

CE 3361 Design of Steel Structures 23313

Spring 2023 Syllabus

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

Lecture Session: MWF 11:30am – 12:20pm

Lecture Location: Liberal Arts 318

Instructor: Joanne Moyer PhD

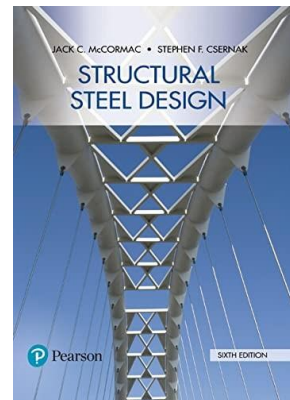
Email: jmmoyer@utep.edu

Online Office Hours: By appointment or weekly study sessions. Weekly study sessions to be announced.

Office Location: A-212

REQUIRED MATERIALS:

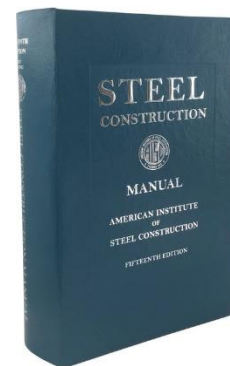
Textbook: Structural Steel Design.
6th Edition by: Jack C. McCormac and
Stephen F Csernak 2018
ISBN-10: 0-13-461067-9
ISBN-13: 978-0-13-461067-2



AISC Steel Construction Manual

Design for Steel Structures
Steel Construction Manual, 15 Ed. (Print)

1. Login or create an AISC student account at <http://www.aisc.org/create-student-account>.
2. Complete the demographics survey, and click Next to move to the next page.
3. Use the grey + sign to generate a student discount code. You must have access to your .edu email address to retrieve the student discount code for your purchase. Input the class key **M3334789-34064**
4. Access your .edu email address to retrieve your student discount code and link to the student bookstore to make your purchase.
5. Your coupon code is valid from **1/11/2023** to **3/5/2023**.



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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.

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.

COURSE OBJECTIVES:

The objectives of CE 3361 are:

At the end of this course, students will be able to:

- become familiar with codes, standards, and specifications commonly used in structural design;
- become familiar with structural steel sections and materials;
- understand basic behavior and failure modes for simple structural steel members and connections;
- be able to design simple structural steel members in tension, compression, flexure and shear and their connections (bolted and welded); and
- understand the role and responsibilities of the structural engineer in a design project.

GRADING POLICY:

Your grade for this course will be determined on the basis of the following percentages:

Grading Scheme:	5 Exams:	75%
	Group Term Presentation and Projects:	25%
		<hr/>
		Total 100%

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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 for every topic. *However, the problems will not be collected or graded.*
- You are encouraged to work on assignment problems in groups, discuss with the TA and/or Professor.
- It is highly recommended that assignment problems are solved for students to better understand the material and for practice.

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!!**
 - **Final Exam grade will replace the lowest exam grade, provided the final exam score is higher than the lowest exam grade.**
- **See tentative schedule for Exam dates.**

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Five 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.
- **Final Exam is optional**
- Please see tentative schedule for Final Exam day and time.
- Final Exam is comprehensive.
- **Final Exam grade will replace the lowest of the 5 Semester Exams provided the Final Exam grade is higher than the lowest Semester Exam.**

XTRA-CREDIT:

There will **NOT** be an opportunity for Xtra-Credit. Please do not ask!

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/HELP

The Teaching Assistant is available to answer any questions regarding the course topics, material, etc. You may also contact the Instructor for any questions you may have.

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 Accommodation 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>

**GROUP PROJECT AND PRESENTATION INFORMATION AND INSTRUCTIONS
WILL BE PROVIDED SEPARATELY AS ADDENDUM TO THIS SYLLABUS.**

****See next page for Tentative Schedule****

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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 class.

CE 3361 Design of Steel Structures Spring 2023 Tentative Schedule				
Week	DATES	CLASS TOPICS	Group Project	Exams
1	Jan 17 - Jan 22	Syllabus, Chapter 1 Intro to Steel Design		
2	Jan 23 - Jan 29	Chapter 2 Specs, Loads, and Methods of Design		
3	Jan 30 - Feb 5	Chapter 2 Specs, Loads, and Methods of Design		Exam 1 Friday Feb 3
4	Feb 6 - Feb 12	Chapter 3 Analysis of Tension Members	Phase 1 due Sunday Feb 19	
5	Feb 13 - Feb 19	Chapter 3 Analysis of Tension Members		
6	Feb 20 - Feb 26	Chapter 4 Design of Tension Members		Exam 2 Friday Feb 24
7	Feb 27 - March 5	Chapter 4 Design of Tension Members		
8	March 6 - March 12	Chapter 5 Intro to Axially Loaded Compression Members	Phase 2 due Sunday March 12	
9	March 13 - March 19	Spring Break		
10	March 20 - March 26	Chapter 5 Intro to Axially Loaded Compression Members		Exam 3 Friday March 24
11	March 27 - April 2	Chapter 6 Design of Axially Loaded Compression Members		
12	April 3 - April 9	Chapter 6 Design of Axially Loaded Compression Members	Phase 3 due Sunday April 9	Exam 4 Friday April 7
13	April 10 - April 16	Chapter 7 Design of Column Base Plates		
14	April 17 - April 23	Chapter 8: Introduction to Beams		
15	April 24 - April 30	Chapter 8	Group Project Report due Sunday April 30	Exam 5 Friday April 28
16	May 1 - May 4	Group Presentations Monday May 1 and Wednesday May 3	Group Presentations	
Wednesday, May 10				
Final Exam: 1:00pm - 3:45pm				

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.**