ENGT 3306, 81161, Engineering Ethics

Fall 2021
Texas A&M University-Central Texas

COURSE DATES, MODALITY, AND LOCATION

This is a Web Enhanced Course with a blended delivery of materials
that meets from Aug 23 – Dec 10
with **51-75% face-to-face meetings on M and W** from **11:00 am – 12:15 pm**
in **Founder's Hall, Room 309** and
25-49% asynchronous online content available online through the A&M-Central Texas Canvas Learning Management System [https://tamuct.instructure.com/]

This is **not** a self-paced course. Assignments and lectures will be required each week throughout the semester.

INSTRUCTOR AND CONTACT INFORMATION

Instructor: Dr. Taylor Harvey
Office: Heritage Hall 302L
Phone: 254-519-5414
Email: tharvey@tamuct.edu (prefer direct email)

Office Hours

Virtual office hours on T 1:30 -2:30 pm (https://tamuct.webex.com/meet/tharvey)
Available by appointment for virtual or in person meetings at other times. Just email me!

Student-instructor interaction

You are strongly encouraged to communicate with me. If you get stuck on a concept or homework problem, **do not** wait until office hours. Send me an email that includes screenshot or photo of the problem and I can provide guidance. I will reply to any email within 48 hours during the work week or on Monday after a weekend (but probably a lot sooner in both cases). If you need more help, send me an email and schedule a webex session (https://tamuct.webex.com/meet/tharvey) or an in-person meeting.

WARRIOR SHIELD

Emergency Warning System for Texas A&M University-Central Texas
Warrior Shield is an emergency notification service that gives Texas A&M University-Central Texas the ability to communicate health and safety emergency information quickly via email, text message, and social media. All students are automatically enrolled in Warrior Shield through their myCT email account.

Connect to Warrior Shield by 911Cellular [https://www.tamuct.edu/police/911cellular.html] to change where you receive your alerts or to opt out. By staying enrolled in Warrior Shield, university officials can quickly pass on safety-related information, regardless of your location.

Fall 2021 Return to Campus Plan. For the most recent campus information regarding COVID-19

see the Texas A&M University-Central Texas [https://www.tamuct.edu/covid19/]

If directed by the university or the university system, course may convert to 100% online content and instruction.

COURSE INFORMATION

Course Overview and description

A study of the ethical considerations related to engineering technology decisions including professional codes, environmental issues, and safety.

Course Objective or Goal
Student Learning Outcomes

1. Act professionally, ethically and socially responsible in a diverse workplace
2. Abide by the Engineering Code of Ethics
3. Adhere to engineering safety standards
4. Commit to lifelong learning and continuous improvement

Required Reading and Textbook(s)

No required text

This is a Writing Instructive (WI) course so writing will be an integral part of my instruction and our interactions. Writing will also be a fundamental way that I measure student mastery of course content. WI means that you will have several opportunities to work on improving your writing skills.

Writing will be integrated into all course activities.

COURSE REQUIREMENTS

The course will involve homework, exams, canvas discussions, and projects.

Periodic **homework** (20 weighted pts in total) will be assigned throughout the semester (SLO 1-4).

Participation in **canvas discussions** is required. Participation is very important to the asynchronous portion of the course. You will be expected to contribute to **at least** one substantive discussion message and least one substantive peer response per week. A message saying "I agree" or something similar is not substantive. This is a required part of your grade.

Two large scale **projects** will be conducted during the semester (15 weighted pts each)

> Project 1 Book Review and Presentation (SLO 1-4);
> Students will select and read a book from a preapproved list (or have a book approved by the instructor). The final project deliverables will be 5 page report and an 8 minute in class presentation. The project will be graded up to 100 pts and then scaled to the 15 pt

weight. Grading will be according to the rubric at the end of the syllabus.

<u>Project 2</u> Special Topic Report and Presentation (SLO 4)
Students will select and receive instructor approval for a topic covering a pertinent, technical topic. The final project deliverables will be 5 page technical report and an 8 minute in class presentation. The project will be graded out of 100 pts and then scaled to the 15 pt weight. Grading will be according to the rubric at the end of the syllabus.

