

# COURSE SYLLABUS

## ENGR 2301 STATICS

### COURSE INFORMATION

**Credit Hours:** 3

**Term:** Summer 2026

**Time:** MW 10:00AM - 11:50AM

**Classroom:** NTDP F185

### INSTRUCTOR INFORMATION

**Name:** Saman Rashidyan, Ph.D., PE, PMP

**Office:** Discovery Park F101J

**Office Hours:** MW 2-3 pm

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

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

### TEACHING ASSISTANT (TA) INFORMATION

**Name:** Khashayar Arshadi

**Office:** Discovery Park D209

**Office Hours:** MW 12 to 1 pm & 2 to 3 pm

**Email:** [khashayararshadi@my.unt.edu](mailto:khashayararshadi@my.unt.edu)

### COMMUNICATION EXPECTATIONS

- You can communicate with your instructor via email ([Saman.Rashidyan@unt.edu](mailto:Saman.Rashidyan@unt.edu)) any time. Please DO NOT communicate with your instructor in Canvas. Your emails will be answered when they are sent to [Saman.Rashidyan@unt.edu](mailto:Saman.Rashidyan@unt.edu) **only**.
- Announcements, grades and PowerPoint files will be posted on Canvas.
- Homework will be assigned on WileyPlus platform.

### COURSE DESCRIPTION

Basic theory of engineering mechanics, using calculus, involving the description of forces, moments and couples acting on stationary engineering structures. Equilibrium in 2 and 3 dimensions, free-body diagrams, friction, centroids, centers of gravity and moments of inertia.

### COURSE OBJECTIVES

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

1. Understand the basic principles that govern the equilibrium of bodies under the actions of forces.
2. Apply the knowledge and tools of statics to solve engineering mechanics problems.
3. Manipulate vector operators and apply them to particles and rigid bodies.

4. Draw free-body diagrams of particles and rigid bodies.
5. Calculate the moment of force about a specified point or line.
6. Determine the forces in the members of simple structures (trusses, frames and machines).
7. Determine internal forces developed in structures.
8. Characterize the friction in equilibrium of rigid bodies.
9. Determine the location of center of gravity and centroid for a system of discrete particles and for objects of arbitrary shape.
10. Understand basic calculations of the moment of inertia for an area.

### **STUDENT LEARNING OUTCOME**

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 1)

### **MATERIALS**

#### ***Required Textbook***

Engineering Mechanics: Statics, 9th Edition by J.L. Meriam, L.G. Kraige, and J.N. Bolton. Use Wiley Plus to get access to the course materials. You will need to get online access from WileyPLUS for the assignments. WileyPLUS Course Section ID: C86626

Course outline is based on this textbook.

### **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)

### **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](mailto: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 July.

## TENTATIVE COURSE OUTLINE

The course outline may be subjected to modifications.

<b>Week</b>	<b>Topic</b>	<b>Book Chapter</b>
1	Introduction to statics	1
2	Force systems	2
3	Force systems	2
4	Equilibrium	3
5	Equilibrium, <b>Exam #1 (Wednesday June 17)</b>	3
6	Structures	4
7	Structures	4
8	Distributed forces - <b>Exam #2 (Wednesday July 8)</b>	5
9	Distributed forces	5
10	Friction - <b>Final Exam (Friday July 24) 10 am-12 pm</b>	6

## COURSE REQUIREMENTS

### ***Exams***

Exams will be open notes/open book (physical copy only). They will be based on textbook, class exercises, homework, class lectures and class discussions. Students are responsible for all text material, regardless of whether we review the text material in class or not.

*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***

Homework is posted on Wileyplus and due one week, unless otherwise noted.

*Late Homework:* It is the students' responsibility to submit all assignments in time. Homework cannot be accepted late as it is controlled by the WileyPLUS platform.

## GRADING

Attendance/Participation	5
Homework and in-class assignments (if any)	20
Exam #1	22.5
Exam #2	22.5
Final Exam	30
<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.