

Course Syllabus – CNST 3351

Construction Planning and Scheduling

Course Description:

This course introduces students to the skills and tools necessary to prepare formal bids for construction projects. It focuses on pricing, indirect costs, bid analysis and introduces use of computer aided software. Good estimating skills are a must for successful construction majors. The goal of this course is to expand your skills in new topics of estimating and to assist you in developing high confidence in the application of the estimating skills you learned previously. The course addresses the bidding procedure from receipt of bid documents through work breakdown, work quantification, pricing and bid submittal for lump sum and unit price bids, and preparation of design/build proposals.

Course Prerequisites:

C or better in CNST 2351

Textbook:

The following textbook is required for this course: It is available hardcopy or electronic version.

Estimating in Building Construction

ISBN: 9780134701165

Required



9 Edition

Author(s): Dagostino

Publisher: Pearson

Drawing Set (Optional – Not Required): During CNST 2351 a full drawing set was required for the class. This will be used for some portions of this class. It is not required that students purchase this set again but it will be helpful if students have it available.

Course Learning Courses:

Students should be able to demonstrate the ability to:

1. Prepare preliminary estimates
2. Calculate direct (labor, equipment, materials, subs) and indirect costs for definitive estimates
3. Be familiar with computer aided-estimating programs
4. Prepare bids and understand bid submission process

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

Student Learning Outcomes:

4. Create Construction Project Cost Estimates
7. Analyze construction documents for planning and management of construction processes
10. Apply Electronic-Based Technology to Manage the Construction Process
13. Understand Construction Risk Management

Course and Student Learning Outcome Mapping:

Student Learning Outcome	Course Learning Outcomes
4	1,2
7	1,2
10	3
13	4

Student Learning Assessment and Assessment Target:

Assessment	SLO#4	SLO#7	SLO#10	SLO#13	Assessment Target
Support (S)			X		At least 70% of students receive a grade of 70 or better
Assess (A)	X	X		X	At least 70% of students receive a grade of 70 or better

Class Grading:

Participation / Attendance	10%
Quizzes	25%
Final Project	30%
Final Exam	35%

Note: The Final Exam will be administered on the last official day of class

Grading Scale:

Letter Grade	Score
A	90% - 100%
B	80% - 89%
C	70% - 79%
D	60% - 69%
F	< 60%

Class Schedule:

Week #	TOPIC
Week 1 (Aug 28)	- Introduction - Distance Learning Basic Rules - Estimate Definition - Textbook Assignments
Week 2 (Sept 4)	- Weekly Quiz 1 - Terminology, Estimate Types & Accuracy - Bid & Contract Documents - Estimating Process - Class Project - Issue
Week 3 (Sept 11)	- Weekly Quiz 2 - Computerized Estimation - OnScreen TakeOff , Sage Timberline - RS Means
Week 4 (Sept 18)	- Weekly Quiz 3 - Conceptual Estimates
Week 5 (Sept 25)	No Class. MAJOR QUIZ #1. Take Online

Week 6 (Oct 02)	- Detailed Estimates: Labor Cost Analysis - Crews - Risk Assignment
Week 7 (Oct 09)	- Weekly Quiz 4 – Risk Assessment - Detailed Estimates; Equipment Cost Analysis
Week 8 (Oct 16)	- Weekly Quiz 5 - Mid-Term Review - Issue Accreditation Assignment
Week 9 (Oct 23)	MID TERM EXAM
Week 10 (Oct 30)	- Mid Term Recap - Detailed Estimates: Materials & Subcontracts - Documenting Estimates / Summaries
Week 11 (Nov 06)	- Weekly Quiz 6 - Detailed Estimates: Indirect Costs, Escalation, Contingency, Profit - Class Project Review
Week 12 (Nov 13)	No Class – MAJOR QUIZ #2
Week 13 (Nov 20)	Final Exam Review Accreditation Assessment Assignment Due
Week 14 (Nov 27)	THANKSGIVING BREAK
Week 15 (Dec 04)	FINAL EXAM Class Project Due

Academic Honesty:

The instructor reserves the right to adjust letter grades, upward only, based on individual attendance and class participation if numerical grade warrants such consideration. Students who violate University rules on scholastic dishonesty are subject to disciplinary penalties, including the possibility of failure in 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.

Exam Policy:

Exams will include material covered in class discussions and homework assignments. Exam make-up will ONLY be given in the event of a verified emergency or doctor-verified sickness.

Assignments turned in late will be counted off 20 percent per day (only exceptions listed previously). The student is responsible for all reading assignments and class handouts whether or not covered in class or listed on the syllabus.

The last day of class is the deadline for students to verify their grades and the accuracy of their score. After this deadline, there will be no consideration for any changes.

University Counseling and Psychological Services:

Counseling and Psychological Services (CAPS) can help students who are having difficulties managing stress, adjusting to college, or feeling sad and hopeless. You can reach CAPS (UH main campus www.uh.edu/caps, or UH Sugar Land campus <http://www.uh.edu/dsaes/uhsugarland/>) by calling [713-743-5454](tel:713-743-5454) during and after business hours for routine appointments or if you or someone you know is in crisis. No appointment is necessary for the “Let’s Talk” program, a drop-in consultation service at convenient locations and hours around campus.

UH main campus: http://www.uh.edu/caps/outreach/lets_talk.html

UH Sugar Land campus: <http://www.uh.edu/dsaes/uhsugarland/>

Classroom / Online Behavior:

High level of professionalism in the classroom and online sessions is expected. The instructor has the right to set the rules in his/her classroom or online sessions. A student does not have the right to make changes to the instructor's way of managing the class. Disruptive behaviors, such as excessive talking, arriving late, and using unauthorized electronic devices or creating any distractions during class is not permitted. Repetitive and seriously disruptive behavior may result in removal from class in accordance with policies and procedures set by the Dean of Students Office.

Course/Instructor Evaluation:

A course/instructor evaluation will be conducted in class during the last scheduled lecture. Any suggestions you have on improving the course, however, are welcome throughout the term.

For detailed information about Disabilities, Religious Holy Days, the Academic Calendar, and Academic Honesty, and other information, please visit the following website: http://www.uh.edu/provost/stu/stu_syllabsuppl.html

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 academic accommodations should contact the Center for Students with Disabilities (713/743-5400) for more assistance.

For detailed information about Disabilities, Religious Holy Days, the Academic Calendar, and Academic Honesty, and other information, please visit the following website: <http://www.uh.edu/provost/policies/student/resources/>.