

# COURSE SYLLABUS

## CNET 3160 Construction Cost Estimating

### COURSE INFORMATION

**Credit Hours:** 3 (2,3)

**Prerequisite:** CNET 2180

**Term:** Spring 2026

**Time:** Lecture: MW 4:00 pm - 4:50 pm, F187

Lab: F 2:30 pm - 5:20 pm, F187

### INSTRUCTOR INFORMATION

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

**Office:** Discovery Park F101J

**Office Hours:** MW 2:30 pm-3:30 pm or by appointment

**Phone:** (940) 369-5263

**Email:** [Saman.Rashidyan@unt.edu](mailto:Saman.Rashidyan@unt.edu)

### COMMUNICATION EXPECTATIONS

- You can communicate with your instructor via email ([Saman.Rashidyan@unt.edu](mailto:Saman.Rashidyan@unt.edu)) any time. Emails will be answered within 48 hours. Please **DO NOT** communicate with your instructor in Canvas.
- 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.

### 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\* (3<sup>rd</sup> 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:**

- The lab portion is worth 25% of the overall course grade. There will be a 3% deduction from the overall course grade for each unexcused lab absence. If lab absences exceed three, the course will be dropped.
- The exercises will be done in groups of 3 or 4, all of whom will receive the same grade for the exercises.
- 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.
  - 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 25% 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	Topic	Chapter /Part
1	Introduction to estimating and bidding	Chapters 1&2
	Introduction to estimating and bidding	Chapters 1&2
2	<i>Martin Luther King Jr Holiday (no classes, university closed)</i>	
	Quantity Takeoff	Chapter 4
3	Quantity Takeoff	Chapter 4
	Concrete	Chapter 5
4	Concrete	Chapter 5
	Masonry	Chapter 6
5	Masonry	Chapter 6
	Metals	Chapter 7
6	Woods, Plastics, and Composites	Chapter 8
	Woods, Plastics, and Composites	Chapter 8
7	Thermal & moisture protection	Chapter 9
	Thermal & moisture protection	Chapter 9
8	<b>Exam 1 – Part 1 (Mar. 2)</b>	
	<b>Exam 1 – Part 2 (Mar. 4)</b>	
9	<i>Spring Break (March 9-15)</i>	
10	Openings	Chapter 10
	Finishes	Chapter 11
11	Fire Suppression, Plumbing, HVAC/Electrical	Ch. 12 to 15
	Fire Suppression, Plumbing, HVAC/Electrical	Ch. 12 to 15
12	<b>Exam 2 – Part 1 (Mar. 30)</b>	
	<b>Exam 2 – Part 2 (Apr. 1)</b>	
13	Earthwork, Exterior Improvements and Utilities.	Ch. 16 to 19
	Earthwork, Exterior Improvements and Utilities.	Ch. 16 to 19
14	Pricing costs to the estimate	Part III
	Pricing costs to the estimate	Part III
15	Review	
	<i>Guest Speaker</i>	
16	Bid Submission	
	Bid Submission	
	<b>Final Exam 12:30 p.m. – 2:30 p.m. Saturday, May 2</b>	

### GRADING

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

### GRADE DISTRIBUTION

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

### RULES OF ENGAGEMENT

Rules of engagement refer to the way students are expected to interact with each other and with their instructors. Here are some general guidelines:

- While the freedom to express yourself is a fundamental human right, any communication that utilizes cruel and derogatory language on the basis of race, color, national origin, religion, sex, sexual orientation, gender identity, gender expression, age, disability, genetic information, veteran status, or any other characteristic protected under applicable federal or state law will not be tolerated.
- Treat your instructor and classmates with respect in any communication online or face-to-face, even when their opinion differs from your own.
- Ask for and use the correct name and pronouns for your instructor and classmates.
- Speak from personal experiences. Use “I” statements to share thoughts and feelings. Try not to speak on behalf of groups or other individual’s experiences.
- Use your critical thinking skills to challenge other people’s ideas, instead of attacking individuals.
- Avoid using all caps while communicating digitally. This may be interpreted as “YELLING!”
- Be cautious when using humor or sarcasm in emails or discussion posts as tone can be difficult to interpret digitally.
- Avoid using “text-talk” unless explicitly permitted by your instructor.
- Proofread and fact-check your sources.
- Keep in mind that online posts can be permanent, so think first before you type.

See these [Engagement Guidelines](#) for more information.