

ENGIN 185: THE ART OF STEM COMMUNICATION

Semester: Spring 2020

Instructor: Sonner Kehrt (etskehr@berkeley.edu)

Units: 3 units

MW 3:30 - 5:00 pm

290 Hearst Memorial Mining Building

Instructor Office Hours:

Wednesdays, 2:00pm – 3:00pm, 101 Bechtel

Catalog Description:

This course provides engineering majors with the fundamental skills for effective technical communication to broad audiences. During the course of the semester, students will develop communications for public dissemination, covering a project or initiative within UC Berkeley's College of Engineering. This work will call on students to: (a) cultivate interest in a broad range of topics related to Engineering; (b) become an engaged and critical reader of academic and general-interest science publications; (c) learn how to assess, plan for, and respond to a variety of communicative situations; (e) produce focused, and at the same time, narratively-rich, accounts of Engineering research.

Course Objectives:

In this course, students will:

- learn the basics of communication; students will be challenged to inform, explain to, and persuade a variety of audiences
- research and report on a chosen topic and critically evaluate the information they encounter
- learn to distill technical information and develop nuanced approaches to balancing the complexity of a research project with the clarity of message.

Accommodations:

If you have been issued a letter of accommodation from the Disabled Students Program (DSP), please see one of the instructors as soon as possible to work out the necessary arrangements. If you need accommodations but have not yet registered with the DSP, please do so as soon as possible. You may also request accommodation of religious creed, disabilities, and other special circumstances. Please arrange to meet with the instructors to discuss your request so that they can plan accordingly in advance.

Academic Integrity:

University policies on academic integrity will be strictly enforced. The text and ideas you submit as your own in class must not be copied from another source without appropriate reference. You may also wish to read the Campus Code of Student Conduct located at <http://sa.berkeley.edu/conduct>. If you have any questions or concerns, please do not hesitate to speak with one of the instructors.

Classroom Etiquette:

Laptops are permitted in class in order to review course material and take notes. If students choose to use their laptops during class time, they must be used for academic purposes; social media, browsing the internet for non-course-related material, e-mail etc. is not permitted.

Please arrive on time, so we can start and finish on time. Instruction will start promptly at 3:40pm.

Format:

Students will attend 3 lecture hours each week (two 1.5 hour sessions), led by either Co-Instructor. There are no prerequisites.

The final deliverables in this course are a written article, a “vignette” (a shorter version of your article with accompanying visual media) and a presentation. You may work alone or in teams of two. All of these deliverables will focus on a single research project or initiative within the College of Engineering. Gaining enough information on this project to produce a well-researched, informative final product will require you to investigate background information, report on on-going research, and interview at least one researcher. The course is designed as a series of smaller assignments that will help break down this process and keep you on track to complete the final deliverables.

Final articles should be about 1000 words and will include a visual component as discussed in class. Vignettes will be about 75 words long and will also include visual media. Your presentation will run for 5-7 minutes and have at least 5 slides.

Course Overview

Week	Date	Topic(s)	Assignment(s) Due
1	1/20	(No Monday class) Course overview; aims of communication; writing for a technical vs. a general audience	
2	1/27	COE areas of research overview; what is a story?; researching topics and stories; reviewing a piece of writing	1. Professional biography
3	2/3	What is a story?; topic vs. story; complexity and simplicity in writing	1. Revised professional biography 2. Teams submitted (if working in a group)
4	2/10	TQS framework; contacting a source; intro to structure; elements of visual storytelling; photography basics	1. Research topic ID'd by Monday 2. Simplification assignment 3. Contact professor or grad student for interview
5	2/17	(No Monday class) intro to oral communications; elevator pitches	1. Annotated bibliography 2. Schedule interview (for Week 7 or 8)
6	2/24	Preparing for an interview; interview techniques; using templates in writing and structure; assembling a story	1. List of ten interview questions [revised questions due at end of class]
7	3/2	Ethics of reportage; objectivity vs. neutrality; fact-checking	1. Students should be conducting interviews in Weeks 7/8
8	3/9	Engineering ethics; real world consequences of engineering decisions; bias in engineering	1. Research ethics write up 2. Students should be conducting interviews in Weeks 7/8
9	3/16	Assembling a story; structure in science writing; presentation basics; visual communication and basics of design; sourcing images/scientific illustrations; image copyright and ethics	1. Summary of interview paper [due 3/20]
	3/23	Spring Break – No Class	
10	3/30	Audience Analysis Presentations	1. Audience analysis presentations slide deck
11	4/6	Giving and receiving feedback; clarity in writing; structure 2.0	1. Draft copy of final article and vignette (both w/ visuals) & 10-15 word summary of report [due 4/10]
12	4/13	Workshop: Peer Review and Editing	1. Video self-assessment (from audience analysis presentation) 2. Read through/skim drafts from your peer review group
13	4/20	Speaking practice; Final presentations begin Wednesday	1. Slide deck for final presentations [due 4/22]

