

Syllabus  
ENGR 2301- Engineering Mechanics - Statics

**Instructor :**

**Dr. Reza Mirshams, Professor**, Mechanical Engineering Department

**Office Location:** Discovery Park, Suite F115Q

**Phone Number:** 940-565-2594

**Email:** Reza.Mirshams@unt.edu

**Time:** T/Th 11:30am – 1:00pm

**Location:** F-183, Discovery Park

**Office Hours for Students:** Tuesdays and Thursdays 2:00 -3:00 PM or by appointment at a different time for in-person meeting. Virtual online Zoom/MEET meeting by appointment could be schedule by request.

**Communication Expectations:** Please ask general questions regarding the course during the class hours.

Email Communications: All email communications must be through CANVAS email or your UNT assigned email. You should write **STATICS 2301–SP26** in the subject line. I will not reply to emails from yahoo, Gmail, Outlook, Hotmail, etc.

If you have a private question, please contact me via UNT email and I will respond within 48 hours on weekdays (usually sooner) or you can request a private meeting. Please do not expect a response over the weekend. Please use my office phone number as a last resort - but also, please use it if you need to!

**Teaching Assistant:**

TA name: Dan Nguyen  
Email Address: DanNguyen5@my.unt.edu

**Course Catalog Description**

3 Credit hours (3 credit hours lecture)

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.

**Class Format**

All teaching aspects of this course will be in-person, face-to-face. Each week there will be two lectures (3 hours total). Each module in the Canvas is the topic in this course and it has been linked to the digital version of the textbook. The lectures formally present the topics covered in this course, and the discussions emphasize on problem-solving procedures. On some occasions, the class sessions may be presented online via Zoom and a recorded version to be accessible by the students.

**Course Prerequisites**

Prerequisite(s): PHYS 1710 and PHYS 1730.

**Course Objectives**

Upon completion of this course, you will be able to:

- Understand the basic principles that govern the static equilibrium of bodies under the action of Forces.
- Apply the knowledge and tools of statics to solve engineering problems.
- The topics of this course are essential for understanding engineering concepts in design and performance of products and structures with materials.

**Topics to Be Covered**

- Introduction

- Statics of Particles
- Rigid Bodies: Force Systems
- Rigid Bodies: Equilibrium Systems
- Distributed Loads and Centroids
- Trusses and Frames
- Internal Forces and Beams
- Friction

### Course Textbook and Resources

#### REQUIRED TEXTBOOK

- VECTOR MECHANICS FOR ENGINEERS – CONNECT ACCESS

by Beer, Johnson, Mazurek, Cornwell; 12<sup>th</sup> edition, Publisher: McGraw Hill, ISBN 9781264863396

Textbook in digital version will be used for class exercises, online quizzes, and homework assignments. The textbook access code should be available for purchase through UNT Bookstore or other online resources.

- The digital textbook has been integrated into UNT Canvas Learning management System (LMS).
- UNT Canvas will be used for posting the course materials and instructions.
- Homework assignments and practices will be assigned from the textbook after each class day.

#### OTHER RESOURCES

- **Engineering Mechanics -Statics**  
By R.C. Hibbeler. 15<sup>th</sup> edition, 2022, Publisher: Pearson.
- I will post on UNT Canvas the topics of discussion, reading topics, and a draft of handout prior to the lecture day for you to review and take notes on them. However, you may need to take notes of discussion and lectures. The PowerPoints have been based on the textbook original PowerPoints and my modifications for the topics in the course.

### Course Requirements

1. Class attendance:
  1. Attendance is required, however, there will not be a penalty for not class attendance.
  2. Class attendance will be recorded by **iClicker**. You must download **iClicker** app for students on your mobile phone (iPhone and Android) or Tablet and register in this course. This is the link for this course <https://join.iclicker.com/BSMT>.
  3. Visit the University of North Texas' Attendance Policy (<http://policy.unt.edu/policy/15-2->) to learn more.
2. Homework (online)
  1. Homework assignments will be online through the digital course textbook at the end of chapters homework problems through UNT Canvas.
  2. The number of questions in each homework will be varied.
  3. Homework assignments will be due in one week.
  4. Some homework late submissions will be allowed after the original deadline.
  5. Deductions for late homework submissions will be posted for each assignment.
  6. No make-up for homework assignments.
3. Quizzes (60 minutes in-class on paper or online)
  1. There will be five (5) announced online quizzes every two weeks on the Canvas during the class hour.
  2. There will not be make up for missing quizzes or early schedule will be given.
  3. The lowest quiz score will be dropped for the final grade calculation.

