construction Contract Documents Last Reviewed: 9/25/2023

| Units | | Course Hours per Week | | Nbr of Weeks | Course Hours Total | |
|---------|------|-----------------------|------|--------------|---------------------------|-------|
| Maximum | 3.00 | Lecture Scheduled | 2.50 | 17.5 | Lecture Scheduled | 43.75 |
| Minimum | 3.00 | Lab Scheduled | 1.50 | 6 | Lab Scheduled | 26.25 |
| | | Contact DHR | 0 | | Contact DHR | 0 |
| | | Contact Total | 4.00 | | Contact Total | 70.00 |
| | | Non-contact DHR | 0 | | Non-contact DHR | 0 |

Total Out of Class Hours: 87.50

Total Student Learning Hours: 157.50

| 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: | |

Catalog Description:

Students will gain experience working with and understanding the relationship between all the components that constitute typical contract documents for a construction project. Course components include the working drawings, Project Manual, specifications, contracting requirements, procurement requirements, modifications and addenda, and resource drawings. Field trips may be required.

Prerequisites/Corequisites:

Course Completion or Current Enrollment in CONS 103

Recommended Preparation:

Limits on Enrollment:

Schedule of Classes Information:

Description: Students will gain experience working with and understanding the relationship between all the components that constitute typical contract documents for a construction project. Course components include the working drawings, Project Manual, specifications, contracting requirements, procurement requirements, modifications and addenda, and resource drawings. Field trips may be required. (Grade Only) Prerequisites/Corequisites: Course Completion or Current Enrollment in CONS 103 Recommended: Limits on Enrollment: Transfer Credit: Repeatability: Two Repeats if Grade was D, F, NC, or NP

ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:

| AS Degree: CSU GE: | Area Transfer Area | Effective: Effective: | Inactive: Inactive: |
|-----------------------|-----------------------|--------------------------|------------------------|
| IGETC: | Transfer Area | Effective: | Inactive: |
| CSU Transfer | : Effective: | 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. Analyze and describe the characteristics, typology, and individual components of a common construction specification.

2. Review, quantify, and identify as required for estimation and construction purposes, a

common set of architectural and associated engineering drawings.

3. Describe General Conditions of the contract, contractual relationships, public agency, and corporate General Conditions.

4. Identify and characterize the individual components of a typical construction contract.

Objectives:

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

- 1. Assemble and modify specifications including descriptive and performance types.
- 2. Identify the differences between the various types of specifications.
- 3. Identify the organizational tactics of specifications according to the MasterFormat system.
- 4. Relate specification requirements to relevant code requirements.

5. Identify specific project requirements per the General Conditions or Special Conditions of the contract.

6. Describe the characteristic differences between the General Conditions and Special Conditions of a common construction contract.

7. Research, write, and modify existing contract components as typically used in construction.

8. Interpret a common set of construction drawings, identifying critical project requirements such as building systems, materials, and construction types.

9. Quantify building componentry such as materials, equipment, and finishes based on a set of architectural and associated engineering drawings.

Topics and Scope:

- I. The Contract Document Process Overview
- II. Working Drawings
 - A. Quantity unit survey review
 - B. Drawing graphics, symbols, annotation, and drawing/detail scales
 - C. Drawing types, organization, and outline specifications
- III. Specifications
 - A. General specification references (e.g. Caltrans or jurisdictional)
 - B. Construction Specifications Institute (CSI) MasterFormat standard
 - 1. CSI divisions
 - C. Specification types
 - 1. The typical parts of a specification
 - 2. Descriptive specifications
 - 3. Performance specifications
 - 4. Proprietary specifications
- IV. The Project Manual
 - A. General Conditions versus Special Conditions
 - B. Overview of the Project Manual
 - 1. Invitation and instructions to bidders
 - 2. Template of agreement and contracts
 - 3. General requirements
 - 4. Scheduling
 - 5. Submittals
 - 6. Quality control
 - 7. Close-out process
 - 8. Field office requirements
 - 9. Temporary construction requirements
 - 10. Close-out package
 - 11. Record documents
 - 12. Warranties
- V. Contracts
 - A. The typical parts of a contract
 - 1. Full names, addresses, and signatures of both parties
 - 2. Scope and schedule of work
 - 3. Project costs, retention, and payment terms
 - 4. Authority
 - B. Types of contracts
 - 1. Lump sum contract
 - 2. Not-to-exceed contract
 - 3. Industry-accepted contract documents
 - a. American Institute of Architects (AIA)
 - b. Associated General Contractors (AGC)
 - 4. Time and materials contract
 - 5. Unit costs contract
 - C. Significant contract clauses
 - 1. Liquidated damages
 - 2. Stop project
 - 3. Withhold payment
 - 4. Insurance requirements
 - 5. Requirements for proper licensure, bonding, permitting and insurance
 - 6. Unforeseen circumstances and Acts-of-Nature

- 7. Change orders
- 8. Warranties and guarantees
- 9. Mechanic's lien laws
- 10. Testing and inspections
- 11. Dispute resolution: mediation, arbitration, and litigation
- 12. Subcontract documents list
- 13. Exhibits
- 14. Right to cancel
- VI. Construction Industry Laws
 - A. Construction contract law fundamentals
 - B. Contractor licensing laws
 - C. Mechanic's lien laws
 - D. Labor laws
 - E. Technical specifications

All topics will be covered in the lecture and lab portions of the course.

Assignment:

Lecture-Related Assignments:

- 1. Reading assignments (20-50 pages per week)
- 2. Study question sets (6-12)
- 3. Quiz(zes) (1-4)
- 4. Specification assignment(s) (1-4)
- 5. Contract assignment(s) (1-4)
- 6. Midterm exam
- 7. Final exam

Lab-Related Assignments:

- 1. Contract Documents lab activities (4-16)
- 2. Field trip(s) may be required

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.

Specification assignment(s); contract assignment(s)

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

Study question sets; lab activities

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

Writing 10 - 30%

| 30 - 50% |
|----------|
| |

| Skill Demonstrations |
|-----------------------------|
| 0 - 0% |

None

Quiz(zes); midterm exam; final exam

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

Class participation

Representative Textbooks and Materials:

Print Reading for Construction. 8th ed. Brown, Walter C. and Dorfmueller, Daniel P. Goodheart-Willcox. 2023.

Understanding and Negotiating Construction Contracts. 2nd ed. Werremeyer, Kit. Wiley. 2023. Instructor prepared materials

Exams 20 - 30%

Other Category 5 - 10%