

The University of Texas at Tyler
Department of Construction Management

CMGT: 3305 Introduction into Construction

Course Syllabus (Fall 2021)

Date Class Begins: 9/23/2021

Time & Venue	<p>8 - 9:20 AM Every Tues and Thur in Room RBN 3038</p> <p>NOTE: Construction is a service industry to an owner of the project. The owner is our customer and excellent service requires timely service and professional performance of duties. Timeliness is of supreme importance to a project. We will practice this skill and trait in 3305. The professional standard is to NEVER be late for any class. If you are going to be late OR if you will need to miss a lecture you MUST notify me ahead of time. Any tardy or late attendance of submission of graded material will be graded as a ZERO if the tardy or late submission is not approved 24 hours ahead of time by me.</p> <p><i>NOTE: ALL CMSA student organizational meetings are required attendance for this class. Attendance sheets are collected and will be part of this course grade.</i></p>
Instructor	<p>Joe Boylan Office: RBS 1037 Email: jboylan@uttyler.edu Phone: (903) 565-5884 Office hours: 0800:00 a.m. – 1700 p.m.</p> <p>I am always available for help in my office anytime I am not teaching. (See office hours outside of RBS 1037) To ensure you get your necessary help please email me ahead of time and we can get your visit locked into the schedule.</p>
Teaching Assistant	<p>Note: The CM Honor Society does provide extra instruction and assistance to students needing extra help in 3305. Contact them for help if you need it also.</p>
Course Website	<p>See UT Tyler's 3305 Canvas Website</p>
Course Objective	<p>1. Welcome to Introduction of Construction! The course will look at 2 fundamental building blocks of construction. Part 1 will focus on the fundamentals of reading CMSI formatted drawings and Part 2</p>

	will focus on basic construction engineering skills. Both are key to your follow-on courses in this major/minor.
Course Outcomes	<p style="text-align: center;">(Next page)</p> <p style="text-align: center;">Introduction to Construction Course Objectives:</p> <p>Part 1 - Plan reading and material takeoff principles</p> <ol style="list-style-type: none"> 1. Understand the fundamentals of architectural plans and takeoff techniques. 2. Understand how CSIM formats and displays the critical project plan information for the builder. 3. Understand the role of codes, specifications, and technical requirements impact the means, methods, and materials used by a GC on the project. 4. Develop critical takeoff skills to help with the accurate development of a project budget and schedule. <p>Part 2 – Construction Engineering Fundamentals</p> <ol style="list-style-type: none"> 1. Explain the elastic curve function for beam deflections. 2. Calculate beam deflections. 3. Calculate stresses in a member subjected to combined loading due to axial, torsional, internal pressure (i.e., thin wall pressure vessels), and/or bending forces. 4. Analyze/design columns. 5. Design connections 6. Use applicable codes to design members (LFRD)
Note to Student About a Syllabus	<p><i>This syllabus is a statement of intent</i> about how the course will be taught this semester. It outlines what we will cover, what you will need to do in the course, and it explains what and when you must do it to successfully complete the course and get a great final grade. This syllabus is intended to protect you from arbitrary or untimely changes in course requirements and due dates. But <i>I reserve the right to make changes as necessary to the syllabus with announcement of changes.</i> As we learned during 2020, there are many circumstances outside of our direct course control that may</p>

