

COURSE SYLLABUS

CNET 3160 Construction Cost Estimating

COURSE INFORMATION

Credit Hours: 3 (2,3)

Prerequisite: CNET 2180

Term: Fall 2026

Time: Lecture: MW 10:40 am -11:30 am, F175
Lab: R 3:30 pm - 6:20 pm, F175

INSTRUCTOR INFORMATION

Name: Saman Rashidyan, Ph.D., P.E.

Office: Discovery Park F101J

Office Hours: MW 2 pm-3 pm or by appointment

Phone: (940) 369-5263

Email: Saman.Rashidyan@unt.edu

COMMUNICATION EXPECTATIONS

- You can communicate with your instructor via email any time. Emails will be answered within 48 hours.
- Grades, PowerPoint files and announcements will be posted on Canvas.

COURSE DESCRIPTION

The course covers procedures, techniques, and systems of construction cost estimating. Coverage includes work classification, quantity detailing, specification interpretation and bid preparation.

COURSE STRUCTURE

Course format/content delivery: face-to-face.

Length of the semester: Aug 17 – Dec 11

COURSE OBJECTIVES

By the end of the course, you will be able to:

1. explain the estimation process for construction projects, including bid preparation, project progress, and closeout.
2. carry out estimation procedures for the various aspects of a construction project.
3. utilize computer methods, including Excel and OnCenter estimation software, to carry out estimation from plan sets.
4. prepare a complete bid submission for a typical construction project.

STUDENT OUTCOMES (ABET)

- ABET SO1: an ability to apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve broadly defined engineering problems appropriate to the discipline
- ABET SO5: an ability to function effectively as a member of a technical team.

MATERIALS

Required Textbook

- *Construction Estimating Using Excel* (3rd Edition)* by Steven J. Peterson (Prentice Hall, 2018, ISBN 9780134405506 – available at the bookstore, online, etc.
- Additional materials to be provided in class/on website, including excerpts from manuals, etc.

*Course outline is based on this textbook.

COURSE REQUIREMENTS

Lab Exercises and Bid Submission:

- There will be lab exercises worth 25% of the overall course grade.
- The exercises will be done individually.
- These exercises will be due strictly based on the schedule announced by the TA.
- The exercises will be graded based on four areas:
 - organization (format) and completeness of submission
 - adherence to procedure
 - written discussion of exercise in relevant sections
 - accuracy of results
- The bid submission:
 - is a separate submission, to be submitted by each group (4 to 5 students).
 - must be submitted on the due date; **no late submissions will be accepted.**

Tests and Final Exam:

- There will be two tests worth 15 % each (a total of 30%) towards your overall grade.
- There will be a comprehensive final exam worth 20% towards your overall grade.
- Both tests and final exam will be covering all topics including:
 - all presentations and any topics discussed in class
 - any chapters of the text noted in the outline
 - any work carried out to complete lab exercises and the bid submission

TENTATIVE COURSE OUTLINE

The course outline may be subjected to modifications with notice.

Week	Date	Topic	Chapter /Part
1	8/17	Introduction to estimating and bidding	Chapters 1&2
	8/19	Introduction to estimating and bidding	Chapters 1&2
2	8/24	Quantity Takeoff	Chapter 4
	8/26	Quantity Takeoff	Chapter 4
3	8/31	Concrete	
	9/2	Concrete	Chapter 5
4	9/7	Labor Day (no classes, university closed)	Chapter 5
	9/9	Masonry	Chapter 6
5	9/14	Masonry	Chapter 6
	9/16	Metals	Chapter 7
6	9/21	Exam 1 – Part 1	
	9/23	Exam 1 – Part 2	
7	09/28	Woods, Plastics, and Composites	Chapter 8
	09/30	Woods, Plastics, and Composites	Chapter 8
8	10/5	Thermal & moisture protection	Chapter 9
	10/7	Thermal & moisture protection	Chapter 9
9	10/12	Openings	Chapter 10
	10/14	Finishes	Chapter 11
10	10/19	Fire Suppression, Plumbing, HVAC/Electrical	Ch. 12 to 15
	10/21	Fire Suppression, Plumbing, HVAC/Electrical	Ch. 12 to 15
11	10/26	Exam 2 – Part 1	
	10/28	Exam 2 – Part 2	
12	11/2	Earthwork, Exterior Improvements and Utilities.	Ch. 16 to 19
	11/4	Pricing costs to the estimate	Part III
13	11/09	Pricing costs to the estimate	Part III
	11/11	<i>Guest Speaker</i>	
14	11/16	Bid Submission	
	11/18	Bid Submission	
15	11/23	Thanksgiving Break (no classes)	
	11/25		
16	11/30	Bid Submission	
	12/2	Bid Submission	
		Final Exam 10:30 a.m. – 12:30 p.m. Saturday, December 5	

GRADING

Attendance and class participation	5
Lab Exercises	25
Homework	10
Bid Submission	10
Exam #1	15
Exam #2	15
Final Exam	20
Total	100

GRADE DISTRIBUTION

90 – 100 and higher	A
80-89	B
70-79	C
60-69	D
Below 60	F