Reports for both projects can utilize any style guide, but must be formatted and referenced.

Three short **midterm exams** (10 weighted pts each) and a **comprehensive** final exam (20 weighted pts) will be given during the semester. (SLO 1-4)

Grading Criteria Rubric and Conversion

Activity	Points	% of Final Grade
Midterm Exams	30	30
Homework	20	20
Canvas Discussion	5	5
Projects	30	30
Final Exam	15	15

Course Grades will be assigned by the following scale based on weighted grade percentage

Grade	Weighted Grade (%)
A	>= 90.00
B	80.00 - 89.99
C	70.00 - 79.99
D	60.00 - 69.99
F	< 60.00

Posting of Grades

All turned in work will be graded within 2 weeks and results posted on Canvas.

Grading Policies

Late Work
Late work without penalty will not be accepted without **prior** approval. You must plan your time well in order to turn things in on time. If there are extenuating circumstances, an individual extension may be granted after speaking with the instructor. Emergencies will be accommodated.

Late work will have a 10% deduction for each calendar day the activity is turned in late (90% maximum score for a project turned in 1 day late, 80% for 2 days late, etc.), but no submissions will be accepted greater than 5 days late. Scores for late projects will be determined using this

formula:
'Grade Recorded' = 'Grade Earned if not late' * 'maximum percent based on days late'.

Missed exams
Exams will be administered either in the classroom, on Canvas, during a Webex session, or self-administered. Proctorio, a remote proctoring program integrated into Canvas, may be used during exams. Exams will be administered at a specific time or during a designated time period. Exam timing and instructions will be communicated during lecture and on Canvas.

If you cannot make an exam session/period, you **must** schedule an alternative time period beforehand. Extenuating circumstances will be considered after speaking with the instructor. Emergencies will be accommodated. All exams must be taken within 1 week of the original exam period.

Plagiarism
It is the responsibility of the student to understand plagiarism and avoid it completely. Contact me if you have any questions about what constitutes plagiarism. Any assignment deemed to be plagiarized by the instructor will receive a zero, even if the plagiarism is the result of a misunderstanding or ignorance. A second plagiarism offense will lead to a failing grade in the course.

Appeals
If the student wishes to appeal a grade, they must do so within 1 week of receiving the graded paper. Students should save all their work to ensure that no clerical errors are made in grade reporting.

COURSE OUTLINE AND CALENDAR

Complete Course Calendar

A tentative schedule is shown below. Modifications to this schedule may be made at the discretion of the instructor.

Week/Dates	Topics
1- Aug 23, 25	Ethical Models
2- Aug 30, 1	Decision Making
3- Sept 6, 8	Group Work, Review
4- Sept 13, 15	Exam 1
5- Sept 20, 22	Environment
6- Sept 27, 29	Energy
7- Oct 4, 6	Climate Change
8- Oct 11, 13	Exam 2
9- Oct 18, 20	Book Report Presentations
10- Oct 25, 27	Safety
11- Nov 1, 3	Hazop
12- Nov 8, 10	Intellectual Property
13- Nov 15, 17	Exam 3
14- Nov 22, 24	Special Topics
15- Nov 29, 1	Special Topics Presentations
16- Dec 6, 8	Final

Meeting locations and due dates for each course activity can be found on canvas.

Important University Dates

See the Academic Calendar: https://www.tamuct.edu/registrar/academic-calendar.html

TECHNOLOGY REQUIREMENTS AND SUPPORT

Computer access will be needed to attend lectures and complete homework and projects.

Technology Requirements

This course will use the A&M-Central Texas Instructure Canvas learning management system. **We strongly recommend the latest versions of Chrome or Firefox browsers. Canvas no longer supports any version of Internet Explorer.**

Logon to A&M-Central Texas Canvas [https://tamuct.instructure.com/] or access Canvas through the TAMUCT Online link in myCT [https://tamuct.onecampus.com/]. You will log in through our Microsoft portal.

