



Instructor: Elisa Warford, Ph.D.

Sections: 66804 and 66848

Tu/Th 9:30-10:50 a.m. and 3:30-4:50 p.m. Pacific Time

warford@usc.edu

Zoom Personal Meeting ID: <https://usc.zoom.us/my/elisawarford>

Office: OHE 106N

Zoom office hours: Tuesday 11:00 a.m.–12:00 p.m., Wednesday 11:00 a.m.–12:00 p.m., and by appointment

To attend an office hour, sign into Zoom and join my meeting room as above. If I'm with another student, I'll ask you to return in a few minutes.

Course Overview and Objectives

An August 2021 [report](#) by the U.N.'s Intergovernmental Panel on Climate Change Climate concluded that we are locked into rising global surface temperatures until at least mid-century. The report urges a deep, rapid reduction in carbon emissions to avoid the most devastating consequences to humans, animals, and the environment. To reduce emissions, engineers must develop and improve sustainable technologies in fields such as energy, transportation, buildings, and agriculture. Other technologies will be needed to help us adapt to the new climate. Clearly, engineering plays a vital role in mitigating and adapting to climate change.

But engineering does not happen in a cultural vacuum; it operates in a complex sociotechnical system in which national and global politics, economics, and culture affect the development and implementation of climate change-related technologies. The ethical implications of the technologies must also be considered: for example, communities of color are disproportionately affected by climate and pollution problems. Further, the risks of climate change and the technologies and policies addressing it must be clearly and persuasively communicated to the public and policy-makers.

The theme of our readings, discussions, and writing this semester will thus be the engineering and communication of climate change and sustainability. We'll be focusing especially on environmental justice matters. You'll be writing papers, articles and reports, giving oral presentations, and learning to present data in drawings and graphs. For a group project, you'll review the research on a technology related to climate change and sustainability and its sociopolitical implications.

By the end of this course, you should be able to:

- Write for academic, public, and professional audiences.
- Demonstrate research and documentation abilities at the upper-division level.
- Write accurate, precise technical prose.

- Revise and edit to advanced academic and professional standards.
- Understand and cogently communicate the ethical issues related to climate change and climate change-related technologies.
- Compose a professional report that surveys the research on a climate-change related technology.
- Prepare and give professional oral presentations for a variety of audiences and purposes.
- Use visual aids in both written and oral communications.
- Work collaboratively to research, write, and present information and ideas.
- Typeset papers in LaTeX

Catalogue Description

WRIT 340 Advanced Writing (3-4, FaSpSm): Instruction in writing for various audiences on topics related to a student's professional or disciplinary interests, with some emphasis on issues of broad public concern. *Prerequisite:* WRIT 130 WRIT 140, or WRIT 150. *Required.*

Contact Me

Office hours

Office hours will normally be held on Zoom. I will be available in my personal Zoom room at the hours listed at the top of the syllabus—no appointment is necessary. If these hours are inconvenient for you, please email me for an appointment.

I can also arrange to meet in person; please email for an appointment.

Email

Outside of office hours, email is the best way to contact me (warford@usc.edu). Please email if you have questions about the course or your progress in it. I do my best to respond to emails within 24 hours, but expect a longer turnaround over the weekend.

Course Modality and Attendance

Class will normally meet in-person unless otherwise announced or indicated on the class schedule. Students are expected to attend in-person unless they have received an exemption from the university ([OSAS](#)), have been approved to take the class from overseas, or are ill or suspect they may be ill. Please do not come to class if you are experiencing symptoms of illness.

To accommodate students in these categories, classes will also be available synchronously on Zoom. To join the Zoom meeting, sign into the course on Blackboard, click “USC Zoom” on the lefthand column, and join the meeting for that day. All classes will be automatically recorded and available on Blackboard under USC Zoom for asynchronous viewing (and transcripts).

It is a violation of [USC policy](#) to disseminate the Zoom recordings (or other course notes or recordings) to anyone other than for the purposes of individual or group study or other uses relevant to the class.

Attendance

There is no official attendance policy for this course. However, it is not a lecture course for which you can easily download notes from lecture slides or watch a lecture online. Rather, it is a skills-based course, which means that the class format is largely based on live class discussion and workshopping. Therefore, for you to succeed in the course, it is important that you attend the synchronous sessions; you will be at a disadvantage—and the class will not be as engaging—if you must rely on recorded Zoom sessions.

Given the uncertain trajectory of the pandemic, these policies may change mid-semester. I also realize that we continue to face challenging circumstances that might affect your academic work. Please reach out to me if you are having difficulties attending so that we can work out a solution. You should also view the Zoom recording and check Blackboard for announcements or schedule changes.

Masking

As per USC policy, face coverings are required in class at all times. Students who do not comply with masking policies will be asked to leave and may face disciplinary action. Eating and drinking in class are prohibited.

