

ITT Technical Institute
CM420T
Construction Documents and Contracts
Onsite Course

SYLLABUS

Credit hours: 4

Contact/Instructional hours: 60 (36 Theory Hours, 24 Lab Hours)

Prerequisite(s) and/or Corequisite(s):

Prerequisites: CD230T Architectural Drafting II

Course Description:

Documents generated during the design and construction of a building, the format and administration of construction specifications, its contracts, and subsequent changes are the focus of this course. Topics include warranties, liability and indemnity and dispute resolution.

Where Does This Course Belong?

Construction Documents and Contracts is a course required to obtain a bachelor's degree in the Construction Management program. This course introduces construction documents required for construction projects. Some of the topics included in this course are construction drawings, specifications, and the Master Format.

The goal of the program is to help the student acquire the necessary skills to become a versatile member of a construction team. Graduates may begin their careers in a variety of entry-level positions involving construction estimating, construction safety assurance, construction project management, or building code compliance.

The following course sequence provides an overview of how the Construction Documents and Contracts course fits into the program.

The following diagram demonstrates how this course fits in the program:



Course Summary

Major Instructional Areas

1. The Construction Industry
2. Types of Business Ownership
3. The Organizational Structure of Companies
4. Relationship between Drawings and Specifications
5. Introduction to Estimating and Bidding
6. Terms and Conditions of Various Types of Construction Contracts
7. Types of Construction Bonds and Insurance
8. Financial Accounting and the Significance of Financial Ratios
9. Labor Laws and Relations

Course Objectives

1. Evaluate the nature of construction contracts.
2. Analyze the roles of participants within the structure of an organization
3. Evaluate the nature and implications of contracts with other team members on a construction project.
4. Evaluate contract liability and contract enforcement issues.
5. Evaluate the contract between a builder and an owner.
6. Analyze risk management strategies.
7. Evaluate subcontracts related to residential construction.
8. Explain the estimating and bidding process.
9. Evaluate financial measurements of a construction company.
10. Evaluate labor law acts and union agreements pertinent to the construction industry.

SCANS Objectives

SCANS is an acronym for Secretary's Commission on Achieving Necessary Skills. The committee, appointed by the National Secretary of Labor in 1990, created a list of skills and competencies that continue to be a valuable resource for individuals developing their careers in a high-tech job market. For more information on the SCANS objectives, visit The U.S. Department of Labor Employment and Training Administration: www.doleta.gov.

The following SCANS objectives are designated for this course:

1. Allocate time, money, materials, and resources.
2. Acquire, interpret, maintain, and communicate information.
3. Participate as a member of a team.

Learning Materials and References

Required Resources

| Textbook Package | New to this Course | Carried over from Previous Course(s) | Required for Subsequent Course(s) |
|--|--------------------|--------------------------------------|-----------------------------------|
| Sears, G. (2005). Construction Contracting: A Practical Guide to Company Management (7th ed.). Hoboken, NJ: John Wiley and Sons, Inc | ■ | | |

Recommended Resources

ITT Tech Virtual Library (accessed via Student Portal)

ITT Tech Virtual Library

Log on to the ITT Tech Virtual Library at <http://www.library.itt-tech.edu/> to access online books, journals, and other reference resources selected to support ITT Tech curricula.

- School of Drafting and Design> Professional Organizations>Recommended Links>Construction

Wiley Student Companion Site

Wiley offers a Student Companion Site for the course's required text. Students can log on to:

<http://bcs.wiley.com/he-bcs/Books?action=index&itemId=0471449881&bcsId=3416>

(Note: This site is not password protected)

Information Search

Use the following keywords to search for additional online resources that may be used for supporting your work on the course assignments:

- Construction contracts
- Organizational structure
- Estimating and Bidding
- Construction bonds
- Labor relations

NOTE: All links are subject to change without prior notice.

Course Plan

Instructional Methods

This course is designed to promote learner-centered activities and support the development of cognitive strategies and competencies necessary for effective task performance and critical problem solving. The course utilizes individual and group learning activities, performance-driven assignments, problem-based cases, projects, and discussions. These methods focus on building engaging learning experiences conducive to development of critical knowledge and skills that can be effectively applied in professional contexts.

