

**MSE 498 – Special Topics: Engineering Communication**  
**Summer 2022 (online)**  
**3 Credit Hours (UG) / 4 Credit Hours (G)**

**Instructor:** Dr. Jessica TerBush  
**Contact:** [jterbush@illinois.edu](mailto:jterbush@illinois.edu)  
**Office:** 207 Ceramics  
**Time zone:** Central (US)

**Class meeting times:** Online, time determined based on pre-class survey. *(2 75-min meetings expected)*  
*You are required to participate in synchronous class discussions when held.*

**Platform:** Microsoft Teams (proposed)

**Office hours:** TBD, also online

**Class description:**

Technical communication skills are essential for engineering success. Throughout their careers, engineers must express ideas to diverse audiences, ranging from professionals in their field, to the CEO of their company, to the average layperson. To do so, they must be prepared to tailor their writing to fit the situation and meet the needs of their audience.

Although lab reports are common for university lab classes, many other types of writing are necessary for academic and industrial career success, such as white papers, technical memos, executive summaries, proposals, and press releases. In this class, we will consider and evaluate the various writing formats students will likely encounter in their career and practice writing and analyzing select examples of these formats.

**Learning Outcomes:** By the end of this course, students will be able to:

- Tailor written communications to the appropriate audience
- Draft out an outline or concept map to plan for a writing assignment
- Critique a published piece of writing
- Revise a document based on peer feedback
- Work as part of a team to create cohesive documents
- Craft a range of written deliverables often encountered in industry or academia

**Textbook:** None required

**Website:** Canvas and Teams

**Recommended Resources:**

- Civil Engineering Writing Project (<http://www.cewriting.org/courses-and-independent-study>)
- Purdue University Online Writing Lab (OWL) ([https://owl.purdue.edu/owl/purdue\\_owl.html](https://owl.purdue.edu/owl/purdue_owl.html))
- Writers Workshop (<https://writersworkshop.illinois.edu/resources-2/writer-resources/>)

- *Writing Science: How to Write Papers That Get Cited and Proposals That Get Funded*, Joshua Schimel, Oxford University Press, 1<sup>st</sup> Edition, 2011.
- *Handbook of Technical Writing*, Gerald J. Alred, Charles T. Brusaw, and Walter E. Oliu, St. Martin's Press, 10<sup>th</sup> Edition, 2011.
- *Pocket Book of Technical Writing for Engineers & Scientists*, Leo Finkelstein Jr., McGraw-Hill, 3<sup>rd</sup> Edition, 2007.
- *A Guide to Writing as an Engineer*, David F. Beer and David A. McMurrey, Wiley, 5<sup>th</sup> Edition, 2019.
- *Scientific English: A Guide for Scientists and Other Professionals*, Robert A. Day and Nancy Sakaduski, Greenwood, 3<sup>rd</sup> Edition, 2011.
- *Writing Science in Plain English*, Anne E. Greene, University of Chicago Press, 2013.
- *The Scientist's Guide to Writing: How to Write More Easily and Effectively throughout Your Scientific Career*, Stephen B. Heard, Princeton University Press, 2016.
- *The Chicago Guide to Communicating Science*, Scott L. Montgomery, University of Chicago Press, 2<sup>nd</sup> Edition, 2017.

**Course Schedule:**

<b>Week of</b>	<b>Class 1</b>	<b>Class 2</b>	<b>Homework Due (Friday of corresponding week)</b>
June 13	Intro/Audience  <i>Assignment Posted: Class Expectations Memo</i>	Memos	None
June 20	The Writing Process	Group Writing	Class Expectations Memo
June 27	White Papers  <i>Assignment Posted: Writing Outline/Plan</i>	Executive Summary  <i>Assignment Posted: Executive Summary</i>	Writing Plan/Outline
July 4	Abstracts	Time Management (recorded)	Executive Summary
July 11	Peer Critique  <i>Assignment Posted: Peer Critique of ES</i>	Proposals  <i>Assignment Posted: Group Pre-Proposal</i>	Peer Critique of Executive Summary
July 18	Journal Articles  <i>Assignment Posted: Executive Summary Rewrite</i>	Design Elements	Executive Summary Rewrite
July 25	Press Releases and Social Media	Presentations  <i>Assignment Posted: Lessons Learned Memo</i>	Group Pre-Proposal
August 1	Class Choice*	None	Lessons Learned

## Assignments and Grade Breakdown:

We will have a mixture of in-class (short) writing or discussion topics, plus weekly assignments due on Friday. Class participation will factor into your grade, so please be prepared to contribute to class discussions and critiques.