14	4/27	Final presentations	1. Vignette [due 4/27] & Final Article [due 5/1]
RRR	5/4	Final Presentations [if necessary]	

Grading Policy

There are three major factors that go into your grade:

1. Final Deliverables – 50%

Week 13 & Week 14: Presentation – 15%

Week 13: Vignette – 10%

Week 14: Article – 25%

2. Homework Assignments – 45%

Week 2: Professional Biography – 5% [Must be completed individually]

Week 4: Simplification Writing Exercise – 5% [Must be completed individually]

Week 5: Annotated Bibliography – 5%

Week 6: Interview Questions – 5%

Week 8: Ethics of Research Write-up – 5% [Must be completed individually]

Week 9: Interview Summary – 5%

Week 10: Audience Analysis Presentations – 5%

Week 11: Story Drafts – 5%

Week 12: Video Self-Assessment – 5% [Must be completed individually]

3. Attendance & Class Participation – 5%

Participation in class discussions is encouraged (active listening, asking and answering questions), and you're expected to be an active participant in classroom activities and group work; spoken communication is an important part of communication generally. However, your participation grade will also be dependent on your end-of-class Blue Book reflections. At the end of each class session, there will be time to write a Blue Book entry on the class. These entries should be one page (single side) of your book, examining what we discussed in class, things you learned, questions you may have, and thoughts you have on the material. In order to get full participation points, your Blue Book entries should (1) show that you paid attention in class and (2) are *actively* reflecting upon what you are learning—what questions do you have? What did you want to learn more about? *These entries should not merely be a summary of what we went over in class.*

Attendance for this class is mandatory—in-class exercises reinforce the material and help build to the final deliverables. Please let the professor know ahead of time if you're going to be absent. More than two unexcused absences will negatively affect your grade.

Rubrics for each graded homework assignment are provided in the "Homework Assignments" section of the syllabus below. **Read the rubrics so you are clear on what you will be graded on for each assignment.** Rubrics for the final deliverables will be provided. With the exception of class participation, the grading points allocated for each assignment correspond with how much the assignment is worth (i.e. a homework assignment worth 5% corresponds to 5 points). That means there are a total of 100 possible points for the semester. The grading point breakdown is:

A+ : 98.1-100.0
A : 94.1-98.0
A- : 90.1-94.0
B+ : 88.1-90.0
B : 84.1-88.0
B- : 80.1-84.0
C+ : 78.1-80.0
C : 74.1-78.1
C- : 70.1-74.0
D : 60.0-70.0
F : >60

Students may turn in **two** homework assignments for a regrade (must be resubmitted **via e-mail to Sonner within 2 weeks** of receiving your original grade to be considered for a regrade).

Weekly Assignments and Readings

Detailed assignment descriptions and grading rubrics can be found at the end of the syllabus. **Homework assignments will be due on bCourses before the start of Monday class** (unless otherwise noted).

A course reader is available for purchase at Copy Central on Telegraph Avenue and there is also a copy in the Engineering Library course reserves for you to use. The materials from which these readings are drawn are also available through UC Berkeley's libraries, either physically or via OskiCat. *The reader does not include readings that are hyperlinked in the syllabus; those readings are available online.*

Week 1 – 1/20

Topic: Aims of Communication

Assignment Due: None

Readings: None

Week 2 – 1/27

Topic: Areas of Research

Assignment Due:

- (a) Professional biography (Bring three hard copies to class)

Readings:

- (a) Graff, Gerald and Cathy Birkenstein
2010 'So What? Who Cares?': Saying Why It Matters. *In They Say / I Say: The Moves that Matter in Academic Writing*. Pp.92-101. New York: Norton.