4. **MIDTERM AND FINAL EXAMS** (*entire class time in-class on paper and/or online*)
1. Total score of each exam will be on percentile, with different value points for each question.
  2. Exam question areas will be discussed in the class lectures and reading assignments in the textbook.
  3. There will NOT be a drop of lowest exam score for the final course evaluation and grading.
  4. Do not schedule travel that will conflict with the schedule time for the midterm exams. No make-up or early exams will be given.

#### EVALUATION AND GRADE WEIGHT PERCENT

The grading breakdown is as follow:

Class Attendance	5%
Class Exercises	10%
Homework Assignments	15%
4 Class quizzes (Drop the lowest score)	25%
Exam Midterm Date will be posted on the CANVAS calendar	25%
Final Exam on UNT Final Exam Schedule, on 12/10, 1:30 – 3:30 PM	20%
<b>TOTAL</b>	<b>100%</b>

- Assignments, quizzes, and exam schedules will be posted on the Canvas calendar.
- I will provide the average of the performance evaluations in the above table before the final exam and an opportunity for the course grade not in including the final exam score.
- +/- grades will be given at the instructor's discretion based on attendance records as determined by iClicker.
- The grade cut-offs can move down at the instructor's discretion.

#### GRADING SCALE

A: 90 % - 100%; B: 75% - 89 %; C: 60% -74%; D: 50% - 59%; F: Below 50%

These grade cut-offs can move down at the instructor's discretion.

#### Course Policies

##### Examination Policy

1. No electronic devices (i.e., iPhones, smartphones, iPads, laptops, and smartwatches) of any kind are permitted during the exams and class quizzes. The sole exception is electronic calculators that do not have communication capability. Students who use any unauthorized electronic device during an exam will be immediately barred from continuing the examination, and a grade of "F" will be assigned.
2. For in-class quizzes and exams, the backpack with the cell phone must be left at the front of the classroom.
3. Grades for the course will be assigned as has been shown on the Evaluation Values. There will NOT be curving of the exam scores or total scores for assigning a grade
4. No make-up will be given for the scheduled exams, unless the student has a legitimate excuse documented properly (e.g., letter from court clerk that he/she must appear in court, letter from physician that he/she is sick).
5. Requests for a review of a graded exam problem must be submitted during the following class hour after which the grade is posted. In this matter, the review is not limited to a single problem requested by the student. Upon review, the exam score may increase, remain the same, or decrease.
6. Refer to the appendices of this syllabus for a general description and schedule of the subject matters that will be discussed.
7. Do not schedule travel that will conflict with the scheduled UNT final exam time. No make-up or early exams will be given.

##### Syllabus Change Policy

This syllabus is subject to change at any time during the semester with changes to be announced during the class hours and posted in the Canvas.

#### ADA Policy

UNT makes reasonable academic accommodations for students with disabilities. Students seeking accommodation must first register with the Office of Disability Accommodation (ODA) to verify their eligibility. If a disability is verified, the ODA will provide a student with an accommodation letter to be delivered to faculty to begin a private discussion regarding one's specific course needs. Students may request accommodation at any time; however, ODA notices of accommodation should be provided as early as possible in the semester to avoid any delay in implementation. Note that students must obtain a new letter of accommodation for every semester and must meet with each faculty member prior to implementation in each class. For additional information see the [ODA website \(https://disability.unt.edu/\)](https://disability.unt.edu/).

#### Additional UNT and Course Policy

1. ***Dishonesty***: The UNT Catalog procedures on cheating and plagiarism will be vigorously enforced. It is the duty of each student to protect their works, so it is not available to others for copying or submission as their efforts. Any violation of the established rules and procedures for exams and quizzes could be considered as dishonesty. This is especially true of files and programs that are generated or copied on the computer and handheld programmable calculators for using during class quizzes and exams. Students that knowingly allow others to use their work are partners in this unethical behavior. All rules relating to academic dishonesty will be enforced in accordance with UNT policies.
2. State common law and federal copyright laws protect this course lectures and materials. They have my own original expression and revisions to the textbook author(s). Whereas you are authorized to take notes in class, thereby creating a derivative work from my lecture, and/or making a print of my lecture notes/slides. The authorization extends only to making one set of notes for your own personal use and no other use. You are not authorized to record my lectures, to provide your notes to anyone else or to make any commercial use of them without express prior permission from me.
3. Class recordings are the intellectual property of the university or instructor and are reserved for use only by students in this class and only for educational purposes. Students may not post or otherwise share the recordings outside the class, or outside the Canvas Learning Management System, in any form. Failing to follow this restriction is a violation of the UNT Code of Student Conduct and could lead to disciplinary action.

#### Student Perception of Teaching (SPOT) 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.

**01/12/2026**