CE 2315-002 Statics 15037
Fall 2021 Syllabus

*Note: the instructor reserves the right to modify the following information as deemed necessary.

Lecture Session: MWF 9:30am – 10:20am
Lecture Location: UGLC 340

Instructor: Joanne Moyer, PhD
Email: jmmoyer@utep.edu
Online Office Hours: Monday and Thursday 1:00pm – 2:00pm
Or by appointment
Office Location: A-212

REQUIRED MATERIALS:

Textbook:

*Preferred Textbook:

Engineering Mechanics: Statics

*The following textbook from CE 1301 can be used in lieu of the preferred textbook:

Statics & Dynamics

Assignments: Pearson: Mastering Engineering
Course Name: CE 2315 Statics Fall 2021
Course ID: moyer04312
*Registration instructions are provided on blackboard*
https://www.pearsonmylabandmastering.com/northamerica/masteringengineering/
**Calculator:** Only NCEES approved calculators will be permitted, as these are what is allowed for the Fundamentals of Engineering exam. Visit the NCEES website (http://ncees.org/exams/calculator/) for more information. No phones. The following are a few of the suggested calculators:

- Hewlett Packard – HP 33S
- Casio – FX 115MS or FX 115MSPlus
- Texas Instruments – TI 30X IIS
- Texas Instruments – TI 36X SOLAR

It is your responsibility to get acquainted with the features of the calculator you decide to use. I recommend that you use this calculator for all your work (including other courses) since this will help you learn how to use all the features of your calculator.

**CELL PHONES:**
Please be courteous, and turn off your cell phones during the class lectures.

**COURSE OBJECTIVES:**

The objectives of CE 2315 are:

Students will learn the principles that govern the behavior of rigid-body systems in static equilibrium. Specifically, students will be able 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.

**GRADING POLICY:**

Your grade for this course will be determined on the basis of **970 points** as follows:

<table>
<thead>
<tr>
<th>Grading Scheme</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Three mid-term Exams:</td>
<td>300 points (100 points each exam)</td>
</tr>
<tr>
<td>Final Comprehensive Exam:</td>
<td>300 points</td>
</tr>
<tr>
<td>Quizzes:</td>
<td>160 points (40 points each quiz)</td>
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<tr>
<td>Assignments:</td>
<td>160 points</td>
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<tr>
<td>Critical Assessment (attendance and involvement in discussions):</td>
<td>50 points</td>
</tr>
</tbody>
</table>

**Total 970 points**
Grading Structure:  
\[ A \geq 90 \]
\[ 90 > B \geq 80 \]
\[ 80 > C \geq 70 \]
\[ 70 > D \geq 60 \]
\[ 60 > F \]

WHAT SHOULD YOU EXPECT FROM ME AS THE INSTRUCTOR? 

1. I will provide you with clear instructions on class expectations.
2. I will check my e-mail at least three times per week and will answer back to you as soon as possible.
3. I will leave myself open to suggestions about improvement of the class and class related activities.
4. I will do all I can to enhance your learning and success in this class.
5. If any changes in the course are to be implemented, I will ensure that the class is notified in a timely manner.

ATTENDANCE & CLASS PARTICIPATION:

- Students are expected to attend all lectures and read all course material assigned.
- Those who fail to attend classes regularly are inviting scholastic difficulty and, with the approval of the Dean of the College of Engineering, may be dropped from the course with a grade of F for repeated (4 or more) unexcused absences.
- Those who fail to complete the course material are inviting scholastic difficulty.

ASSIGNMENTS:

- Assignment problems will be assigned via Pearson: Mastering Engineering.
- Written assignments may also be assigned during the semester.
- Assignments will be available after a subject has been covered. Assignments will be due within a week after availability.
- Past experience clearly shows that a student's grade is strongly dependent upon the effort that is put into working and understanding the homework.
- Late assignments will not be accepted. No exceptions!!

QUIZZES:

Quizzes will be administered during the scheduled lecture time on-campus.

- See tentative schedule for Quiz dates.
- Quizzes are closed book – closed notes. Be sure to prepare and be ready to take quizzes.
- The lowest quiz grade will be dropped from your grades.
- No makeup quizzes will be administered. No exceptions!!
Five quizzes will be given. You must take the quizzes during the scheduled course time. These dates are announced on the first day of class although the dates may be changed according to the progress of the class.

EXAMS:

Exams will be administered during the scheduled lecture time on-campus.

- Exams are closed book – closed notes. No cell phones allowed.
- No makeup exams will be administered. No exceptions!!
- See tentative schedule for Exam dates.

Four mid-term exams will be given. You must take the exams during the scheduled exam times. These dates are announced on the first day of class although the dates may be changed according to the progress of the class.

In accordance with University regulations, students who miss examinations will receive grades of zero.

Make sure that you do not have a cell phone or any other electronic item in your possession during the exams.

The mere possession of a disallowed calculator, any cell phone or any other electronic item on or near you during exams is the ground for receiving a grade of zero.

