



CONE 411.001 STEEL & CONCRETE DESIGN COURSE SYLLABUS: FALL 2015

Instructor: Debbie Kim, Assistant Professor

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Preferred Form of Communication: Email

Communication Response Time: 11 am – 4 pm on Monday through Friday except during weekends. Emails received during weekends will be answered on the following Monday.

COURSE INFORMATION

Textbook(s) Required:

1. Design of Reinforced Concrete, 9th Ed., Jack C. McCormac and Russell H. Brown, Wiley ISBN 978-1-1181-2984-5

2. Structural Steel Design, 5th Ed., Jack C. McCormac and Stephen F. Csernak, Prentice Hall ISBN-10: 0136079482, ISBN-13: 9780136079484

References:

1. Building Code Requirements for Structural Concrete (ACI318-11) and Commentary, ACI Committee 318, American Concrete Institute, ISBN 9780870317446

2. AISC Steel Construction Manual, 14th Ed., American Institute of Steel Construction, ISBN 1564240606

Course Description

Planning and field engineering for concrete and steel construction. Structural mechanics of concrete beams, slabs, columns, walls and footings. Steel structures including tension members, compression members, flexural members, connections, and building codes. (Prerequisite: CONE 331)

Syllabus/schedule subject to change

Student Learning Outcomes

Upon successful completion of this course, students will be able to:

1. Design reinforced concrete beams using the latest ACI 318 Codes
2. Design reinforced concrete slabs using the latest ACI 318 Codes
3. Design reinforced concrete columns using the latest ACI 318 Codes
4. Design steel tension members using the latest AISC Steel Construction Manual (SCM)
5. Design steel columns the latest AISC SCM
6. Design steel beams the latest AISC SCM

COURSE REQUIREMENTS**Instructional / Methods / Activities Assessments**

This course is an enhanced course. This means course materials and lecture notes will be provided via a course website on MyLeo. All announcements will be posted on the course website as well. Most of the assignments will be asked to submit in class but there may be assignments that should be posted on the course website. In addition, there will be a number of quizzes only available on the course website. Students' grades for assignments, quizzes and exams will be indicated on the submitted papers if available and on the course website.

Student Responsibilities

It is a student's responsibility to log in to MyLeo in a timely manner to read announcements, access necessary course materials, submit assignments and answer quiz questions whenever required. Students can set up their MyLeo account such that they will receive notifications via emails and/or text messages from MyLeo when there are new updates on our course website. For more details about how to access the course website, read all the subsections of Section ACCESS AND NAVIGATION in page 4 of this syllabus.

GRADING**Grading Scale**

Final grades in this course will be based on the following scale:

- A = 90%-100%
- B = 80%-89%
- C = 70%-79%
- D = 60%-69%
- F = 59% or Below

Assessments

Student's final grade will be assessed based on the following:

1. Grades Attendance & Participation 10%
2. Assignments & Quizzes 20%
3. Exam I 20%
4. Exam II 20%
5. Final exam 30%

TECHNOLOGY REQUIREMENTS

- To fully participate in enhanced courses you will need to use a current Flash enabled browser. For PC users, the suggested browser is Google Chrome or Mozilla Firefox. For Mac users, the most current update of Firefox is suggested.
- You will need regular access to a computer with a broadband Internet connection. The minimum computer requirements are:
 - 512 MB of RAM, 1 GB or more preferred
 - Broadband connection required courses are heavily video intensive
 - Video display capable of high-color 16-bit display 1024 x 768 or higher resolution
- You must have a:
 - Sound card, which is usually integrated into your desktop or laptop computer
 - Speakers or headphones.
 - *For courses utilizing video-conferencing tools and/or an online proctoring solution, a webcam and microphone are required.
- Both versions of Java (32 bit and 64 bit) must be installed and up to date on your machine. At a minimum Java 7, update 51, is required to support the learning management system. The most current version of Java can be downloaded at: [JAVA web site](http://www.java.com/en/download/manual.jsp)
<http://www.java.com/en/download/manual.jsp>
- Current anti-virus software must be installed and kept up to date.
- Run a browser check through the Pearson LearningStudio Technical Requirements website. [Browser Check](http://help.ecollege.com/LS_Tech_Reg_WebHelp/en-us/#LS_Technical_Requirements.htm#Browset)
http://help.ecollege.com/LS_Tech_Reg_WebHelp/en-us/#LS_Technical_Requirements.htm#Browset