In-class assignments/participation – 30% total, including:

- Audience awareness
- Memo example discussion
- Analysis of three abstracts
- Discussion of journal articles
- Social media post on your research

Weekly writing assignments (listed in table above) – 10% each for a total of 70%

- Rubrics will be provided for each of the weekly assignments

There will be no final exam for this class.

Exact grade breakdown will depend on the class average, but default will be a straight-scale. If the class average is lower than expected, grades may be curved at the instructor's discretion.

“Straight-scale” breakdown is as follows:

<b>97-100</b>	A+	<b>77-79</b>	C+	<b>Below 60</b>	F
<b>93-96</b>	A	<b>73-76</b>	C		
<b>90-92</b>	A-	<b>70-72</b>	C-		
<b>87-89</b>	B+	<b>67-69</b>	D+		
<b>83-86</b>	B	<b>63-66</b>	D		
<b>80-82</b>	B-	<b>60-62</b>	D-		

Please note that this is a mixed graduate and undergraduate class. ***The graduate student requirements for certain assignments will be more in-depth than the undergraduate***; this will be clearly communicated when the assignment(s) are given.

## Grading Policies and Penalties:

1. A late penalty of 10% per day will be assessed for any assignments submitted after the deadline.
2. Students are expected to participate in the in-class discussions, writing assignments, and critiques. Failure to participate may result in a reduced grade for the class.
3. Plagiarism is a serious offense, and is punishable according to the University Code of Policies and Regulations. Depending on the severity of the offense, penalties range from a reduced grade for an assignment, to no credit for the assignment, to a reduced or failing grade in the class. In particularly severe circumstances, the student can be recommended for suspension or dismissal. Please make sure all non-original ideas are referenced and cited, and long passages are properly quoted. If you have questions, please ask!

## **Accommodations:**

To obtain disability-related academic adjustments and/or auxiliary aids, students with disabilities must contact the course instructor and the Disability Resources and Educational Services (DRES) as soon as possible. To contact DRES, you may call 217-333-4603, e-mail [disability@illinois.edu](mailto:disability@illinois.edu) or go to the DRES website.

Please note: This is an online class, and will require in-class participation. If you foresee any issues due to technology (slow/spotty internet, no microphone or webcam, etc), please reach out to me at the beginning of the class to see what can be done.

## **University Policies to Note (the “fine print”):**

### **Academic Integrity**

The University of Illinois at Urbana-Champaign Student Code should also be considered as a part of this syllabus. Students should pay particular attention to Article 1, Part 4: Academic Integrity. Read the Code at the following URL: <http://studentcode.illinois.edu/>.

Academic dishonesty will result in a sanction proportionate to the severity of the infraction, with possible sanctions described in 1-404 of the Student Code (<https://studentcode.illinois.edu/article1/part4/1-404/>). Every student is expected to review and abide by the Academic Integrity Policy as defined in the Student Code: <https://studentcode.illinois.edu/article1/part4/1-401/>. As a student it is your responsibility to refrain from infractions of academic integrity and from conduct that aids others in such infractions. A short guide to academic integrity issues may be found at <https://provost.illinois.edu/policies/policies/academic-integrity/students-quick-reference-guide-to-academic-integrity/>. Ignorance of these policies is not an excuse for any academic dishonesty. It is your responsibility to read this policy to avoid any misunderstanding. Do not hesitate to ask the instructor(s) if you are ever in doubt about what constitutes plagiarism, cheating, or any other breach of academic integrity.

### **Anti-Racism and Inclusivity Statement**

The Grainger College of Engineering is committed to the creation of an anti-racist, inclusive community that welcomes diversity along a number of dimensions, including, but not limited to, race, ethnicity and national origins, gender and gender identity, sexuality, disability status, class, age, or religious beliefs. The College recognizes that we are learning together in the midst of the Black Lives Matter movement, that Black, Hispanic, and Indigenous voices and contributions have largely either been excluded from, or not recognized in, science and engineering, and that both overt racism and micro-aggressions threaten the well-being of our students and our university community.

The effectiveness of this course is dependent upon each of us to create a safe and encouraging learning environment that allows for the open exchange of ideas while also ensuring equitable opportunities and respect for all of us. Everyone is expected to help establish and maintain an environment where students, staff, and faculty can contribute without fear of personal ridicule, or intolerant or offensive language. If you witness or experience racism, discrimination, micro-aggressions, or other offensive behavior, you are encouraged to bring this to the attention of the course director if you feel comfortable. You can also report these behaviors to the Bias Assessment and Response Team (BART) (<https://bart.illinois.edu/>). Based on your report, BART members will follow up and reach out to students to make sure they have the support they need to be healthy and safe. If the reported behavior also violates university policy, staff in the Office for Student Conflict Resolution may respond as well and will take appropriate action.