Suggested Learning Approach

In this course, you will be studying individually and within a group of your peers. As you work on the course deliverables, you are encouraged to share ideas with your peers and instructor, work collaboratively on projects and team assignments, raise critical questions, and provide constructive feedback.

Use the following advice to receive maximum learning benefits from your participation in this course:

| DO | DON'T |
|---|--|
| <ul style="list-style-type: none"> ▪ Do take a proactive learning approach ▪ Do share your thoughts on critical issues and potential problem solutions ▪ Do plan your course work in advance ▪ Do explore a variety of learning resources in addition to the textbook ▪ Do offer relevant examples from your experience ▪ Do make an effort to understand different points of view ▪ Do connect concepts explored in this course to real-life professional situations and your own experiences | <ul style="list-style-type: none"> ▪ Don't assume there is only one correct answer to a question ▪ Don't be afraid to share your perspective on the issues analyzed in the course ▪ Don't be negative about the points of view that are different from yours ▪ Don't underestimate the impact of collaboration on your learning ▪ Don't limit your course experience to reading the textbook ▪ Don't postpone your work on the course deliverables – work on small assignment components every day |

Course Outline

| Unit | Reading Assignments | Graded Activities & Deliverables |
|---|---------------------|--|
| 1. The Construction Industry and Business Ownership | Clough, pp. 1-40 | <ul style="list-style-type: none"> ▪ Unit 1. Problem Set 1. Types of Business Ownership ▪ Unit 1. Assignment 1. Local Construction Projects ▪ Unit 1. Assignment 2. Famous Projects ▪ Unit 1. Exercise 1. Licensing and Professional Organizations |
| 2. Company Organization | Clough, pp. 41-57 | <ul style="list-style-type: none"> ▪ Unit 2. Problem Set 1. Business Functional Groups ▪ Unit 2. Assignment 1. Organizational Structure ▪ Unit 2. Assignment 2. Organizational Chart ▪ Unit 2. Exercise 1. Employee Handbook |
| 3. Drawings and Specifications | Clough, pp. 58-75 | <ul style="list-style-type: none"> • Unit 3. Problem Set 1. Scope of Service • Unit 3. Assignment 1. General Condition Clauses • Unit 3. Exercise 1. Supplementary Conditions |
| 4. Cost Estimating and Bidding | Clough, pp. 76-134 | <ul style="list-style-type: none"> ▪ Unit 4. Problem Set 1. Estimating ▪ Unit 4. Assignment 1. Bid Advertisements ▪ Unit 4. Assignment 2. Ethics ▪ Unit 4. Exercise 1. Strip Shopping Center |
| 5. Construction Contracts | Clough, pp. 135-172 | <ul style="list-style-type: none"> ▪ Unit 5. Assignment 1. A101 and A111 Contracts ▪ Unit 5. Problem Set 1. Contract Review ▪ Unit 5. Exercise 1. Sub-contractor Boilerplate |
| 6. Contract Surety Bonds | Clough, pp. 173-198 | <ul style="list-style-type: none"> ▪ Unit 6. Problem Set 1. Unit Review ▪ Unit 6. Assignment 1. Surety Bond Calculations ▪ Unit 6. Exercise 1. Condominium Construction |
| 7. Construction Insurance | Clough, pp. 199-238 | <ul style="list-style-type: none"> ▪ Unit 7. Assignment 1. Certificate of Insurance Form |

| | | |
|---|---------------------|--|
| | | <ul style="list-style-type: none"> ▪ Unit 7. Assignment 2. Insurance Coverage ▪ Unit 7. Problem Set 1. Unit Review ▪ Unit 7. Exercise 1. Project Risks |
| 8. Business Methods | Clough, pp. 239-281 | <ul style="list-style-type: none"> ▪ Unit 8. Assignment 1. Depreciation Schedule ▪ Unit 8. Assignment 2. Schedule of Value ▪ Unit 8. Problem Set 1. Unit Review ▪ Unit 8. Exercise 1. Financial Reports |
| 9. Labor Law and Labor Relations | Clough, pp. 363-420 | <ul style="list-style-type: none"> ▪ Unit 9. Problem Set 1. Unions ▪ Unit 9. Problem Set 2. Federal and State Statutes ▪ Unit 9. Assignment 1. Labor Agreement Clauses ▪ Unit 9. Assignment 2. Davis-Bacon Act ▪ Unit 9. Exercise 1. Union Laws and Federal Regulations |
| 10. Course Review and Final Examination | | <ul style="list-style-type: none"> ▪ Final Exam and Review |