Running the browser check will ensure your internet browser is supported.

Pop-ups are allowed.
 JavaScript is enabled.
 Cookies are enabled.

- You will need some additional free software (plug-ins) for enhanced web browsing. Ensure that you download the free versions of the following software:
 - [Adobe Reader](https://get.adobe.com/reader/) <https://get.adobe.com/reader/>
 - [Adobe Flash Player](https://get.adobe.com/flashplayer/) (version 17 or later) <https://get.adobe.com/flashplayer/>
 - [Adobe Shockwave Player](https://get.adobe.com/shockwave/) <https://get.adobe.com/shockwave/>
 - [Apple Quick Time](http://www.apple.com/quicktime/download/) <http://www.apple.com/quicktime/download/>
- At a minimum, you must have Microsoft Office 2013, 2010, 2007 or Open Office. Microsoft Office is the standard office productivity software utilized by faculty, students, and staff. Microsoft Word is the standard word processing software, Microsoft Excel is the standard spreadsheet software, and Microsoft PowerPoint is the standard presentation software. Copying and pasting, along with attaching/uploading documents for assignment submission, will also be required. If you do not have Microsoft Office, you can check with the bookstore to see if they have any student copies.
- For additional information about system requirements, please see: [System Requirements for LearningStudio](https://secure.ecollege.com/tamuc/index.learn?action=technical) <https://secure.ecollege.com/tamuc/index.learn?action=technical>

ACCESS AND NAVIGATION

Pearson LearningStudio (eCollege) Access and Log in Information

This course will be facilitated using Pearson LearningStudio, the learning management system used by Texas A&M University-Commerce. To get started with the course, go to [myLeo](http://www.tamuc.edu/myleo.aspx). <http://www.tamuc.edu/myleo.aspx>

You will need your CWID and password to log in to the course. If you do not know your CWID or have forgotten your password, contact Technology Services at 903.468.6000 or helpdesk@tamuc.edu.

It is strongly recommended you perform a "Browser Test" prior to the start of your course. To launch a browser test, login to Pearson LearningStudio, click on the "My Courses" tab, and then select the "Browser Test" link under Support Services.

Pearson LearningStudio Student Technical Support

Texas A&M University-Commerce provides students technical support in the use of Pearson LearningStudio.

Technical assistance is available 24 hours a day/ 7 days a week.

If you experience LearningStudio (eCollege) technical problems, contact the LearningStudio helpdesk at 1-866-656-5511 (toll free) or visit [Pearson 24/7 Customer Support Site](http://247support.custhelp.com/) <http://247support.custhelp.com/>

The student help desk may be reached by the following means 24 hours a day, seven days a week.

- **Chat Support:** Click on '*Live Support*' on the tool bar within your course to chat with a Pearson LearningStudio Representative.
- **Phone:** 1-866-656-5511 (Toll Free) to speak with Pearson LearningStudio Technical Support Representative.

Accessing Help from within Your Course

Click on the '*Tech Support*' icon on the upper left side of the screen inside the course. You then will be able to get assistance via online chat or by phone.

Note: Personal computer problems do not excuse the requirement to complete all course work in a timely and satisfactory manner. Each student needs to have a backup method to deal with these inevitable problems. These methods might include the availability of a backup PC at home or work, the temporary use of a computer at a friend's home, the local library, office service companies, an Internet cafe, or a bookstore, such as Barnes & Noble, etc.