## **Community of Care**

As members of the Illinois community, we each have a responsibility to express care and concern for one another. If you come across a classmate whose behavior concerns you, whether in regards to their well-being or yours, we encourage you to refer this behavior to the Student Assistance Center (217-333-0050 or <http://odos.illinois.edu/community-of-care/referral/>). Based on your report, the staff in the Student Assistance Center reaches out to students to make sure they have the support they need to be healthy and safe.

Further, we understand the impact that struggles with mental health can have on your experience at Illinois. Significant stress, strained relationships, anxiety, excessive worry, alcohol/drug problems, a loss of motivation, or problems with eating and/or sleeping can all interfere with optimal academic performance. We encourage all students to reach out to talk with someone, and we want to make sure you are aware that you can access mental health support at McKinley Health Center (<https://mckinley.illinois.edu/>). Or the Counseling Center (<https://counselingcenter.illinois.edu/>). For urgent matters during business hours, no appointment is needed to contact the Counseling Center. For mental health emergencies, you can call 911.

## **Disruptive Behavior**

Behavior that persistently or grossly interferes with classroom activities is considered disruptive behavior and may be subject to disciplinary action. Such behavior inhibits other students' ability to learn and an instructor's ability to teach. A student responsible for disruptive behavior may be required to leave class pending discussion and resolution of the problem and may be reported to the Office for Student Conflict Resolution (<https://conflictresolution.illinois.edu>; [conflictresolution@illinois.edu](mailto:conflictresolution@illinois.edu); 333-3680) for disciplinary action.

## **Family Educational Rights and Privacy Act (FERPA)**

Any student who has suppressed their directory information pursuant to Family Educational Rights and Privacy Act (FERPA) should self-identify to the instructor to ensure protection of the privacy of their attendance in this course. See <https://registrar.illinois.edu/academic-records/ferpa/> for more information on FERPA.

## **Mental Health**

Significant stress, mood changes, excessive worry, substance/alcohol misuse or interferences in eating or sleep can have an impact on academic performance, social development, and emotional wellbeing. The University of Illinois offers a variety of confidential services including individual and group counseling, crisis intervention, psychiatric services, and specialized screenings which are covered through the Student Health Fee. If you or someone you know experiences any of the above mental health concerns, it is strongly encouraged to contact or visit any of the University's resources provided below. Getting help is a smart and courageous thing to do for yourself and for those who care about you.

Counseling Center (217) 333-3704  
McKinley Health Center (217) 333-2700  
National Suicide Prevention Lifeline (800) 273-8255  
Rosecrance Crisis Line (217) 359-4141 (available 24/7, 365 days a year)

If you are in immediate danger, call 911

## **Religious Observances**

Students should complete the Request for Accommodation for Religious Observances form should any instructors require an absence letter in order to manage the absence. In order to best facilitate planning and communication between students and faculty, we request that students make requests for absence letters as early as possible in the semester in which the request applies.

## **Sexual Misconduct Reporting Obligation**

The University of Illinois is committed to combating sexual misconduct. Faculty and staff members are required to report any instances of sexual misconduct to the University's Title IX and Disability Office. In turn, an individual with the Title IX and Disability Office will provide information about rights and options, including accommodations, support services, the campus disciplinary process, and law enforcement options.

A list of the designated University employees who, as counselors, confidential advisors, and medical professionals, do not have this reporting responsibility and can maintain confidentiality, can be found here: [wecare.illinois.edu/resources/students/#confidential](http://wecare.illinois.edu/resources/students/#confidential).

Other information about resources and reporting is available here: [wecare.illinois.edu](http://wecare.illinois.edu).

## **Students with Disabilities**

To obtain disability-related academic adjustments and/or auxiliary aids, students with disabilities must contact the course instructor and the as soon as possible. To ensure that disability-related concerns are properly addressed from the beginning, students with disabilities who require assistance to participate in this class should contact Disability Resources and Educational Services (DRES) and see the instructor as soon as possible. If you need accommodations for any sort of disability, please speak to me after class, or make an appointment to see me or see me during my office hours. DRES provides students with academic accommodations, access, and support services. To contact DRES you may visit 1207 S. Oak St., Champaign, call 333-4603 (V/TDD), or e-mail [disability@illinois.edu](mailto:disability@illinois.edu). <http://www.disability.illinois.edu/>.