Week 3 – 2/3

Topic: Introduction to Storytelling

Assignment Due:

- (a) Revised professional biography
- (b) If working with partner(s), must submit names of team members

Readings:

(a) Lallensack, Rachel

2019 This Ink is Made from Air Pollution. Smithsonian.com. Accessed online Aug 2, 2019, <https://www.smithsonianmag.com/innovation/ink-made-air-pollution-180972212/>

(b) Hall, Shannon

2018 A Superconductor Scandal? Scientists Question a Nobel Prize-Worthy Claim. Scientific American. Accessed online Aug 2, 2019, <https://www.scientificamerican.com/article/a-superconductor-scandal-scientists-question-a-nobel-prize-worthy-claim/>

(c) Booth, Wayne, Gregory Colomb and Joseph Williams

2008 From Topics to Questions. *In* The Craft of Research. Pp. 35-50. Chicago: University of Chicago Press.

Week 4 – 2/10

Topic: What Makes a Story? (Part 1)

2/12 Guest Speaker: Adam Lau

Assignment Due:

- (a) Simplification written assignment
- (b) Submit research topic
- (c) Contact primary interviewee (professor or grad student) [by end of week]

Readings:

- (a) Schimel, Joshua
2012 Making a Story Sticky. *In* Writing Science: How to Write Papers That Get Cited and Proposals That Get Funded. Pp. 16-25. New York: Oxford University Press.
- (b) von Bubnoff, Andreas
2013 Getting the Story, and Getting It Right. *In* The Science Writers' Handbook: Everything You Need to Know to Pitch, Publish, and Prosper in the Digital Age. Hayden, Thomas and Michelle Nijhuis, eds. Pp. 40-52. Boston: Da Capo Press.

Week 5 – 2/17

Topic: Introduction to Oral Communication

Assignment Due:

- (a) Schedule interview (ideally for Week 7 or 8)
- (b) Annotated bibliography (due by start of class on Wednesday, 2/19)

Readings:

- (a) Gadwal, Shilpa
2009 Elevator Pitches 101. Accessed online, Aug 2, 2019,
<https://www.asm.org/Articles/2019/March/Elevator-Pitches-101>
- (b) Zimmer, Carl
2015 Explaining Complexity. The Open Notebook. Accessed online, Jan 9, 2019,
<https://www.theopennotebook.com/2015/07/07/zimmers-guide-to-explainers/>

Week 6 – 2/24

Topic: Interviewing, Composition, and Development

Assignment Due:

- (a) List of ten interview questions

Readings:

- (a) Schimel, Joshua
2012 Story Structure. *In Writing Science: How to Write Papers That Get Cited and Proposals That Get Funded*. Pp. 26-34. New York: Oxford University Press.
- (b) Perelman, Leslie, James Paradis and Edward Barrett
1998 Paragraphs. *In The Mayfield Handbook of Technical and Scientific Writing*. Pp. 229-240. Mountain View: Mayfield Publishing Company.
- (c) Giles, Chrissie
2014 Talk to me! Top Tips for Conducting Interviews with Scientists. The Guardian. Accessed online, Jan 9, 2019,
<https://www.theguardian.com/science/2014/apr/03/top-tips-conducting-interviews-scientists-science-writing-prize>

Week 7 – 3/2

Topic: Ethics of Reportage

Assignment Due: None (you should be conducting your interview this week)

Readings:

- (a) Glass, Ira and Mike Daisey. "Mr. Daisey and the Apple Factory (Episode 252)."