Policy for Reporting Problems with Pearson LearningStudio

Should students encounter Pearson LearningStudio based problems while submitting assignments/discussions/comments/exams, the following procedure **MUST** be followed:

1. Students must report the problem to the help desk. You may reach the helpdesk at 1-866-656-5511.
2. Students **MUST** file their problem with the helpdesk and obtain a helpdesk ticket number

3. Once a helpdesk ticket number is in your possession, students should email me to advise me of the problem and to provide me with the helpdesk ticket number
4. At that time, I will call the helpdesk to confirm your problem and follow up with you

PLEASE NOTE: Your personal computer/access problems are not a legitimate excuse for filing a ticket with the Pearson LearningStudio Help Desk. You are strongly encouraged to check for compatibility of your browser **BEFORE** the course begins and to take the Pearson LearningStudio tutorial offered for students who may require some extra assistance in navigating the Pearson LearningStudio platform. **ONLY** Pearson LearningStudio based problems are legitimate.

myLeo Support

Your myLeo email address is required to send and receive all student correspondence. Please email helpdesk@tamuc.edu or call us at 903-468-6000 with any questions about setting up your myLeo email account. You may also access information at [myLeo](https://leo.tamuc.edu). <https://leo.tamuc.edu>

Learner Support

Go to the following link [One Stop Shop](http://www.tamuc.edu/admissions/onestopshop/)- created to serve you by attempting to provide as many resources as possible in one location.

<http://www.tamuc.edu/admissions/onestopshop/>


Go to the following link [Academic Success Center](http://www.tamuc.edu/campusLife/campusServices/academicSuccessCenter/)- focused on providing academic resources to help you achieve academic success.

<http://www.tamuc.edu/campusLife/campusServices/academicSuccessCenter/>

FREE MOBILE APPS

The Courses apps for phones have been adapted to support the tasks students can easily complete on a smaller device. Due to the smaller screen size course content is not presented.

The Courses app is free of charge. The mobile Courses Apps are designed and adapted for different devices.

	App Title:	iPhone – Pearson LearningStudio Courses for iPhone Android – LearningStudio Courses - Phone
	Operating System:	iPhone - OS 6 and above Android – Jelly Bean, Kitkat, and Lollipop OS
	iPhone	https://itunes.apple.com/us/app/pearson-learningstudio-

	App URL:	courses/id977280011?mt=8
	Android App URL:	https://play.google.com/store/apps/details?id=com.pearson.lsp_hone

Once downloaded, search for Texas A&M University-Commerce, and it should appear on the list. Then you will need to sign into the myLeo Mobile portal.

The Courses App for Android and iPhone contain the following feature set:

- View titles/code/Instructor of all Courses enrolled in online
- View and respond to all discussions in individual Courses
- View Instructor Announcements in individual Courses
- View Graded items, Grades and comments in individual Courses
- Grade to Date
- View Events (assignments) and Calendar in individual Courses
- View Activity Feed for all courses
- View course filters on activities
- View link to Privacy Policy
- Ability to Sign out
- Send Feedback

LEARNINGSTUDIO NOTIFICATIONS

Students can be alerted to course activities via text on their mobile phones or up to two email addresses.

Based on their preferences, students can automatically receive a push notification with every new: course announcement, threaded discussion post, grade, and/or assignment without having to login to the course. Enrolled students will automatically receive email notifications for announcements and can opt out of this feature. To receive text notifications, students must opt in.

To begin setting up notifications, go into your course in LearningStudio and click on the bell-shaped Notifications icon on the main menu ribbon.

By default the student's university email address will appear. This cannot be changed in LearningStudio. Additional email addresses may be added by clicking the Add button. After all of the other selections are completed be sure to click the Save and Finish button.