FINAL EXAM:

The final exam will be administered during the scheduled lecture time on-campus

- Final Exam is closed book – closed notes. No cell phones allowed.
- Students must take the final exam during the scheduled final exam time. No exceptions!!
- Please see tentative schedule for Final Exam day and time.
- Final Exam is comprehensive.

COURSE PORTFOLIO:

Students are encouraged to prepare a course portfolio documenting all materials relevant to the course. The portfolio shall contain Power Point lecture notes, class notes, handouts, exams, homework assignments, study notes, and any relevant materials accumulated during the semester. I believe that you will benefit from the portfolio years later when you need to review the learned subjects for advanced courses or professional engineer licensure exam
TUTORING

ACES provides tutoring for Statics. Please take advantage of this great resource located in Classroom Building Room C-001. See the link below for hours of operation.

https://www.utep.edu/engineering/student-resources/student-resources-aces.html

PERSONS WITH DISABILITY:

UTEP seeks to provide reasonable accommodations for all qualified individuals with disabilities, including learning disabilities. This university will adhere to all applicable federal, state, and local laws, regulations and guidelines with respect to providing reasonable accommodations as required affording equal educational opportunity. It is the student's responsibility to register with Center for Accomodation and Support Services (CASS) in the East Union Bldg., Room 106 within the first two weeks of classes, and inform the faculty member to arrange for appropriate accommodations.

Center for Accomodation and Support Services (CASS) can also be reached in the following ways:
Web: http://sa.utep.edu/cass/
Monday thru Friday 8:00a.m.-5:00p.m.
Union Building East Room 106
Phone:(915) 747-5148
cass@utep.edu

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.

Course tutoring/homework help sites, such as Chegg, are strictly prohibited for use on exams and quizzes.
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

TENTATIVE SCHEDULE:

NOTE: Schedule may be modified to accommodate particular needs as the semester progresses. It is to the students benefit that they read and study the chapters and sections as outlined in this calendar to reinforce the material that is presented in the class.

<table>
<thead>
<tr>
<th>Week</th>
<th>DATES</th>
<th>CLASS TOPICS</th>
<th>Quizzes</th>
<th>Exams</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Aug 23 - Aug 29</td>
<td>Syllabus, Chapter 1 (General Principles)</td>
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<td>2</td>
<td>Aug 30 - Sept 5</td>
<td>Chapter 2 (Vectors)</td>
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<td>3</td>
<td>Sept 6 - Sept 12 <em>Sept 6 Labor Day-No classes</em></td>
<td>Chapter 2</td>
<td>Quiz 1 Wednesday Sept 8</td>
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<td>4</td>
<td>Sept 13 - Sept 19</td>
<td>Chapter 3 (Equilibrium)</td>
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<td>5</td>
<td>Sept 20 - Sept 26</td>
<td>Chapter 4 Moments (Force Resultants)</td>
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<td>Exam 1 Wednesday Sept 22</td>
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<td>6</td>
<td>Sept 27 - Oct 3</td>
<td>Chapter 4/Chapter 5 (Equilibrium of Rigid Body)</td>
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<td>7</td>
<td>Oct 4 - Oct 10</td>
<td>Chapter 5/Chapter 6 (Structural Analysis)</td>
<td>Quiz 2 Wednesday Oct 6</td>
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<td>8</td>
<td>Oct 11 - Oct 17</td>
<td>Chapter 6</td>
<td></td>
<td>Exam 2 Wednesday Oct 13</td>
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<td>9</td>
<td>Oct 18 - Oct 24</td>
<td>Chapter 6 &amp; Chapter 7 (Internal Forces, Shear and Moment Diagrams)</td>
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<td>10</td>
<td>Oct 25 - Oct 31</td>
<td>Chapter 7</td>
<td>Quiz 3 Wednesday Oct 27</td>
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<td>11</td>
<td>Nov 1 - Nov 7</td>
<td>Chapter 7</td>
<td></td>
<td>Exam 3 Wednesday April 7</td>
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<td>12</td>
<td>Nov 8 - Nov 14</td>
<td>Chapter 9 (Center of Gravity &amp; Centroid)</td>
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<td>13</td>
<td>Nov 15 - Nov 21</td>
<td>Chapter 9</td>
<td>Quiz 4 Wednesday Nov 17</td>
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<tr>
<td>14</td>
<td>Nov 22 - Nov 28 <em>Nov 25-26 Thanksgiving Holiday-No classes</em></td>
<td>Chapter 10 (Moment of Inertia)</td>
<td>Quiz 5 Wednesday Nov 24</td>
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<tr>
<td>15</td>
<td>Nov 29 - Dec 2</td>
<td>Chapter 10</td>
<td></td>
<td>Exam 4 Wednesday Dec 1</td>
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Wednesday, Dec 8

Final Exam: 10:00am - 12:45pm

FINAL COMMENT:

I wish you all the best in the course. Please do not hesitate to ask questions. Any specific comments that students have on how the course might be improved are particularly welcome, especially during the semester.