2012 *This American Life*. Public Radio International. Accessed online, Dec 8, 2018, <https://archive.org/details/ThisAmericanLife454Mr.DaiseyAndTheAppleFactory>

(b) Duhigg, Charles and David Barboza

2012 In China, Human Costs Are Built Into an iPad. New York Times. Accessed online, Dec 12, 2018, http://www.nytimes.com/2012/01/26/business/ieconomy-apples-ipad-and-the-human-costs-for-workers-in-china.html?_r=0

(skim)

(b) TON Editors

2012 Ask TON: How To Fact-Check. The Open Notebook. Accessed online, Jan 9, 2019, <https://www.theopennotebook.com/2012/10/09/ask-ton-how-to-fact-check/>

Week 8 – 3/9

Topic: Engineering Ethics

Assignment Due:

- (a) Research ethics write-up
- (b) Conduct interview, if you haven't already

Readings:

(a) National Society of Professional Engineers

2007 NPSE Code of Ethics for Engineers. Accessed online, Dec 12, 2018, <https://www.nspe.org/resources/ethics/code-ethics>

(b) Beirne, Aodhan

5 Takeaways from Facebook's Leaked Moderation Documents. The New York Times. Accessed online, Jan 9, 2019, <https://www.nytimes.com/2018/12/27/world/facebook-moderators-takeaways.html>

(c) Reiley, Carol

2016 When Bias in Product Design Means Life or Death. TechCrunch. Accessed online, Jan 9, 2019, <https://techcrunch.com/2016/11/16/when-bias-in-product-design-means-life-or-death/>

Week 9 – 3/16

Topic: Putting Together A Story

3/18 Guest Speaker: Adam Lau

Assignment Due:

- (a) Summary of interview (due by midnight on Friday, 3/20)

Readings:

- (a) Cole, Peter
2008 News Writing. The Guardian. Accessed online Aug 1, 2019,
<https://www.theguardian.com/books/2008/sep/25/writing.journalism.news>

- (c) Zimmer, Carl
2011 Death to Obfuscation! National Geographic – The Loom. Accessed online Aug 1, 2019,
<https://www.nationalgeographic.com/science/phenomena/2011/01/12/death-to-obfuscation/>

Week 10 – 3/30

Topic: Audience Analysis Presentations

Assignment Due:

- (a) Prepare for presentations

Readings:

- (a) McGowan, Bill
2014 The Conviction Principle and The Curiosity Principle (excerpts). *In Pitch Perfect*. pp.116-123 and 151-157 New York: Harper Business.

- (b) Anderson, Chris
2013 How to Give a Killer Presentation. Harvard Business Review. Accessed online, Aug 2, 2019, <https://hbr.org/2013/06/how-to-give-a-killer-presentation>

- (c) Alley, Michael **[In the course reader, this is listed as Week 9, but it is for Week 10]**
2003 Speech: The Words You Say. *In The Craft of Scientific Scientific Presentations*. Pp. 15-47 New York: Springer. **(skim)**

Week 11 – 4/6

Topic: Giving and Receiving Feedback & Putting Together a Story 2.0

Assignment Due:

- (a) Draft copy of final article and vignette [bring 3 hard copies of your final article to class in addition to submitting it on bCourses] (due by midnight on Friday, 4/10)
- (b) 10 – 15 word summary of your article (due by midnight on Friday, 4/10)

Readings:

- (a) Rathi, Akshat
2014 How to Avoid Common Mistakes in Science Writing. The Guardian. Accessed online Jan 9, 2019, <https://www.theguardian.com/science/2014/apr/24/how-to-avoid-common-mistakes-in-science-writing>
- (b) Fessler, Leah
To Give Better Feedback, You Must Fully Understand the Agony of Receiving It [Interview with Sheila Heen]. Quartz. Accessed online Aug 10, 2019. <https://qz.com/work/1086444/ask-for-feedback-but-first-learn-how-to-receive-it/>
- (c) Booth, Wayne, Gregory Colomb and Joseph Williams.
2008 Connecting with Your Reader. *In* The Craft of Research. Pp. 16-27. Chicago: University of Chicago Press.

Week 12 – 4/13

Topic: Peer Review and Editing

Assignment Due:

- (a) Audience Analysis Video Self-Assessment
- (b) Skim articles/vignettes from your peer review group

Readings: None

Week 13 – 4/20

Topic: Speaking Practice and *Final Presentations*

Assignment Due:

- (a) Final deliverables fact-checked
- (b) Final presentation slide deck (due by start of class on Wednesday, 4/22)

Readings: None

Week 14 – 4/27

Final Presentations

Assignment Due:

- (a) Vignette due 4/27
- (b) Final Article due 5/1

RRR Week – 5/4

Final Presentations (if needed)

SUPPLEMENTARY RESOURCES AVAILABLE THROUGH UCB LIBRARY (VPN/Proxy-Server)

Duarte, Nancy

2008 [Slide:ology](#): The Art and Science of Creating Great Presentations. Sebastopol: O'Reilly Media.