COMMUNICATION AND SUPPORT

Interaction with Instructor Statement

In general, discussing your questions and/or concerns during office hours with me is the most efficient way to communicate and to get help you need. If you cannot visit my office during the office hours, it is preferred for you to send me emails with your questions. Please add "[Course Prefix and #-Section#]" in the subject title so that I recognize which course and section you are inquiring about. For example, add [CONE411-011] in the subject title for emails about the Steel and Concrete Design course. Please be as specific as possible in describing subjects and/or concepts you need more assistance from me.

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Course Specific Procedures:

Class Attendance Requirements

# of Absence*	0-3	4	5
Point Deduction	0	-5	-10**

* Two tardiness = one absence

** Attendance and Participation is 10 % of your final grade (see above).

Assignments Policy

1. All assignments should be submitted *at* the beginning of the class on the due date.
2. Only selected HWs will be graded.
3. Unless prior arrangements are worked out with the instructor, a penalty of 50% will be assessed on late assignments submitted within next class meeting time of the due date.
4. After the grace period, ZERO credit will be awarded.

Syllabus Change Policy

The syllabus is a guide. Circumstances and events, such as student progress, may make it necessary for the instructor to modify the syllabus during the semester. Any changes made to the syllabus will be announced in advance.

University Specific Procedures:

Student Conduct

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. (See current Student Guidebook).

Students should also consult the Rules of Netiquette for more information regarding how to interact with students in an online forum: [Netiquette](http://www.albion.com/netiquette/corerules.html)
<http://www.albion.com/netiquette/corerules.html>

ADA Statement

Students with Disabilities

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

Office of Student Disability Resources and Services

Texas A&M University-Commerce

Gee Library- Room 132

Phone (903) 886-5150 or (903) 886-5835

Fax (903) 468-8148

Email: Rebecca.Tuerk@tamuc.edu

Website: [Office of Student Disability Resources and Services](http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndServices/)

<http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndServices/>

Nondiscrimination Notice

Texas A&M University-Commerce will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

**CONE 411 STEEL & CONCRETE DESIGN
COURSE OUTLINE / CALENDAR**

Week	Subjects		
	Monday	Wednesday	Friday
1 (8/31 – 9/4)	Concrete and Reinforced Concrete	Flexural Analysis of Beams	Strength Analysis of Beams
2 (9/7 – 9/11)	Labor Day	Design of Rectangular Beams and One-Way Slabs	Design of Rectangular Beams and One-Way Slabs
3 (9/14 – 9/18)	Analysis and Design of T Beams and Doubly Reinforced Beams	Analysis and Design of T Beams and Doubly Reinforced Beams	Serviceability and Beam Deflections
4 (9/21 – 9/25)	Shear and Diagonal Tension	Introduction to Columns	Design of Short Columns
5 (9/28 – 10/2)	Slender Columns	Footings	Footings
6 (10/5 – 10/9)	Retaining Walls	Retaining Walls	Two-Way Slabs
7 (10/12 – 10/16)	Walls	Exam 1	Pre-stressed Concrete
8 (10/19 – 10/23)	Reinforced Concrete Masonry	Structural Steel Design	Specifications, Loads, and Methods of Design
9 (10/26 – 10/30)	Analysis of Tension Members	Analysis of Tension Members	Design of Tension Members
10 (11/2 – 11/6)	Introduction to Axially Loaded Compression Members	Design of Axially Loaded Compression Members	Design of Axially Loaded Compression Members
11 (11/9 – 11/13)	Introduction to Beams	Design of Beams for Moments	Design of Beams for Moments
12 (11/16 – 11/20)	Bending and Axial Force	Bending and Axial Force	Bolted Connections
13 (11/23 – 11/27)	Exam 2	Bolted Connections	Thanksgiving Holiday
14 (11/30 – 12/4)	Welded Connections	Building Connections	Design of Steel Buildings
15 (12/7 – 12/11)	Composite Beams	Composite Columns	Review of Course
16 (12/14)	Final Exam (8 – 10a)		