

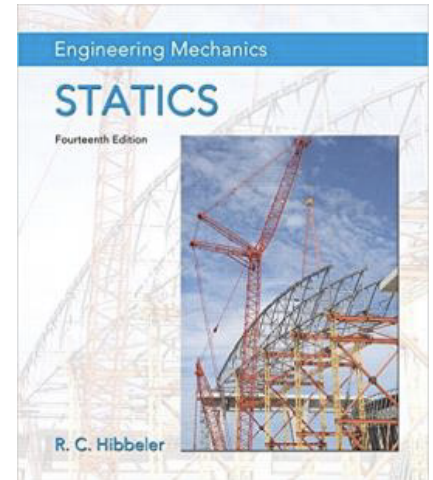
**Textbook**

**Engineering Mechanics: Statics 14<sup>th</sup> ed.**  
by R.C. Hibbeler

Mastering Engineering Course ID:  
[carrasco53337](#) (click on ID to register)

**Instructor**

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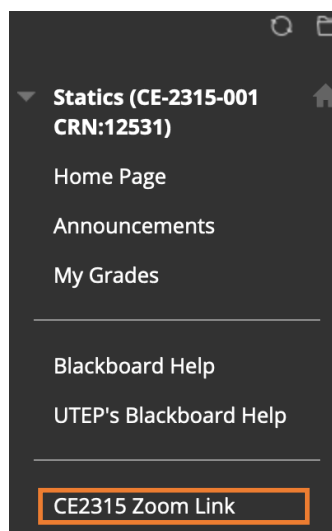
**Prerequisites**

CE 1301 Fundamentals of Civil  
Engineering or PHYS 2420 Introductory Mechanics, and  
MATH 1411 Calculus I

**Course Delivery Format**

This semester's statics course will be offered synchronously online. This means that we will be meeting every Tuesday and Thursday from 10:30 to 11:50 am using the Zoom platform. To login students can use the link with the title "CE2315 Zoom Link" (see image below) in Black Board on the left tool bar or just click on the Zoom link given below. All Zoom sessions will be recorded and uploaded to Black Board. The purpose of uploading the sessions is not to allow students to willfully skip them but rather to assist those that for any reason cannot attend a particular session(s) either because of technical problems (i.e. internet access) or any other personal reason. Skipping too many sessions will make it difficult to catch up even if they are available in Black Board.

Students are required and expected to study the videos linked in the Class Schedule (excel file in Black Board) prior to the class sessions. The purpose of these videos is to give students the general principles to be discussed in class so that our Zoom session can focus mostly on the solution of sample problems.



Join Zoom Meeting

<https://utep-edu.zoom.us/j/86558844848?pwd=RHovOXV0cDd5UHhS3FZNY9PZXdBZz09>

Meeting ID: 865 5884 4848

Passcode: 1p859r

## Course Objectives

At the end of the course students will have developed the skills to:

1. Identify an engineering problem appropriate for engineering mechanics analysis;
2. Draw a free-body diagram and identify all forces and moments acting on an object at rest;
3. Represent force and moment systems with equivalent systems;
4. Perform an analysis to identify all forces and moments acting internally or externally on an object; and
5. Determine geometric properties of one, two and three-dimensional objects.

## Topics covered

- |                                   |              |
|-----------------------------------|--------------|
| 1. General Principles             | (Chapter 1)  |
| 2. Force Vectors                  | (Chapter 2)  |
| 3. Equilibrium of a Particle      | (Chapter 3)  |
| 4. Force System Resultants        | (Chapter 4)  |
| 5. Equilibrium of a Rigid Body    | (Chapter 5)  |
| 6. Structural Analysis            | (Chapter 6)  |
| 7. Internal Forces                | (Chapter 7)  |
| 8. Friction                       | (Chapter 8)  |
| 9. Center of Gravity and Centroid | (Chapter 9)  |
| 10. Moment of Inertia             | (Chapter 10) |

## Grades

Your grade for this course will be assessed based on your performance on the following:

Homework and Quizzes	(20%)
Regular exams	(50%)
Final comprehensive exam	(30%)

All students must take the final exam and need to obtain a 50% or higher grade to pass the class.

The instructor reserves the right to revise this grading plan. However, students will be informed of any changes during the semester.

## Study Guide and Aids

Students are required and expected to study the videos linked in the Class Schedule (excel file in Black Board) prior to the class sessions. The purpose of these videos is to give students the general principles to be discussed in class so that our Zoom session can focus mostly on the solution of sample problems.

Students are also encouraged to form virtual study groups to prepare for class, ask questions about homework problems and study for exams. Teaching and learning to and from each other is one of the best techniques to improve the skills needed to perform well in this and any other course. Students are expected to dedicate 8 to 10 hours a week studying and preparing for this course.

Establish a good studying habit and you will do very well in the class.

### Online Resources

Students are required to create an account in Mastering Engineering and access the course using the ID given above. Homework will be assigned through this system and it is a great source of study materials. Students are also encouraged to visit the textbook published website for additional study aids.

### Instructor's Office Hour

You are always welcomed to meet with the instructor by making an appointment. A Zoom meeting will be scheduled for this purpose.

### Teaching Assistant

There will be a teaching assistant (TA) assigned to each session of the course. The TA will assist the instructor in grading quizzes, proctoring exams, and answering questions. In addition to the instructor's office hour, there will be TA's office hours to answer your questions. To schedule a meeting with the TA click on the link below and select from the available time slots:

<https://calendly.com/paolamsantillano/statics-course-office-hours>

## Attendance and Tardiness

Attendance is mandatory. Absence can be checked by the instructor through exams, quizzes, roll calling, randomly picked names for problem solving in class, or other mechanisms. You could receive an F grade if you miss more than three classes without the instructor's consent. The instructor appreciates all efforts to attend the class. Part of being a professional is being on time and being prepared to do your job. This

applies to your career as a student as much as it does to your future career as an engineer.

### **Policy on Cheating**

Students are expected to be above reproach in all scholastic activities. Students who engage in scholastic dishonesty are subject to disciplinary penalties, including the possibility of failure in the course and dismissal from the university. Scholastic dishonesty includes but is not limited to cheating, plagiarism, collusion, the submission for credit any work or materials that are attributable in whole or in part to another person, taking an examination for another person, any act designed to give unfair advantage to a student, or the attempt to commit such acts. The Department of Civil Engineering has established the Honor Code because it has an obligation to the State and the public to prevent students from entering the profession who are not honest and trustworthy in their academic efforts. This Honor Code Policy allows the Department to recommend disciplinary action to the University Student Conduct Office and to remove students from the Department who have violated the Honor Code. This Honor Code is consistent with the *Student Conduct and Discipline* Chapter of the *Student Affairs* Section of the *Handbook of Operating Procedures* of the University of Texas at El Paso.

All students should sign the Honor Code Agreement and submitted to the Civil Engineering office for record keeping and be deeply familiar with the Honor Code Policy published in our website:

<http://ce.utep.edu/honorcode.htm>

### **Class Schedule**

See excel file with schedule in Black Board.