A recent classic on visual aspects of slide-design (mostly geared to business professionals); includes chapters on diagrams, images, charts, and lay-out.

Duarte, Nancy

2010 [Resonate](#): Present Visual Stories that Transform Audiences. Hoboken: Wiley.

Applies insights from literary studies of myth, literature, and cinema to creating narratively-rich presentation content.

Nathans-Kelly, Traci and Christine G. Nicometo

2014 [Slide Rules](#): Design, Build, and Archive Presentations in the Engineering and Technical Fields. Hoboken: IEEE/Wiley.

A detailed (although sometimes dry) guide on how to apply insights from cognitive science to create more effective slides; focuses on engineering fields and includes chapters both on textual and visual aspects of slide-design.

Schimmel, Joshua

2012 [Writing Science](#): How to Write Papers That Get Cited and Proposals That Get Funded. New York: Oxford University Press.

A story-centered approach to engineering writing; describes how to use elements of plot usually associated with fiction (e.g., opening, challenge, action, resolution) in the scientific context

Perelman, Leslie C., James Paradis and Edward Barrett

1998 [The Mayfield Handbook](#) of Technical and Scientific Writing. Mountain View: Mayfield Publishing Company.

A highly-detailed handbook addressing all aspects of technical and scientific writing -- types of technical documents (reports, literature reviews, letters of proposal, press releases), strategies for effective organization, as well as fundamentals of mechanics.

Paradis, James and Muriel L. Zimmerman

2002 [The MIT Guide](#) to Science and Engineering Communication. Cambridge: MIT Press.

A thorough primer focusing on all the aspects of the writing process (organizing, revising, documenting) as well as various applications (e.g., proposals, progress reports, and journal articles).

Whitcomb, Clifford and Leslie Whitcomb

2013 [Effective Interpersonal](#) and Team Communication Skills for Engineers.

Hoboken: IEEE/Wiley.

Focuses on interpersonal and team communications (and, thus, complements our focus on technical communications). Includes chapters on emotional intelligence, attending behaviors, and conflict negotiation.

Weekly Assignments

For students working in teams, some assignments must still be completed individually. For grading purposes, assignments that may be completed with your team (designated in the description by different length standards for individuals and teams), **all team members must submit the assignment on bCourses.**

Week 2: Professional Biography (*Revised copy due Week 3*)

Completed Individually

Write a **paragraph** (max 150 words) introducing yourself. Over the course of the semester, you will refer back to this paragraph as you introduce yourself to your classmates, interviewees, and readers. Your biographies need to be relatable (i.e. engaging for non-specialists) and specific (i.e. informative for specialists). As you prepare, review the previous week’s class discussion: strive to tell a story rather than give a list of your accomplishments. You may also consider answering the following questions: How did you become a College of Engineering student? What are some of your favorite classes? What is your most memorable course project? What problems would you like to work on in the future? Bring three hard copies of your biography to class for peer review. A revised copy of your biography will be due in Week 3; the below rubric will be used to grade the final version.

Content is relatable (i.e., engaging for non-specialists)	1
Content is specific (i.e., informative for specialists)	1
Reads like a story	1
Shows evidence of revisions	1
Meets length requirements; spelling/grammar	1

Week 4: Simplification Writing Exercise

Completed Individually

Choose one of the four provided articles. All of these are selected because they are written for a more specialized audience than you will be ultimately writing for (but they should still be understandable to you, even without a background in the subject—though you may have to do some googling to clarify words/concepts). Closely read your chosen article, looking for the main message(s) the article is trying to convey, along with areas where the writing and ideas could be simplified. Especially note the use of jargon, technical language, or unnecessarily complex terms (i.e. saying *utilize* when you could just say *use*). Take some time as well to think about the level of detail provided and what details could be cut while still retaining the *overall message* of the article.