Username: Your MyCT email address. Password: Your MyCT password

Canvas Support

Use the Canvas Help link, located at the bottom of the left-hand menu, for issues with

Canvas. You can select "Chat with Canvas Support," submit a support request through "Report a Problem," or call the Canvas support line: 1-844-757-0953.

For issues related to course content and requirements, contact your instructor.

Online Proctored Testing

A&M-Central Texas uses Proctorio for online identity verification and proctored testing. This service is provided at no direct cost to students. If the course requires identity verification or proctored testing, the technology requirements are: Any computer meeting the minimum computing requirements, plus web camera, speaker, and microphone (or headset). Proctorio also requires the Chrome web browser with their custom plug in.

Other Technology Support

For log-in problems, students should contact Help Desk Central, 24 hours a day, 7 days a week

Email: helpdesk@tamu.edu
Phone: (254) 519-5466
Web Chat: [http://hdc.tamu.edu]
Please let the support technician know you are an A&M-Central Texas student.

UNIVERSITY RESOURCES, PROCEDURES, AND GUIDELINES

Drop Policy

If you discover that you need to drop this class, you must complete the Drop Request Dynamic Form through Warrior Web.

[https://dynamicforms.ngwebsolutions.com/casAuthentication.ashx?InstID=eaed95b9-f2be-45f3-a37d-46928168bc10&targetUrl=https%3A%2F%2Fdynamicforms.ngwebsolutions.com%2FSubmit%2FForm%2FStart%2F53b8369e-0502-4f36-be43-f02a4202f612].

Faculty cannot drop students; this is always the responsibility of the student. The Registrar's Office will provide a deadline on the Academic Calendar for which the form must be completed. Once you submit the completed form to the Registrar's Office, you must go into Warrior Web and confirm that you are no longer enrolled. If you still show as enrolled, FOLLOW-UP with the Registrar's Office immediately. You are to attend class until the procedure is complete to avoid penalty for absence. Should you miss the drop deadline or fail to follow the procedure, you will receive an F in the course, which may affect your financial aid and/or VA educational benefits.

Academic Integrity

Texas A&M University-Central Texas values the integrity of the academic enterprise and strives for the highest standards of academic conduct. A&M-Central Texas expects its students, faculty, and staff to support the adherence to high standards of personal and scholarly conduct to preserve the honor and integrity of the creative community. Any deviation by students from this expectation may result in a failing grade for the assignment and potentially a failing grade for the course. All academic misconduct concerns will be referred to the Office of Student

Conduct. When in doubt on collaboration, citation, or any issue, please contact your instructor before taking a course of action.

For more information regarding the Student Conduct process, [https://www.tamuct.edu/student-affairs/student-conduct.html].

If you know of potential honor violations by other students, you may submit a report, [https://cm.maxient.com/reportingform.php?TAMUCentralTexas&layout_id=0].

Academic Accommodations

At Texas A&M University-Central Texas, we value an inclusive learning environment where every student has an equal chance to succeed and has the right to a barrier-free education. The Office of Access and Inclusion is responsible for ensuring that students with a disability receive equal access to the university's programs, services and activities. If you believe you have a disability requiring reasonable accommodations, please contact the Office of Access and Inclusion, WH-212; or call (254) 501-5836. Any information you provide is private and confidential and will be treated as such.

For more information, please visit our Access & Inclusion Canvas page (log-in required) [https://tamuct.instructure.com/courses/717]

Important information for Pregnant and/or Parenting Students

Texas A&M University-Central Texas supports students who are pregnant and/or parenting. In accordance with requirements of Title IX and related guidance from US Department of Education's Office of Civil Rights, the Dean of Student Affairs' Office can assist students who are pregnant and/or parenting in seeking accommodations related to pregnancy and/or parenting. Students should seek out assistance as early in the pregnancy as possible. For more information, please visit Student Affairs [https://www.tamuct.edu/student-affairs/pregnant-and-parenting-students.html]. Students may also contact the institution's Title IX Coordinator. If you would like to read more about these requirements and guidelines online, please visit the website [http://www2.ed.gov/about/offices/list/ocr/docs/pregnancy.pdf].

