CE 1301 Civil Engineering Fundamentals 15511 Fall 2020 Syllabus

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

Lecture Session: Online/7:30am – 8:20am TR

Instructor:Joanne Moyer, PhD (jmmoyer@utep.edu)Office Location:A 212Office Phone #:(915) 747-7456Online Office Hours:Blackboard Collaborate
Monday 2:00pm – 3:00pm
Or by appointment

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.

REQUIRED MATERIALS:

Textbook: Statics & Dynamics . 14th Edition by: R.C. Hibbeler, 2016 Pearson ISBN-10: 0-13-391542-5 ISBN-13: 978-0-13-391542-6



Assignments: Pearson: Mastering Engineering Course Name: CE 1301 CE Fundamentals 15511 Fall 202 Course ID: moyer04817

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 (<u>http://ncees.org/exams/calculator/</u>) 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.

Technology: Webcam/Computer camera for online meetings and exams/quizzes.

CELL PHONES:

Please be courteous, and turn off your cell phones during the online lectures.

COURSE OBJECTIVES:

This course involves a hands-on survey of the five disciplines of civil engineering (geotechnical, structural, transportation, environmental, and construction) and an introduction to engineering mechanics with a focus on the fundamentals of statics. The objectives of this course are to develop:

- 1. an understanding of the breadth of the civil engineering profession and the significant role that civil engineers provide in civilization
- 2. an understanding of several typical career pathways for civil engineers, especially including professional engineering licensure
- 3. an intuitive understanding of loads and moments
- 4. a mathematical vector analysis of forces and moments in static structures
- 5. a fundamental analysis of reaction forces and moments on static rigid bodies
- 6. an introduction to dynamics with conservation of energy and momentum

GRADING POLICY:

Grading Scheme:	Exams (3):	30%
	Final Exam:	20%
	Quizzes:	10%
	Assignments:	15%
	Lab Discussion Board	15%
	Lab Participation	10%

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Grading Structure:	$A \ge 90$
	$90 > B \ge 80$
	$80 > C \ge 70$
	$70 > D \ge 60$
	60 > F

ATTENDANCE & CLASS PARTICIPATION:

- Students are expected to attend all online lecture sessions, watch all videos, and read all course material assigned.
- "Online Modules" will be provided for each <u>Chapter and Sections</u>, which include but not limited to: videos, lecture slides, readings, and assignments for the <u>Chapters and Sections</u> subject matter.
- Those who fail to complete <u>the course material</u> 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:

Weekly quizzes will be administered via blackboard/Mastering Engineering. Respondus LockDown Browser (Webcam required) is required in order to take the quizzes through blackboard.

- <u>Weekly quizzes will be administered during our regular lecture time on Thursdays</u> <u>from 7:30am – 8:20am MST. The quiz will take a portion of the lecture time.</u>
- Download Respondus LockDown Browser prior to the first online quiz. See Respondus LockDown Browser instructions for more information.
- Webcam/Computer Camera is required for the Respondus Lockdown Browser.
- Quizzes are closed book closed notes. <u>The lowest quiz grade will be dropped from your grades</u>. Be sure to prepare and be ready to take quizzes.
- Each student must submit their work within the required timeframe that will be provided in order to receive credit. Failure to do so will result in a zero regardless if the answer is correct.
- Late quizzes will not be accepted. No exceptions!!
- <u>No makeup quizzes will be administered. No exceptions!!</u>

EXAMS:

Exams will be administered via blackboard/Mastering Engineering. Respondus LockDown Browser (Webcam required) is required in order to take the exams on blackboard.

- Download Respondus LockDown Browser prior to the first online Exam. See Respondus LockDown Browser instructions for more information.
- Webcam/Computer Camera is required for the Respondus Lockdown Browser.
- Exams are closed book closed notes. No cell phones allowed.
- Each student must submit their work within the required timeframe that will be provided in order to receive credit. Failure to do so will result in a zero regardless if the answer is correct.
- <u>No makeup exams will be administered. No exceptions!!</u>
- <u>See tentative schedule for Exam dates. The time for exams are during our regular</u> <u>lecture time, 7:30am – 8:20am.</u>

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

Your lowest exam score will be dropped.

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 via blackboard/Mastering Engineering. Respondus LockDown Browser (Webcam required) is required in order to take the quizzes on blackboard.

