

COURSE SYLLABUS

CNET 3440 – CNET 3445 Steel Structures

COURSE INFORMATION

Credit Hours: 3

Term: Spring 2026

Time: Lecture MW 10:00 am - 11:20 am

Classroom: NTDP F175

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

COMMUNICATION EXPECTATIONS

- You can communicate with your instructor via email (Saman.Rashidyan@unt.edu) any time. Emails will be answered within 48 hours. Please **DO NOT** communicate with your instructor in Canvas.
- Homework, grades, PowerPoint files and announcements will be posted on Canvas.

COURSE DESCRIPTION

This course offers a review of the principles, analysis and methodologies for conceptual and detailed design of steel structures and emphasizes on the role of mechanics in modern structural engineering design specifications with a focus on load and resistance factor design. Topics include behavior and design of hot-rolled steel: members, connections, and advanced analysis techniques.

COURSE OBJECTIVES

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

- Understand the concepts of load and resistance factor design (LRFD) for steel structures.
- Know how to prepare calculations to support steel design.
- Understand the mathematical concepts for choosing structural steel members.
- Know how to calculate the required sizes for structural steel columns, beams, and tension members.
- Know how to calculate weld and bolt sizes for steel connections.

STUDENT LEARNING OUTCOMES (ABET)

SO2: an ability to design systems, components, or processes meeting specified needs for broadly-defined engineering problems appropriate to the discipline.

MATERIALS

Textbook

Required: Steel Design (6th), William T. Segui, Cengage Learning; ISBN: 978-1-337-09474-0

*Additional materials to be provided in class/on Canvas, including excerpts from manuals, etc.

Supplementary reference: Steel Construction Manual, 15th Ed. 2017, American Institute of Steel Construction.

MINIMUM TECHNOLOGY REQUIREMENTS

- Computer
- Reliable internet access
- [Canvas Technical Requirements](https://clear.unt.edu/supported-technologies/canvas/requirements) (https://clear.unt.edu/supported-technologies/canvas/requirements)

COMPUTER SKILLS & DIGITAL LITERACY

- Using Canvas
- Using email with attachments

TECHNICAL ASSISTANCE

Here at UNT we have a Student Help Desk that you can contact for help with Canvas or other technology issues. UIT Help Desk: [UIT Student Help Desk site](http://www.unt.edu/helpdesk/index.htm) (http://www.unt.edu/helpdesk/index.htm)
Email: helpdesk@unt.edu , Phone: 940-565-2324

COURSE EVALUATION

Student Perceptions of Teaching (SPOT) is the student evaluation system for UNT and allows students the ability to confidentially provide constructive feedback to their instructor and department to improve the quality of student experiences in the course. Please don't forget to submit the course evaluation when the link is sent to you in April.

COURSE REQUIREMENTS

Exams

Exams will be based on the textbook, handouts, class exercises, homework, and class lectures. Students are responsible for all text material, regardless of whether we review the text material in class or not. Only the print textbook, class presentations (hard copies) and personal notes can be used in the exams. No cellphone/laptop is allowed.

Missed Exams: You will be allowed to make up missed exams only if you have a documented university excused absence. Make-up exams may not be the same as the original.

Homework & in-class assignment

Homework is due one week, unless otherwise noted. Late Homework: You are NOT allowed to turn in late homework. Each in-class assignment is worth half of a homework assignment.

Final Project

The final team project includes a written report and a presentation to be worth 10 and 5 points respectively towards your final grade.

TENTATIVE COURSE OUTLINE

The course outline may be subjected to modifications with notice.

Week	Topic	Book Chapter
1	Introduction	1
2	Concepts	2
3	Tension Members	3
4	Tension Members / Compression Members	3, 4
5	Compression Members	4
6	Beams	5
7	Beams	5
8	Review, Exam #1 (March 4)	
9	Spring Break (March 9-15)	
10	Beams	5
11	Beam-columns	6
12	Review, Exam #2 (April 1)	
13	Beam-columns	6
14	Simple Connections	7
15	Eccentric Connections - Project Presentation	8
16	Project Presentation	
17	Final Exam: Saturday May 2, 7:30 a.m. - 9:30 a.m.	

GRADING

Attendance and class participation	5
Homework and in-class assignments	15
Final Project	15
Exam #1	20
Exam #2	20
Final Exam	25
Total	100

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.