	require changes to this syllabus in content and schedule. These will always be announced in advance and the syllabus will be updated on Canvas so all can be aware of the required changes.
Prerequisite/Co-Requisite	Approval by the CM Dept. Head is a prerequisite for this course.
Required Texts	<p>1. <i>Plan Reading and Material Takeoff</i> by Wayne J DelPico, R.S.Means Company ISBN 978-0-87629-348-5</p> <p>2. <i>Statics and Structural Strength of Materials for Architecture and Building Construction</i> (4th Ed.) by Barry Onouye and Kevin Kane (ISBN 978-0-13-507925-6)</p> <p>NOTE: Class slides in lecture are NOT complete information. You MUST read the chapters and all quizzes and exams will include information in the chapter in the text and may NOT have been included in class lecture slides!</p>
Grading	<p>Contributions towards final grade (out of 100%)</p> <p>10% <i>Attending Weekly Lectures and Discussions/CMSA</i></p> <ul style="list-style-type: none"> • Attendance and preparedness for ALL weekly lectures in 4335 are expected in order to receive full credit for this portion of your final grade. • CMSA meeting attendance are required and part of this grade. • NOTE: Lecture and CMSA attendance will/does impact your grade! <p>20% <i>Cardboard Canoe Project</i></p> <p>60% <i>Exams 1- 5</i></p> <p>10% Unannounced in class tests/quizzes or adhoc class presentations given by one or more of you as selected by me on chapter material due for that date on syllabus (approx. 10)</p> <p>NOTE: Exams, quizzes, and any form of assessment all carry the same grade weight. (ie. quizzes are not less important than exams for your final grade!)</p> <p>Letter grades will be assigned based on the final course grade:</p> <p style="margin-left: 40px;">A 90 and above B 80 to 89.99 C 70 to 79.99 D 69 to 65 F 65 and below</p> <p>A grade of 69 (D) or below will be a failure to complete the course for graduation in the department.</p>

	No letter grade will be released until it is official on the University grade system.
General Syllabus Student Information and Rights	General Syllabus Student Information and Rights .docx

3305 Course Schedule (Subject to change as needed throughout the semester- you will find latest syllabus in Canvas!)				
Date	Lesson	Topic for Class	Reading	Assignment
8/24/2021	1	Syllabus and Part 1 -- Drawings and Plans Cardboard Canoe Proj.	Read syllabus in Canvas; Read Architectural Drawing Article in Module 1 in Canvas;	CANVAS Material Text Chp 1-2
8/26/2021	2	Reading plans and math of takeoffs	Chapter 1 AND 2 of Plans textbook	TEXT
8/31/2021	3	CMSI and various Specs and Standards	Chapter 3	TEXT
9/2/2021	4	General Proj. Requirements	Chapter 4	TEXT
9/7/2021	5	Proj Site Work	Chapter 5	TEXT
9/9/2021	6	EXAM # 1	Chp 1 to 5	FOR GRADE
9/14/2021	7	Concrete & Masonry	Chapter 6 & 7	TEXT
9/16/2021	8	First Aid Trng	Chapter 7	TEXT
9/21/2021	9	Metals and Wood and Plastics	Chapter 8 & 9	“
9/23/2021	10	Lab tool Qualification trng	Chapter 9	“
9/28/2021	11	Thermal and Moisture Protection	Chapter 10	“
9/30/2021	12	EXAM #2	Chapters 6-10	FOR GRADE
10/5/2021	13	Doors and Windows	Chapter 11	TEXT
10/7/2021	14	Finishes	Chapter 12	“
10/12/2021	15	Mechanical Systems	Chapter 15	CANVAS Material
10/14/2021	16	Electrical Systems	Chapter 16	
10/19/2021	17	EXAM # 3	Chp 11, 12, 15, 16	FOR GRADE
10/21/2021	18	Forces and Vectors	Pg. 1-32	2.6 and 2.8
10/26/2021	19	Vector Addition	Pg. 33-40	2.9 - 2.13
10/28/2021	20	Varignon's Theorem	Pg. 42-46	2.14, 2.15

11/2/2021	21	Parallel Forces and FBD	Pg. 47-48	2.19-2.23,2.24,2.25
11/4/2021	22	Reaction Forces from Connectors	Pg. 59-72	2.28-2.33 (not 2.31)
11/9/2021	23	Static Determinacy and Review	Pg. 74-84	2.34,2.35
11/11/2021	24	Exam # 4	Pg. 86-95	2.42,2.34,2.46,2.48,2.50-53, 2.55,2.57-58,2.60
11/16/2021	25	Cable Systems	CH3 pg 96-110	3.1-3.3
11/18/2021	26	Equil in Rigid Bodies	CH 3 p 111-116	3.5,3.6,3.8-10
11/22 – 11/26		Thanksgiving Break		
11/30/2021	27	Stress and Strain	CH 5 pg. 251 – 279; 289-293	5.16-17 for AL alone
12/2/2021	28	EXAM # 5		For Grade