

The University of Texas at Tyler
Department of CE and CM

**CMGT 4335 & CENG 4341 Project Leadership, Professional Ethics, Public Policy, and
Contract Law**

Course Syllabus (Spring 2024)

Time & Venue	<p>11 – 12:20 PM Every Tuesday and Thur Room RBS 1031</p> <p>Timeliness is of supreme importance to any project. We will practice this skill and trait this class. 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>
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	N/A
Course Website	See UT Tyler's Canvas Website

<p>Course Objective</p>	<p>Welcome to this course. This course is a little different than most you have taken so far. The overall educational model for a professional project leader has the shape of a T as shown below. The bottom vertical leg of the T is your technical and engineering competence, knowledge, and practice that you have gained by your classroom and practice work in your “hard engineering” skills courses. The top of the T shaped model in the horizontal box is made up of “soft skills” critically needed to be a professional engineering/technology leader. The topics here are leadership, business acumen, people management, contracts and contract law, professional practice skills, law, regulations, character, ethics, lifelong learning, continued skills development, professionalism. This course is exclusively in the top of the T.</p> <p>All of these deal with your professional identity, ethics, morals, leadership, and business and management skills.</p> <p>This course will focus on the top of the T – the “soft” skills and critical lessons in becoming a <i>practicing professional leader</i>.</p> <div data-bbox="667 947 1174 1430" data-label="Diagram"> <p style="text-align: center;">Soft Business, Legal, People/Team Skills</p> <p style="text-align: center;">Hard Science/Math Skills</p> </div>
<p>Course Outcomes</p>	<p>In this course, you will learn to:</p> <ol style="list-style-type: none"> 1. Understand and define specialized knowledge, practice, competence, and professional identify and community training required to be a <i>professional project leader</i>. 2. Understand the concepts in the “leadership “of engineering, and various “build it” processes. NOTE: - integrated design never stops till it is commissioned 3. Define and understand what a profession and what a professional is. 4. Understand what a leader is and what leadership does. 5. Understand what a manager is and what management does.

	<p>6. Understand what a team player/follower is and how they best support a team.</p> <p>7. Know what an “engineer” is and what engineering does.</p> <p>8. Understand what is required <i>in practice</i> and <i>character</i> of an engineer and a leader</p> <p>9. Look at the TRUST between a professional and society and why this is so critical to sustain.</p> <p>10. Look at contracts, Kr Law, obligations under contractual arrangements.</p> <p>11. Look at the ethics expected of you as an engineering/technology leader and professional.</p> <p>12. Look at and understand Public Policy and the engineering/technology professional.</p>
<p>Note to Student About a Syllabus</p>	<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 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.</p>
<p>Prerequisite/Co-Requisite</p>	<p>There are no prerequisites/co-requisites for this course; however, the student must receive instructor consent and approval from the CM Department Chair.</p>
<p>Required Texts</p>	<ol style="list-style-type: none"> 1. <i>Common Sense Construction Law</i> 5th Ed by Smith and Currey from Wiley ISBN 978-1-118-85810-3 2. <i>Ethics for Engineers</i> by Martin Peterson from Oxford Press ISBN 9780190609207
<p>Grading</p>	<p>Contributions towards final grade (out of 100%)</p> <p>10% Attending Weekly Lectures and Discussions</p> <ul style="list-style-type: none"> • Attendance and preparedness for weekly lectures are expected in order to receive full credit for this portion of your final grade. • <i>NOTE: Lecture attendance will/does impact your grade!</i> <p>20% Public Policy Paper</p> <p>20% <i>Team Ethics case study Presentation</i></p> <p><i>50% EXAMs</i></p> <p>100%</p>

	<p>Letter grades will be assigned based on the final course grade:</p> <p style="text-align: center;">A 90 and above B 80 to 89.99 C 70 to 79.99 D 69 to 65 F 65 and below</p> <p><i>A grade of 69 (D) or below will be a failure to complete the course for graduation in the department.</i></p> <p>No letter grade will be released until it is official on the University grade system.</p>
General Syllabus Student Information and Rights	General Syllabus Student Information and Rights .docx

4335/4341 Course Schedule (Subject to change as needed throughout the semester)				
Date	Lesson	Topic for Class	Reading	Assignment
1/16	1	Syllabus and a professional CM education		CANVAS Material
1/18	2	Public Policy	Chapter 1	CANVAS Material
1/23	3	Public Policy	Chapter 2	CANVAS Material
1/25	4	Public Policy	Chapter 3	CANVAS Material
1/30	5	PP Project Prep	NO CLASS	CANVAS Material
2/1	6	PP Project Briefing		For grade
2/6	7	PP Project Briefing		For grade
2/8	8	PP and Engineering/Project LAW	Canvas	PM Law and Canvas slides
2/13	9	PP and Engineering/Project LAW	“	“
2/15	10	EXAM I	“	
2/20	11	What is a profession?	Colby Sullivan	Read
2/22	12	What is a professional?	Fledderman	Read
2/27	13	What is a professional organization and role?	Colby Sullivan & Fledderman	Read
2/29	14	Professional Duty of Care	Paper and Bolam “Test”	CANVAS Material
3/5	15	Leadership, Management and Followship	Northrup Chp 1, 12	CANVAS Material

3/7	16	Engineering Ethics 1&2	Ethics for Engineers Chp 1 &2	Peterson & team presentation
3/19	17	Engineering Ethics 3&4	Ethics for Engineers Chp 7&8	Peterson & team presentation
3/21	18	Engineering Ethics Part 3	Ethics for Engineers 10,12	Peterson & team presentation
3/26	19	EXAM #2		
3/28	20	KR Law & Construction	Smith/Currie Chp 1	
4/2	21	KR Interpretation	" Chp 2	
4/4	22	KR Methods	" Chp 3	
4/9	23	P3 projects	" Chp 4	
4/11	24	Auth and Respon. Of Design Professional	" Chp 9	
4/16	25	Kr changes	" Chp 11	
4/18	26	Kr inspections, acceptance, warranties and commissioning	" Chp 14	
4/23	27	EXAM #3		
4/25	28	Course Wrap Up and Survey		

Public Policy Paper: Should there be an ethical standard for the use of AI to generate engineering solutions to engineering structural problems?

If NO –why does AI not pose a safety issue for PE level solutions to engineering problems?

IF YES - As a significant safety issue - what should be done to verify the veracity of the solution generated to a structural support problem?

For lessons 16 -18 on Ethics – 2 teams will give an overview of the ethical issue faced by the team in the ethical failure example below and analyze what happened (good and bad) using the questions below. This presentation should be 10 or less minutes. It is for a grade. Format and content is left to the team – but it should contain enough to learn from this incident what we should and should not do as a professional engineer if faced with the same set of circumstances.

TASK: Explain why and how the engineering leaders failed in their Duty of Care and Professional Practice obligations -what were the impacts of these failed decisions/actions AND How they should have solved the problem presented!

1. Challenger Space Shuttle
2. Columbia Space Shuttle
3. Schlitterbahn Ride Failure
4. Apollo Capsule Fire 1967

5. Ronan Point Apartment Tower Failure
6. Florida Bridge Failure