Then, rewrite the article for a more general audience. Shoot for about ~300 - 400 words, which is far shorter than the original articles. The goal is to still convey the overall message—think about whether the article’s headline would still make sense with your rewrite—but to cut unnecessary detail and to simplify the language and the concepts so the story is accessible to someone with no background knowledge of the field. Don’t be afraid to use a [thesaurus](#) to find simpler word choices.

Retains the overall message of the article	1
Language is simple and straightforward—jargon, statistics, and complex terms	2
Rewrite is clearly structured in a way that enhances the reader’s understanding.	1
Spelling and grammar are correct	1

Week 5: Annotated Bibliography

For this assignment, you'll need to browse articles—from both academic and popular sources—related to your interviewee and their research. Look for stories on the College of Engineering's media accounts, research papers written by your interviewee, related papers their research cites, and coverage of their work (or related work) in the media. If the College of Engineering media has covered your topic, be sure to include those stories—you'll need to decide how your story will be different. If there is no coverage already by COE, include a statement with your bibliography verifying that you checked COE media accounts and there is no coverage.

The purpose of this assignment is to familiarize yourself with what's already been written about your subject and get you to start thinking about how your article will be different, as well as help you begin to prepare for your interview. Additionally, your final report will need to provide an overview of your interviewee's research trajectory and situate their research project in a wider disciplinary context.

Prepare an annotated bibliography of articles related to your interviewee's area of research (at least 5 articles for individuals; 8 for groups).¹ *These should be a combination of academic and popular articles.* Each source should be accompanied by 2-4 sentences identifying why the source will be helpful to your understanding of your interviewee's research project and how it will help prepare you for your interview.

At least 5 sources for individuals; 8 for groups	1
Includes popular sources (i.e. New York Times, Scientific American, etc.)	1
Includes academic sources (i.e. research journal articles)	1
Verifies if there is already COE coverage of the topic	1
Clear explanation of why each source is helpful to your project	1

Week 6: Interview Questions

¹ For more info on how to prepare an annotated bibliography, see this OWL page:
https://owl.purdue.edu/owl/general_writing/common_writing_assignments/annotated_bibliographies/index.html

In preparation for your interview, develop a list of 10 questions to ask your interviewee. Review the research you have done for earlier assignments (Institutional Context paper and Annotated Bibliography). Think about your TQS statement and the information you need to find out from your interviewee. These should not be a list of random questions; think about how the type and sequence of the questions relate to each other and the topic, and how they will help you structure your interview. Bring three hard copies to class.

Complete/incomplete	
---------------------	--

Completed Individually

Read NPSE Code of Ethics. Based on the code, think broadly about your interviewee’s research **topic** (not your interviewee’s conduct). Write a brief paper (250 words max – this needs to be completed individually, even for those working in groups). For example, you may want to think about *inevitable tradeoffs* between different principles of ethical action and/or *ambiguities* inherent in any formalized code of ethics. For instance, NPSE Code stipulates that engineers ought to strive public interest *and* protect confidential information. However, these principles may be irreconcilable (think about Edward Snowden’s case). Or, to give another example, NPSE Code stipulates that engineers ought to hold paramount health and safety of “the public.” Who counts as “public”? You may also think about the challenges of following NPSE Code in an academic setting, where there may be a trade-off between working solely within one’s area of expertise and developing competence in new areas pertinent to one’s research.

Complete/Incomplete	
---------------------	--

[Note this is due on Friday, March 20 at midnight]

Write a paper (450 words for individuals; 650 words for groups) summarizing your interview. Be sure to also include visual media (photos, illustrations, charts etc.) that you might eventually include in your vignette or final report, or that you can use in your final presentation. You should consider this an early draft of your final deliverables, and it should incorporate the ideas we've discussed throughout the course—as you write your summary, review course materials and ask yourself:

Do I strike a balance between informing, explaining, and arguing? Does my work have a potential to create knowledge, deepen understanding, and compel action? [Week 1]

Do I state—and distinguish between—my (or my interviewee's) research topic and the question my story is addressing? Is it clear why this topic and question are significant? [Week 3]

Do I link my interviewee's research to the history of the department/broader research area? Will I be able to link my story with other stories—in popular press, trade journals, academic journals? Does my piece have a potential to become a part of a broader conversation? [Week 4]

Was I able to move from a "topic" to a "story"? Will my readers be able to identify characters involved in a conflict or journey? Is my story "sticky"? [Week 5]

Does my draft have organizational patterns? Do I use signal words to indicate these patterns? Do I use coherence devices: topic sentences, transition words, strategic repetition? [Week 6]

It's also important to ask yourself—and identify in the paper—if you are missing any information for your final report, and how you plan to get that information [i.e. do you need to send your interviewee follow up questions?]

Tone is appropriate for a general audience (no jargon, minimal data/statistics, a clear picture of why non-engineers should care comes across, etc.)	2
Organization & Coherence: One main idea in each paragraph, paragraphs arranged in a way that makes sense moving from one idea to the next, appropriate transitions and topic sentences, use of signal words, structure supports one main story	2
Specifically evaluates whether any needed information is still missing for the final article AND includes visual elements	1

Week 10: Audience Analysis Presentations

The audience analysis presentation is a chance to practice your public speaking skills and hone your final deliverables so that they resonate better with a general audience. In this presentation, you will briefly explain what it is you've been researching this semester, and then explore how potential readers might engage with or think about the information.

For this assignment, you (or your group) should think about three distinct audience groups (i.e. non-STEM undergrads; non-engineering working professionals; high school students; STEM graduate students in a different field of research, etc.). In preparation for the presentation, speak with representatives from those three audience types; talk about your plans to write a story on your topic; notice their reaction; find a way to pivot and adjust your writing to resonate with your audience's interests.

Includes an overview of your chosen audience and a description of how a representative of that audience reacted to your topic	1
Explanation of how you're going to change/edit/pivot your report/vignette/presentation based on your audience research	1
Slide design: clear, accessible, understandable	1
Body language and vocal variation	2

Week 11: Draft Copy of Final Report and Vignette

[Note this is due on Friday, April 10 at midnight]

Complete a rough draft of your final report and vignette. In their final versions, the length requirements will be:

Vignette: ~75 words plus accompanying visual elements

Article: ~1000 words plus accompanying visual elements

For the rough drafts due this week, vignettes should be submitted at the final word counts, but the article drafts may be shorter or longer (800-1300).

Note that you can—and should—draw upon what you’ve written in earlier assignments. The Interview Summary in particular serves as an early rough drafts for your final products, so if there is language or paragraphs you like in it, you may incorporate them into your final products.

In addition to the report and the vignette you must also write a 10-15 word summary of your story—as Albert Einstein said, “If you can’t explain it simply, you don’t understand it well enough.”

Bring 3 hard copies of the vignette, 10-15 word summary, and final article to class.

Includes visual media / 10 – 15 word summary: completed and aligns with content of longer draft	1
Tone is appropriate for a general audience (no jargon, minimal data/statistics, a clear picture of why non-engineers should care comes across, etc.)	1
Article is a story, not a topic (focuses on one main idea, ideas presented in paragraphs, a reader could summarize the story you’re telling in a sentence or two)	1
Organization & Coherence: One main idea in each paragraph, paragraphs arranged in a way that makes sense moving from one idea to the next, appropriate transitions and topic sentences, use of signal words, structure supports one main story	2

Week 12: Video Self-Assessment

Completed Individually

On the scale of 1-5, how would you rate your success in meeting your goal during the last round of presentations? Explain (i.e., elaborate on) your rating.

Cite a time index and/or concrete action/behavior that is a cause of concern; be as specific about what you will do in order to achieve which outcome (e.g., I will work on illustrative gestures in order to better explain my technical contributions).

What are your performance goals for the next round of presentations?

You must answer all three of these in your self-assessment to receive a Complete.

Complete/Incomplete	
---------------------	--

Week 13 & 14: Final Article/ Final Vignette / Final Presentations

Your vignettes should be about 75 words, and must include visual media – due Monday, April 27.

Final articles should be about 1000 words, and should include visual media – due Friday, May 1.

Presentation slide decks must include at least 5 slides.