Construction Documents for Capital Projects
CNST 2345

GENERAL
Course Instructor: Afsaneh Farroukhi
Course Time: Thursday at 7:00-10:00PM
Office Hours: Immediately Following Class or By Appointment
Office location: 111D T1
Contact Information: Through Blackboard Email

Course Description
This course introduces students to the construction documents commonly used in Industrial construction projects. It also focuses on the understanding of the hierarchy/relationships among those documents.

Course Prerequisites
CNST 2325 Process and Industrial Subsystems

Textbook

Learning Objectives
Upon the completion of the course students will demonstrate the ability to:
1. Understand Contracting Principles;
2. Determine Contract Types and responsibilities of Parties;
3. Understand Contracts as Administrative Systems and Procedures;
4. Understand Documentation required at offices and Jobsites;
5. Understand Risk Types and Mitigation Philosophies;
6. Understand the Applicability of Construction/Fabrication Codes and Other Standards;
7. Understand Project Closeout/Care-Custody-and Control;
8. Understand the role of Safety in Project Planning and Execution;
9. Understand the role of Quality in Project Planning and Execution;
10. Understand the role of Critical Construction Project Documents.

In addition to the learning objectives above, this course emphasizes Ethics, Safety, and Oral/Written Communication.

Grading
Class Project 20%
Mid-term Examination 40%
Final Examination 40%

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<th>Week #</th>
<th>Topic</th>
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<tr>
<td>1</td>
<td>Introduction to Construction Documents (Overview)</td>
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<td>Project Structure 1</td>
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<td>Construction Contract Types</td>
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<td>Bonds</td>
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<td>Business Structure - Roles &amp; Responsibilities</td>
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<td>Responsibility VS Authority - Job Planning</td>
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| 3 | Engineering/Design  
   Responsibility/Liability  
   Spearin Doctrine  
   Specifications  
   Codes and Other Standards |
| 4 | Estimating  
   Bidding  
   Job Walk  
   Costs |
| 5 | Construction Contracts, Contract Documents  
   Liquidated Damages, Extension/Acceleration |
| 6 | Performance & Payment Bonds, Miller Act  
   Bonding Alternatives, Builder's Risk  
   Liability Insurance, Worker's Compensation |
| 7 | Mid-Term Examination (Chapters 1 thru 8) |
| 8 | Financial/Accounting, Depreciation  
   Payments, Cash Flow |
| 9 | Roles and Responsibilities - Quality Assurance/Quality Control  
   Claims BREAK - Arbitration/Mediation |
| 10 | Planning & Execution, CPM  
   Precedence Diagram, Critical Path, Schedule Float  
   Labor Costs, Equipment Costs |
| 11 | Labor Relations Acts, National Labor Relations Board  
   Hiring, Disputes, Labor Laws |
| 12 | History of Unions, Role of Unions;  
   Bargaining, Wages  
   Open Shop, Closed Shop |
| 13 | Project Safety Requirements, O.S.H.A.  
   Safety Statistics, Safety Reporting |

**Academic Honesty**

The instructor places all grades into the hands of the student, and the final grade is based solely on the performance of the student on mid-term and final examinations and the class project. Responsibility for attendance and participation is the responsibility of the student. Students who violate University rules on scholastic dishonesty are subject to disciplinary penalties, including the possible failure of the course and dismissal from the University. Since dishonesty harms the individual, all students, and the integrity of the University, policies on scholastic dishonesty will be strictly enforced.

**Students with Disabilities**

University of Houston provides, upon request, appropriate academic adjustments for qualified students with disabilities. Any student with a documented disability (physical or cognitive) who requires accommodations should contact the Center for Students with Disabilities (713/743-5400) for assistance.
**Examination Policy**
Exams will include material covered in the class room discussions, homework, and materials posted to Blackboard as well as specified chapters of the text. Exam make-ups will only be allowed in the event of a verifiable emergency situation which must be documented to the instructor’s satisfaction. Graded work assignments submitted after the stated submission date and time shall be reduced in possible grade by 20%. The student is responsible for all reading assignments and class handouts whether or not covered in class.

**Class Project**
The class project – a Construction Project Proposal, in response to a RFP provided by the instructor, is valued as 20% of the student’s grade, and must be received by the posted date in order to receive the highest possible grade. No projects will be accepted after the stated due date.

**Phones and other Electronic Devices**
Phones and other Electronic Devices are not to be heard. Make sure you silence these devices during class. Any device that emits noise during class is a distraction and is inappropriate for the classroom. Talking / texting on your phone during class is not allowed. It is not considerate to your fellow classmates who have paid for the course. All electronic devices must be turned off and out of sight during exams and quizzes. Students may be asked to leave for the day if this behavior persists. Academic evaluations during classes missed under this criteria will be counted as zero.

**Changes in the Syllabus:** The instructor reserves the right to make changes to the syllabus. Changes will be announced in class.