Evaluation and Grading

Evaluation Criteria

The graded assignments will be evaluated using the following weighted categories:

| Category | Weight |
|--------------|-------------|
| Problem Set | 20% |
| Assignment | 37% |
| Exercise | 28% |
| Final Exam | 15% |
| TOTAL | 100% |

Grade Conversion

The final grades will be calculated from the percentages earned in the course, as follows:

| Grade | Percentage | Credit |
|-------|------------|--------|
| A | 90–100% | 4.0 |
| B+ | 85–89% | 3.5 |
| B | 80–84% | 3.0 |
| C+ | 75–79% | 2.5 |
| C | 70–74% | 2.0 |
| D+ | 65–69% | 1.5 |
| D | 60–64% | 1.0 |
| F | <60% | 0.0 |

Graded Activities and Deliverables

| Grading Category | Category Weight | Graded Deliverable | Weight |
|------------------|-----------------|---|--------|
| Problem Set | 20% | Unit 1. Problem Set 1. Types of Business Ownership | 2% |
| | | Unit 2. Problem Set 1. Business Functional Groups | 2% |
| | | Unit 3. Problem Set 1. Scope of Service | 2% |
| | | Unit 4. Problem Set 1. Estimating | 2% |
| | | Unit 5. Problem Set 1. Contract Review | 2% |
| | | Unit 6. Problem Set 1. Unit Review | 2% |
| | | Unit 7. Problem Set 1. Unit Review | 2% |
| | | Unit 8. Problem Set 1. Unit Review | 2% |
| | | Unit 9. Problem Set 1. Unions | 2% |
| | | Unit 9. Problem Set 2. Federal and State Statutes | 2% |
| Assignment | 37% | Unit 1. Assignment 1. Local Construction Projects | 2% |
| | | Unit 1. Assignment 2. Famous Projects | 2% |
| | | Unit 2. Assignment 1. Organizational Structure | 2% |
| | | Unit 2. Assignment 2. Organizational Chart | 2% |
| | | Unit 3. Assignment 1. General Condition Clauses | 3% |
| | | Unit 4. Assignment 1. Bid Advertisements | 2% |
| | | Unit 4. Assignment 2. Ethics | 3% |
| | | Unit 5. Assignment 1. A101 and A111 Contracts | 3% |
| | | Unit 6. Assignment 1. Surety Bond Calculations | 3% |
| | | Unit 7. Assignment 1. Certificate of Insurance Form | 2% |
| | | Unit 7. Assignment 2. Insurance Coverage | 3% |
| | | Unit 8. Assignment 1. Depreciation Schedule | 2% |

| Grading Category | Category Weight | Graded Deliverable | Weight |
|------------------|-----------------|--|--------|
| | | Unit 8. Assignment 2. Schedule of Value | 3% |
| | | Unit 9. Assignment 1. Labor Agreement Clauses | 2% |
| | | Unit 9. Assignment 2. Davis-Bacon Act | 3% |
| Exercise | 28% | Unit 1. Exercise 1. Licensing and Professional Organizations | 3% |
| | | Unit 2. Exercise 1. Employee Handbook | 3% |
| | | Unit 3. Exercise 1. Supplementary Conditions | 3% |
| | | Unit 4. Exercise 1. Strip Shopping Center | 3% |
| | | Unit 5. Exercise 1. Sub-contractor Boilerplate | 3% |
| | | Unit 6. Exercise 1. Condominium Construction | 3% |
| | | Unit 7. Exercise 1. Project Risks | 3% |
| | | Unit 8. Exercise 1. Financial Reports | 3% |
| | | Unit 9. Exercise 1. Union Laws and Federal Regulations | 4% |
| Exam | 15% | Final Exam Units 1-9 | 15% |

Academic Integrity

All students must comply with the policies that regulate all forms of academic dishonesty, or academic misconduct, including plagiarism, self-plagiarism, fabrication, deception, cheating, and sabotage. For more information on the academic honesty policies, refer to the Student Handbook and the Course Catalog.

(End of Syllabus)