Title IX of the Education Amendments Act of 1972 prohibits discrimination on the basis of sex and gender–including pregnancy, parenting, and all related conditions. A&M-Central Texas is able to provide flexible and individualized reasonable accommodation to pregnant and parenting students. All pregnant and parenting students should contact the Associate Dean in the Division of Student Affairs at (254) 501-5909 to seek out assistance. Students may also contact the University's Title IX Coordinator.

Tutoring

Tutoring is available to all A&M-Central Texas students, on a remote online basis. Visit the Academic Support Community in Canvas to view schedules and contact information. Subjects tutored on campus include Accounting, Advanced Math, Biology, Finance, Statistics, Mathematics, and Study Skills. Student success coaching is available online upon request.

If you have a question regarding tutor schedules, need to schedule a tutoring session, are interested in becoming a tutor, success coaching, or have any other question, contact Academic

Support Programs at (254) 501-5836, visit the Office of Student Success at 212F Warrior Hall, or by emailing studentsuccess@tamuct.edu.

Chat live with a tutor 24/7 for almost any subject from on your computer! Tutor.com is an online tutoring platform that enables A&M-Central Texas students to log in and receive online tutoring support at no additional cost. This tool provides tutoring in over 40 subject areas except writing support. Access Tutor.com through Canvas.

University Writing Center

University Writing Center: Located in Warrior Hall 416, the University Writing Center (UWC) at Texas A&M University–Central Texas (A&M–Central Texas) is a free service open to all A&M–Central Texas students. For the Fall 2021 semester, the hours of operation are from 10:00 a.m.-5:00 p.m. Monday thru Thursday in Warrior Hall 416 (with online tutoring available every hour as well) with satellite hours available online only Monday thru Thursday from 6:00-9:00 p.m. and Saturday 12:00-3:00 p.m.

Tutors are prepared to help writers of all levels and abilities at any stage of the writing process. While tutors will not write, edit, or grade papers, they will assist students in developing more effective composing practices. By providing a practice audience for students' ideas and writing, our tutors highlight the ways in which they read and interpret students' texts, offering guidance and support throughout the various stages of the writing process. In addition, students may work independently in the UWC by checking out a laptop that runs the Microsoft Office suite and connects to WIFI, or by consulting our resources on writing, including all of the relevant style guides. Whether you need help brainstorming ideas, organizing an essay, proofreading, understanding proper citation practices, or just want a quiet place to work, the UWC is here to help!

Students may arrange a one-to-one session with a trained and experienced writing tutor by making an appointment via WCOnline at https://tamuct.mywconline.com/. In addition, you can email Dr. Bruce Bowles Jr. at bruce.bowles@tamuct.edu if you have any questions about the UWC, need any assistance with scheduling, or would like to schedule a recurring appointment with your favorite tutor by making an appointment via WCOnline at https://tamuct.mywconline.com/. In addition, you can email Dr. Bruce Bowles Jr. at bruce.bowles@tamuct.edu if you have any questions about the UWC, need any assistance with scheduling, or would like to schedule a recurring appointment with your favorite tutor.

University Library

The University Library provides many services in support of research across campus and at a distance. We offer over 200 electronic databases containing approximately 400,000 eBooks and 82,000 journals, in addition to the 96,000 items in our print collection, which can be mailed to students who live more than 50 miles from campus. Research guides for each subject taught at A&M-Central Texas are available through our website to help students navigate these resources. On campus, the library offers technology including cameras, laptops, microphones,

webcams, and digital sound recorders.

Research assistance from a librarian is also available 24 hours a day through our online chat service, and at the reference desk when the library is open. Research sessions can be scheduled for more comprehensive assistance, and may take place virtually through WebEx, Microsoft Teams or in-person at the library. Assistance may cover many topics, including how to find articles in peer-reviewed journals, how to cite resources, and how to piece together research for written assignments.

Our 27,000-square-foot facility on the A&M-Central Texas main campus includes student lounges, private study rooms, group work spaces, computer labs, family areas suitable for all ages, and many other features. Services such as interlibrary loan, TexShare, binding, and laminating are available. The library frequently offers workshops, tours, readings, and other events. For more information, please visit our Library website [http://tamuct.libguides.com/index].

A Note about Sexual Violence at A&M-Central Texas

Sexual violence is a serious safety, social justice, and public health issue. The university offers support for anyone struggling with these issues. University faculty are mandated reporters, so if someone discloses that they were sexually assaulted (or a victim of Domestic/Dating Violence or Stalking) while a student at TAMUCT, faculty members are required to inform the Title IX Office. If you want to discuss any of these issues confidentially, you can do so through Student Wellness and Counseling (254-501-5955) located on the second floor of Warrior Hall (207L).

Sexual violence can occur on our campus because predators often feel emboldened, and victims often feel silenced or shamed. It is incumbent on ALL of us to find ways to actively create environments that tell predators we don't agree with their behaviors and tell survivors we will support them. Your actions matter. Don't be a bystander; be an agent of change. For additional information on campus policy and resources visit the Title IX webpage [https://www.tamuct.edu/compliance/titleix.html].

Behavioral Intervention

Texas A&M University-Central Texas cares about the safety, health, and well-being of its students, faculty, staff, and community. If you are aware of individuals for whom you have a concern, please make a referral to the Behavioral Intervention Team. Referring your concern shows you care. You can complete the referral online [https://cm.maxient.com/reportingform.php?TAMUCentralTexas&layout_id=2].

Anonymous referrals are accepted. Please see the Behavioral Intervention Team website for more information [https://www.tamuct.edu/bit]. If a person's behavior poses an imminent threat to you or another, contact 911 or A&M-Central Texas University Police at 254-501-5800.

Copyright Notice

Students should assume that all course material is copyrighted by the respective author(s). Reproduction of course material is prohibited without consent by the author and/or course instructor. Violation of copyright is against the law and Texas A&M University-Central Texas' Code of Academic Honesty. All alleged violations will be reported to the Office of Student Conduct.

Project 1: Book Review Grading Rubric

Category	Outstanding	Acceptable	Needs Improvement	Score
Introduction (10 pt)	Clearly presents key thesis of book. Strong overall critique of the books thesis support. States clearly value of reading book.	Key thesis of book presented. Mediocre overall critique of the books thesis support. Value of reading the book stated.	Key thesis of book poorly presented. Weak summary critique of the books thesis support. Does not state if reading book is of value.	
Summary (20 pt)	Clearly describes thesis, argument and conclusions of text. Shows good understanding of relevant main points and avoids extraneous detail.	Describes some elements of thesis and argument, but misses or misunderstands some parts of the text	Misses or misunderstands major parts of text. Lacks basic understanding of the issues.	
Critique (20 pt)	Perceptively describes and evaluates the kinds of evidence used to support the claims in the text. Thoughtful evaluation of strengths and weaknesses of text.	Describes most of the evidence used, and shows some ability to evaluate usefulness and relevance of evidence.	Describes some of the evidence used, but is not able to evaluate relevance and usefulness. Mostly ignores evaluation and focuses on summary	
Organization and Mechanics (20 pt)	Report is well organized and clearly written. The underlying logic is clearly articulated and easy to follow. Words are chosen that precisely express the intended meaning and support reader comprehension. Diagrams or analyses enhance and clarify presentation of ideas. Sentences are grammatical and free from spelling errors.	Report is organized and clearly written for the most part. In some areas the logic or flow of ideas is difficult to follow. Words are well chosen with some minor exceptions. Diagrams are consistent with the text. Sentences are mostly grammatical and only a few spelling errors are present but they do not hinder the reader.	Report lacks an overall organization. Reader has to make considerable effort to understand the underlying logic and flow of ideas. Diagrams are absent or inconsistent with the text. Grammatical and spelling errors make it difficult for the reader to interpret the text in places.	
Presentation (30 pt)	Slides are error-free and logically present the main components of the process and recommendations. Material is readable and the graphics highlight and support the main ideas. Speakers are audible and fluent on their topic, and do not rely on notes to present or respond. Speakers respond accurately and appropriately to audience questions and comments.	Slides are error-free and logically present the main components of the process and recommendations. Material is mostly readable and graphics reiterate the main ideas. Speakers are mostly audible and fluent on their topic, and require minimal referral to notes. Speakers respond to most questions accurately and appropriately.	Slides contain errors and lack a logical progression. Major aspects of the analysis or recommendations are absent. Diagrams or graphics are absent or confuse the audience. Speakers are often inaudible or hesitant, often speaking in incomplete sentences. Speakers rely heavily on notes. Speakers have difficulty responding clearly and accurately to audience questions.	

Project 2: Special Topics Grading Rubric				
Category	Outstanding	Acceptable	Needs Improvement	Score
Thesis and Introduction (10 pt)	Clear, concise, well developed thesis. Major supporting evidence for thesis indicated.	Clear and mostly complete thesis and supporting statements.	Vague, incomplete, or missing thesis and support statements.	
Demonstration of Knowledge (20 pt)	The paper demonstrates that the author fully understands topic. Facts integrated into the writer's own insights based on evidence. The writer provides concluding remarks that show analysis of topic.	The paper demonstrates that the author, for the most part, understands the topic. Some of the conclusions, however, are not supported in the body of the paper.	The paper does not demonstrate that the author has fully understood topic.	
Depth (15 pt)	In-depth exploration and discussion of topic in all sections of the paper.	In-depth exploration and discussion of topic in most sections of the paper.	Weak exploration and discussion of topic in most sections of the paper.	
Ethical Concerns (10 pt)	Ethical implications or concerns of the topic are explored in depth.	Ethical implications of the topic are explored.	Poor or missing discussion of the ethical concerns for the topic.	
Organization and Mechanics (20 pt)	Report is well organized and clearly written. The underlying logic is clearly articulated and easy to follow. Words are chosen that precisely express the intended meaning and support reader comprehension. Figures and diagrams used to enhance and clarify presentation of ideas. Sentences are grammatical and free from spelling errors.	Report is organized and clearly written for the most part. In some areas the logic or flow of ideas is difficult to follow. Words are well chosen with some minor exceptions. Figures and diagrams are used and are consistent with the text. Sentences are mostly grammatical and only a few spelling errors are present but they do not hinder the reader.	Report lacks an overall organization. Reader has to make considerable effort to understand the underlying logic and flow of ideas. Figures and Diagrams are absent or inconsistent with the text. Grammatical and spelling errors make it difficult for the reader to interpret the text in places.	
Sources (5 pt)	More than 5 current sources, of which at least 2 are peer-review journal articles or scholarly books. Sources include both general background sources and specialized sources. Special-interest sources and popular literature are acknowledged as such if they are cited. All web sites utilized are authoritative.	Fewer than 5 current sources, or fewer than 2 of 5 are peer-reviewed journal articles or scholarly books. All web sites utilized are credible.	Fewer than 5 current sources, or fewer than 2 of 5 are peer-reviewed journal articles or scholarly books. Not all web sites utilized are credible, and/or sources are not current. Sources are not cited.	
Presentation (20 pt)	Slides are error-free and logically present the main components of the process and recommendations. Material is readable and the graphics highlight and support the main ideas. Speakers are audible and fluent on their	Slides are error-free and logically present the main components of the process and recommendations. Material is mostly readable and graphics reiterate the main ideas. Speakers are mostly audible and	Slides contain errors and lack a logical progression. Diagrams or graphics are absent or confuse the audience. Speakers are often inaudible or hesitant, often	

	topic, and do not rely on notes to present or respond. Speakers respond accurately and appropriately to audience questions and comments.	fluent on their topic, and require minimal referral to notes. Speakers respond to most questions accurately and appropriately.	speaking in incomplete sentences. Speakers rely heavily on notes. Speakers have difficulty responding clearly and accurately to audience questions.	