- Download Respondus LockDown Browser. See Respondus LockDown Browser instructions for more information.
- Webcam/Computer Camera is required for the Respondus Lockdown Browser.
- Final Exam is closed book closed notes. No cell phones allowed.
- Each student must submit their work within the required timeframe that will be provided in order to receive credit. Failure to do so will result in a zero regardless if the answer is correct.
- You must take the final exam during the scheduled final exam time. No exceptions!!
- Please see tentative schedule for Final Exam day and time.

The final exam is a <u>closed book-closed note</u> comprehensive exam. <u>Every student</u> is required to take the final exam at the end of the semester. <u>Your lowest exam score will be replaced with</u> your final exam grade, assuming that the final exam grade exceeds your prior scores.

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

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 <u>cass@utep.edu</u>

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.

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

LECTURE 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.

Week	Date	CLASS TOPICS	
1	8/25	Intro to Civil Engineering	
	8/27	Code of Ethics	
2	9/1	Intro to Excel/Word/Chapter 1: General Principles	
	9/3	Chapter 1: General Principles	
3	9/8	Special Presentation	
	9/10	Chapter 2: Force Vectors	
4	9/15	Special Presentation	
	9/17	Special Presentation	
5	9/22	Exam 1	
5	9/24	Special Presentation	
6	9/29	Chapter 2: Force Vectors	
	10/1	Chapter 2: Force Vectors	
7	10/6	Chapter 2: Force Vectors	
	10/8	Chapter 3: Equilibrium of a Particle	
8	10/13	Chapter 3: Equilibrium of a Particle	
	10/15	Chapter 3: Equilibrium of a Particle	
9	10/20	Exam 2	
	10/22	Chapter 4: Force System Resultants	
10	10/27	Chapter 4: Force System Resultants	
10	10/29	Chapter 4: Force System Resultants	
11	11/3	Chapter 4: Force System Resultants	
11	11/5	Exam 3	
12	11/10	Chapter 5: Equilibrium of a Rigid Body	
	11/12	Chapter 5: Equilibrium of a Rigid Body	
10	11/17	Chapter 12: Kinematics of a Particle	
15	11/19	Chapter 12: Kinematics of a Particle	
1.4	11/24	Chapter 13: Kinetics of a Particle: Force and Acceleration	
14	11/26	Thanksgiving Break	
15	12/1	Chapter 13: Kinetics of a Particle: Force and Acceleration	
	12/3	Exam 4	
Final Exam: Thursday, December 10, 2020			
7:00am - 9:45am			
LABORATORY:			

Discussion Board:

Students will answer questions/statements issued on blackboard through the discussion board regarding lab activities. In addition to the student posting their answer to the questions/statements, each student will also comment on at least TWO other students post to their answers to the questions/statements. This results in a **minimum of 3 total posts** on the discussion board for each student. The comments should add to the discussion by sharing your experience or adding information. Comments such as great...really good... I enjoyed it...I agree, etc. will **NOT** be considered for grading purposes.

Lab Attendance and Participation:

Lab attendance and participation will be taken for each live lab session. Practice problems from the book topic will be given. Participation is critical in understanding the concepts.

Week	Week of	LAB TOPIC	
1	Aug 24	Introductions	
2	Aug 31	Professional writing: emails, memorandums, reports	
3	Sept 7	No lab, Labor Day	
4	Sept 14	Practice Problems/Geotechnical Engineering	
5	Sept 21	Practice Problems/Structural Engineering	
6	Sept 28	Practice Problems/Civil Engineering	
7	Oct 5	Practice Problems/Construction Management	
8	Oct 12	Practice Problems/Transportation Engineering	
9	Oct 19	Practice Problems/Water & Wastewater Engineering	
10	Oct 26	Practice Problems/Environmental Engineering	
11	Nov 2	Practice Problems/ArcGIS, Sustainability	
12	Nov 9	Practice Problems/AutoCad	
13	Nov 16	Practice Problems/AutoCad	
14	Nov 23	No lab, Thanksgiving	
15	Nov 30	Practice Problems/AutoCad	
*Every lab w	*Every lab will consist of working practice problems in additional to a lab topic		

LAB TENTATIVE SCHEDULE: