

CVEEN 3100 Spring 2021 Syllabus

Technical Communication for Engineers | BIPPES



1. COURSE INFORMATION

Instructor: Professor Brandy Bippes
Office: U708
Office Hours: MWF 11-12 & by appointment
Phone: +82 32.626.6205
Email: brandy.bippes@utah.edu

Meeting Times & Locations
Sec 301: T/Th 1-2:20 pm, U407

2. COURSE OVERVIEW

CVEEN 3100 Description

Learning to communicate orally and in writing is an essential component of an undergraduate engineering education. The course addresses the fundamentals of writing and reviewing technical documents, presenting scientific information through graphs and tables, and preparing technical presentations. Enrollment Requirements: Prerequisites: "C-" or better in ((WRTG 2010 OR EAS 1060 OR HONOR 2211) OR AP Lit Comp score of 4+ OR AP Lang Comp score of 4+) AND Full Major Status in (Civil Engineering OR Construction Engineering). Requirement Designation: Upper Division Communication/Writing (CW).

Credits 3

Course Description and Outcomes

Welcome! Perhaps more than any other field of engineering, civil and environmental engineering insists that its practitioners be adept writers and speakers as well as scientists. Because civil engineers working in industry are required to maintain active professional and public relations, this course addresses some of the social, ethical, and practical dimensions of workplace communications.

An engineer's work requires empirical grounding and attention to discrete details. The same is true of how one communicates his or her research. Yet for many, writing and public speaking is hard. Very hard. The act of writing or delivering a public speech—unlike solving an equation—does not always have one right answer. Oftentimes, there are numerous right answers; thus, civil and environmental engineers are forced at once to be empirical and analytical while remaining introspective, culturally sensitive, and dynamic once new information requires them to do so.

This course offers engineering students a chance to explore and question some of the meta-level aspects of the profession. In particular, this course is designed to train students to write and speak more effectively by exposing them to rhetoric as a method for analyzing, evaluating, and communicating multiple layers of technical information. Toward this end, answers to problems often appear more complicated, rather than less, as one studies a problem. Students enrolled in this class should be prepared to discuss many intricate and competing ideas; to question preconceived notions of what it is to practice engineering; and, above all, be ready to dwell in those sometimes grey areas in which questions, not answers, are the objective. Ultimately, the goal of this course is to critically train you to reason and argue about familiar things in new ways.

Learning Objectives

The assignments in CVEEN 3100 are structured to teach students:

- an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts

- an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives

3. REQUIRED TEXTS AND MATERIALS

Textbooks: Required

- D. Beer and D. McMurrey. (2014). *A Guide to Writing as an Engineer* (5th Ed.) (Required, in UAC fees)
- Finkelstein, Leo Jr. (2008). *Pocket Book of Technical Writing for Engineers & Scientists* (3rd Ed.) (Required, buy from InterPark or other source ASAP). ISBN 978-0-07-319159-1
- John Elkington. (1999). *Cannibals with Forks*. (Required, buy from InterPark or other source ASAP). ISBN 978-1-84112-084-3
- Additional required readings (available on Canvas)

Textbooks: Strongly Recommended

- Berdainer, Catherine G.P. and Lenart, Joshua B. (2021). *So, you have to write a literature review*. ISBN 978-1-119-55502-5
- Finkelstein, Jr. Leo. (2006). *Pocket book of English Grammar for Engineers and Scientists*. ISBN 978-1-57766-737-7
- Berger, Robert E. (2014). *A scientific approach to writing for engineers and scientists*. ISBN 978-1-118-83252-3

Other Required Materials & Resources

- Access to Canvas
- Access to cloud storage

Suggested Materials & Resources

- 3-ring binder or zipper case for organizing your work
- Pen/s: Multiple colors
- Highlighters: Multiple colors
- Canvas student app

4. ENGLISH IN AND OUT OF THE CLASSROOM

The medium of instruction at the University of Utah and UAC is English. **You are expected to use only English while in the classroom and for related homework activities.** This includes all communication with fellow students both for personal communication and during group activities. This policy starts from the moment you walk into the classroom. This will help your fluency as you begin to *think in English*. Using a language other than English will earn a “tardy” for the day. (See attendance requirements.)

You will be assigned individual and group homework in reading, writing, speaking, and listening to English outside the classroom. You will be assigned homework requiring you to converse and interact with English speakers outside the classroom.

5. ASSIGNMENTS & GRADE WEIGHTS

Assignments

Your final grade will consist of the combined scores on the following assignments, which are described in more detail in handouts.

Assignment	%
Quizzes (3x)	10
Memos (3x)	10
Job Document Assignment (Resume and Cover Letter)	5
Research Rough Draft (10+ pages)	15

Final Group Research Report (12-15 pages)	20
Final Group Grant (~10 pages)	20
Final Group Presentation (12-15 minutes w/ Q&A to follow)	15
Participation	5
Total	100

Participation

As this is an upper division writing class, you are responsible for doing a significant amount of reading and writing each week. You must come to class prepared to discuss the readings beyond a cursory level. You should also expect to use part of each class to raise sophisticated questions, synthesize information, and apply ideas to engineering-related topics. Each member of the class is expected to participate actively every class period; you will be evaluated on your contributions to class discussions. Additionally, I give occasional quizzes to ensure you are keeping up with the readings. **Group Activities**

Equal participation is required for group activities, and you will be graded accordingly.

Attendance

Attendance is required. Everyone is allowed **three** excused absences. Additional absences will result in a reduction to your final grade. **Five** absences will result in automatic failure of the course. In the rare event that you must miss a class, be sure to let me know and then contact a classmate for any assignment information.

Consultations

One-on-one and group consultations are a great opportunity for instructors and students to review individual assignments, improve interpersonal relations, and discuss class issues. This semester you are required to meet for two consultations in the CLEAR office. **Failing to attend a consultation will constitute an absence and no credit will be given.**

Office Hours

I am happy to talk to you about your projects and/or class concerns. I try my best to be available after most class meetings, but sometimes this is not possible. If you would like to meet, it is best to make an appointment in advance. If my office hours do not work for you, just let me know and we can figure out a time that works for both of us.

Submitting Major Assignments

The CLEAR Program maintains an archive of students' written work for ABET review purposes. All major assignments should include a cover page labeled as follows:

- Project Title
- Name(s)
- Department and Course Number
- Semester and Year
- Type of project or assignment

All major assignments must be submitted both in hard copy and electronically. Hard copies should be handed in during class on its due date; electronic files should be uploaded to the Canvas website and labeled as such: CVEEN3100_FA2019_JoeSmith_ProjectName.doc.

Students will not receive credit for an assignment until both versions are submitted.

Oral Presentations

Both individual and group presentations will be recorded and archived for use by the Department of Civil and Environmental Engineering and the CLEAR Program. Each presentation must have a title slide that includes:

- Presentation Title
- Student Name(s)
- Department Name
- Class Number, Semester, and Year
- Type of Presentation (midterm, final project, etc.)

Students should upload final presentation slides and/or handouts to the course Canvas website the same day a presentation is given. The file should be named as follows:

- Department and course number, semester and year, first and last names, name of presentation (Eg. CVEEN3100_FA2019_JoeSmith_ProjectName.doc).

ABET Student Outcomes

The Accreditation Board for Engineering and Technology (ABET) is a non-governmental organization that accredits post-secondary education programs in applied science, computing, engineering, and engineering technology. This course engages five of eleven ABET student learning outcomes, specifically:

6. LATE WORK

All assignments must be submitted by the due date. For major assignments, late work will be graded down 15% for each day late. After 2 days, you will automatically be given a 0 for the assignment. Minor assignments should be submitted on time to receive credit. No late work will be accepted for minor assignments.

7. CLASSROOM TECHNOLOGIES

Canvas

We will use Canvas regularly in this class: <http://canvas.utah.edu>

Phones

Phones are welcome during approved activities only.

Writing activities must be completed with a pen/pencil and paper or using desktop publishing software (e.g. Word), as assigned. **You may not complete academic-level writing activities on your cell phone** such as drafting paragraphs and papers.

When you look up English words in the dictionary, please use an English dictionary so you're learning English definitions in "English. Your instructor will discuss this in class.

Computer Labs

UAC computer labs are equipped with the software required for this course.

TV / Podcasts / Radio / Audio Files

Your homework will include watching American TV or movies, YouTube, TED talks, and other audio-visual texts. You will listen to texts such as podcasts, online radio, and other audio files that accompany some of your assigned readings. **You will write about every text you read, watch, or listen to.**

8. CLASSROOM TECHNOLOGIES (L.01) (L.02) (L.03) (L.04) (PL.05a) (PL.05b) (PL.05c) (PL.05d)

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9. CONFERENCES W/ INSTRUCTOR (L.01) (L.02) (L.03) (L.04) (PL.05a) (PL.05b) (PL.05c) (PL.05d)

You will conference with your instructor as often as once per week as part of your required coursework.

10. SOCIAL NORMS & U.S. EDUCATION (PL.05b) (PL.05d)

We will discuss many social norms of U.S. education throughout this class so that you will be fully prepared for U.S. education.

You will be asked to talk A LOT in class. You will be asked to share your opinion and to discuss topics such as current events and politics.

If you have any questions about an assignment or class, the appropriate action is to speak to your instructor right away. It is respectful to resolve issues with the classroom instructor before approaching higher authorities. (See Conflict Resolution below.)

11. EMAIL COMMUNICATION

When sending an email to the instructor, you must use your university Umail account or Canvas. Your instructor will not respond to email outside the Umail or Canvas system.

12. CLASS PARTICIPATION

You must complete the assigned homework and come to class prepared to participate. Arrive on time, contribute to general class discussions, contribute to small group discussions, seek feedback from other class members on work in progress, and provide thoughtful feedback to other class members.

13. ATTENDANCE

Attendance counts toward your grade (see Grade Weights below). Assignments, tests, quizzes, and exams given in class cannot be made up if you miss class.

14. ABSENCES & TARDIES

After you miss three classes, your grade will be reduced by 1/3 of a letter grade for each subsequent absence. For example, if you have a B+ and you miss a fourth class, your grade will be reduced to a B. If you miss a fifth class, your grade will be reduced to a B-. If you miss seven classes or more, you will automatically receive an E for the semester and will be required to take the course again.

If you miss a class, you should talk to one of your peers to get the information you missed. You are responsible for the material and information you missed in a class.

Tardiness (coming to class late)

If you arrive after class begins, you are late. It is polite to arrive a few minutes early.▪

Four “tardies” = 1 absence. More than 10 minutes late = absent.

▪ *Students will also be counted late for any of the following reasons:*

1. Speaking any language other than English during class
2. Leaving class for more than 3 minutes
3. Coming to class without the main textbook, a pen or pencil, and a notebook to take notes.
4. Using any technology during class without permission (e.g. looking at your phone)
5. Not participating in group activities, discussions, or being unprepared for class
6. Sleeping during class time

There are **no excused absences**. If you have an emergency, Assistant Dean of Students Kevin D’Arco kevin.darco@utah.edu may permit an excused absence in very rare circumstances. **Before you contact Kevin**, read the following carefully to determine if your situation qualifies for an excused absence:

- Activities such as work, internships, visiting an embassy, and participation in a student club are not excused absences.
- Not feeling well on the day of the exam, including having a headache, stomach ache, or a cold is not sufficient to be allowed a make-up exam. In order to be excused from an exam due to medical condition, a student’s illness must be severe and require hospitalization.
- In addition, a scheduled or unscheduled doctor appointment is not an excused absence. A note from the IGC medical clinic does not qualify a student for an excused absence. Emergencies that arise on the day of the exam will also need official documentation, including:
 - auto accidents (police report)
 - health emergencies which require hospitalization (note from the attending physician)
 - death in the family (copy of the obituary)

17. ASSIGNMENT AND FINAL COURSE GRADES

A: 94-100; **A-:** 90-93 | **B+:** 87-89; **B:** 84-86; **B-:** 80-83 | **C+:** 77-79; **C:** 74-76; **C-:** 70-73 | **D+:** 67-69; **D:** 64-76; **D-:** 60-63 | **E:** <60

Note: Students whose final grade is below a C- will be required to retake EAS 1040.

18. SPRING HOLIDAYS

The following days, this class will not meet Spring Semester 2020. It is your responsibility to know these dates and check them on the [UAC Academic Calendar](#) this and every term.

19. CONFLICT RESOLUTION

Building professional relationships with your instructors and peers is important for your university success.

It is professional to address any issues you have with a class or an instructor, directly with the instructor herself before you escalate them with other authorities. The best way to resolve issues is to build a relationship with mutual respect:

1. First, **talk to your instructor in person**. You can talk to your instructor before or after class or during office hours (listed above).
2. If you are unable to meet with your instructor in person, **send her an email**. This is easiest using the Canvas Inbox.
3. Your instructor will **make a plan together** with you to resolve the issue.
4. If you’re not satisfied with the resolution, **talk to your instructor again**.
5. Never escalate an issue to higher authorities until you have worked with your instructor.

20. UNIVERSITY POLICIES

1. The Americans with Disabilities Act. The University of Utah Asia Campus seeks to provide equal access to its programs, services, and activities for people with disabilities. If you will need accommodations in this class, reasonable prior notice needs to be given to the UAC Office of the Dean of Students – randy.mccrillis@utah.edu. The UAC Office of the Dean of Students will work with you and the instructor to make arrangements for accommodations. All written information in this course can be made available in an alternative format with prior notification to the UAC Office of the Dean of Students.

2. Sexual Misconduct. Title IX makes it clear that violence and harassment based on sex and gender (which includes sexual orientation and gender identity/expression) is a civil rights offense subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories such as race, national origin, color, religion, age, status as a person with a disability, veteran's status or genetic information. If you or someone you know has been harassed or assaulted, you are encouraged to report it to the Title IX Coordinator in the UAC Office of the Dean of Students – randy.mccrillis@utah.edu. For support and confidential consultation, contact the UAC Mental Health Counseling, 3052 Multi-complex Building, 032-626-6142.

3. Student Code of Conduct. All students are expected to maintain professional behavior in the classroom setting as outlined in the Code of Student Rights and Responsibilities, Policy 6-400 of the University Regulations Library (<http://www.regulations.utah.edu/academics/6-400.html>).

4. Wellness Statement. Personal concerns such as stress, anxiety, relationship difficulties, depression, cross-cultural differences, etc., can interfere with a student's ability to succeed and thrive at the University of Utah Asia Campus. For helpful resources, contact the UAC Mental Health Counseling Center; asiacampus.utah.edu/mental-health-counseling-center/; 0326266142. You can make an appointment using this link: <https://appointmentwithjan.as.me/schedule.php>

5. Language Policy. The University of Utah Asia campus is committed to providing and fostering an environment that is safe and free from prohibited discrimination. The following language policy applies to all academic and administrative units of the University and to all members of the University community, including faculty, staff, and students. English is recognized as the official language of instruction, assessment, and curriculum. In addition, English is the official language for all administrative and business related matters of the University.

Finally, you must make sure you that you are addressing this policy in your syllabus, "The University expects regular attendance at all class meetings. Instructors must

communicate any particular attendance requirements of the course to students in writing on or before the first class meeting. Students are responsible for acquainting themselves with and satisfying the entire range of academic objectives and requirements as defined by the instructor."

If you are requiring that students obtain an official excuse for their absences please note this in your syllabus, you do not have to require this from students. In order for a student to receive an official excused absence, they must complete a request form in the Office of the Assistant Dean of Students (kevin.darco@utah.edu) and provide any accompanying documentation with the request. If their request is approved, the Assistant Dean of Students will email all appropriate faculty with this notification.

If a student will be absent from an exam, they must email the Assistant Dean of Students at kevin.darco@utah.edu prior to the exam.

COVID Related Absences:

If you have COVID-19 symptoms, including fever or respiratory symptoms such as cough, phlegm, sore throat, and nasal congestion, you should notify your instructor immediately, call the KCDC for testing guidance, and stay home based on the KCDC's directive. You can return to class if you are clear from COVID-19 symptoms. In order to be excused from your courses, you will need an official medical certification.

Self-quarantine Statement

The University of Utah Asia Campus expects regular attendance at all class meetings. Given the current situation with COVID-19, we have created the following guidelines.

1. If a student has completed less than 50% of the course and is required to self-quarantine, we suggest that the student withdraw from the course. In this situation, all tuition will be refunded with appropriate medical documentation

2. If a student has completed 50-75% of the course and is required to self-quarantine, the Assistant Dean of Students Office will work with the faculty and student to determine the best scenario. If the decision is to withdraw from a course, all tuition will be refunded with appropriate medical documentation.

3. If a student has completed over 75% of the course and is required to self-quarantine, the student and faculty will work together to ensure that the student is able to complete the course. If the student is unable to finish all coursework during the course, a student may receive the mark "I" (incomplete) and work to complete all remaining coursework in consultation with the instructor. 1. The Americans with Disabilities Act.

21. SPRING 2021 CVEEN 3100 TENTATIVE SCHEDULE

TENTATIVE. Exact due dates and times will be given in class.

Readings must be completed before class

UNIT 1 ENTERING THE PROFESSION		
Date	Reading To Be Done Before Class	Due
Week 1: Familiarizing w/ TCOM		
2/23	Lecture: Course Introduction <ul style="list-style-type: none"> • https://techwhirl.com/what-is-technical-communications/ • https://www.nspe.org/resources/ethics/code-ethics • Pocketbook of TW Ch 1 Intro • Beer & McMurrey Ch 1 Engineers & Writing • <i>Cannibals w/ Forks</i>, Ch 1 Executive Summary (Triple Bottom Line Reading, continuous throughout semester). 	See "Files" folders in Canvas for all assignment details
2/25	Lecture: Addressing your Publics Read: <ul style="list-style-type: none"> • Dickel et al. (2018). Engineering Publics: The Different Modes of Civic Technoscience. (Find and download from Marriott lib.) • <i>3 Laws of Professional Communication</i>, Doumont (pp. 291-95) • <i>3 Engineering Disasters</i> (Canvas) • Engineering Risks and Failures: Lessons Learned from Environmental Disasters (2012) (Find and download from Marriott Lib.) • [Review: <i>Cannibals w/ Forks</i>, Ch 1 Executive Summary] • Pocket Book of TW pp. 328-329 Memoranda • Pocket Book of TW Ch 13 Grammar, Style, & Punctuation • Pocket Book of Grammar sec. 5.5 (all of 5.5, end at 5.6) Form and Voice 	Discussion Questions #1 (Hard Copy)
Week 2: Ethics		
3/2	No CVEEN 3100 today, but homework is due: Read: <ul style="list-style-type: none"> • <i>How to Read</i>, Keshav • Beer & McMurrey Ch 11 Ethics & Documentation • Beer & McMurrey Ch 4 Letters, Memoranda, etc. • Pocket Book TW Ch 2 Ethical Considerations • Pocket Book TW Ch 15 Visuals • Cruel Pies: The Inhumanity of Technical Illustrations, Dragga & Ross (find and download from Marriott Lib.) • Kimball: Rose Colored Glasses (On Canvas) • Review: https://www.nspe.org/resources/ethics/code-ethics • <i>Cannibals w/ Forks</i>, Ch 2 	Q&D 1 Due in class
3/4	Lecture: Ethics Collect Memos Read: <ul style="list-style-type: none"> • <i>Ethics in Technical Communication</i> Ch 1: Nature of Ethics (On Canvas) 	Memo #1 Diagnostic: Why do Engineers need TCOM. Due Wed. midnight. Discussion Board: Response to an ethical issue. Due by Saturday midnight.