Zoom Etiquette

Cameras: If you are attending via Zoom, please make every effort to turn on your camera during our class meetings. This helps me gauge your engagement and comprehension and helps create class community and accountability. I recognize, however, that conditions might prevent you from using the camera, such as technological issues, illness, or your home environment (though many privacy concerns can be ameliorated with virtual backgrounds). Please let me know if you are unable to use your camera for any of these or other reasons.

Chat: While we'll be using the Zoom chat feature as a class, please limit your private chat to matters about the class. It is difficult for me to monitor the chat while I'm speaking, so if you'd like to contribute to the class, please raise your digital hand.

Blackboard

This syllabus (including updates to it as necessary), the paper assignment prompts, course handouts, your grades, announcements, and other course materials will be posted on our course Blackboard space. Please check Blackboard often.

Assignments and Grading

You will be evaluated on the following assignments and activities:

Ethics analysis paper

An academic research paper in which you analyze an ethical issue related to technologies that address climate change or sustainability.

Interdisciplinary technology review

A collaboratively written review on the technological, economic, policy, and/or ethical aspects of a technology related to climate change or sustainability.

Technical description or research summary

The technical description is a brief description of the technology related to climate change or sustainability. The research summary is a summary of a scholarly article related to your technology review. The description or summary will become a part of your literature review.

Op-ed article

An op-ed article in which you address a specific demographic in the public on the usefulness of a certain technology to combat climate change.

Oral presentation of the technology discussed in the op-ed article (Zoom or in-person, TBA)

Portfolio

Revisions of your ethics paper and op-ed article.

Participation

Your level of involvement and professionalism in the class (see below).

Overall class participation

In general, I will award high participation grades to those who demonstrate engagement in the class by contributing productively to class discussions, online forums, peer reviews, and group work.

Grade breakdown

Each assignment will receive a specified number of points, for a total of 1000 points.

Assignment	Points
Ethics paper	200
Interdisciplinary technology review	150
Proposal memo for tech review	75
Technical description for tech review	75
Op-ed article	150
Op-ed presentation	100
Portfolio	200
Class participation	50
Total	1000

There is no curve in this course: an A is 94% and above, A- 90-93.5%, B+ 87-89.5% and so on.

Paper grades will be based on a common WRIT 340 rubric, available at <http://viterbi.usc.edu/academics/programs/ewp/writing/>. The rubric for oral presentations can be found on Blackboard.

Rough draft feedback policy

I am happy to provide feedback on rough drafts. Due to time constraints, I will provide general feedback on entire rough drafts only in a live conference. If you have specific questions about a paper, such as its introduction, support for a particular paragraph, or citation questions, I will answer those questions over email.

Paper submissions

Unless otherwise directed, papers will be submitted through Turnitin as PDFs. Formatting should adhere to the guidelines specified for the assignment.

Late papers

Target deadlines for most papers are by 11:59 p.m. on the day specified on the schedule of assignments. If you anticipate not being able to meet this deadline, please contact me in advance to work out a reasonable deadline. This does not apply for group project assignments, which need to adhere to a stricter timeline.

Any paper not turned in will result in a 0, which will significantly lower your course grade. *It is therefore always in your best interest to turn in a paper, even if it is very late. I will always accept late papers.*

Academic Integrity

Plagiarism is an issue in both academia and the professional world. With the proliferation of digital resources on the Internet, many of which cut and paste information from one website to another with no acknowledgement of the original source, it can be difficult for students to understand the importance of clear documentation. However, both students and professionals can face serious consequences for claiming someone else's work as their own.

Because we are in an academic setting, plagiarism (e.g., submitting someone else's work—in whole or in part—as your own, submitting your own work completed for another class without my permission) or falsifying information will not be tolerated. This includes failing to document sources properly, paraphrasing too closely to the original, and, of course, outright stealing. Depending on the violation, according to official University sanctions, you may fail the paper, fail the course, and risk suspension from the school. For an overview of the University's policies concerning academic integrity, including what constitutes plagiarism, see <http://web-app.usc.edu/scampus/>.

Students with Disabilities

Any student requesting academic accommodations based on a disability is required to register with the Office of Student Accessibility Services (OSAS) each semester. A letter of verification for approved accommodations can be obtained from OSAS. Please be sure the letter is delivered to me as early in the semester as possible.

Required Texts and Materials

Readings and materials can be found on Blackboard.

Recommended Texts

Williams, Joseph M. and Gregory G. Colomb. *Style: Lessons in Clarity and Grace*. 11th ed. Boston: Longman, 2010.

Available at Amazon and in the bookstore.

Tufte, Edward. *Visual and Statistical Thinking: Displays of Evidence for Making Decisions*.

Available as an e-book (\$2) or in print at <http://www.edwardtufte.com/tufte/ebooks>

Available in print at Amazon (\$7)

Course Schedule (subject to change)

Please complete any readings before coming to class on the day they appear on the schedule. Bring the reading to class on these days as well, as we will be working from it. Bring your laptop to class every day.

[BB] indicates reading is available on Blackboard

All classes will meet live on Zoom unless indicated as asynchronous. Zoom recordings will be shared with class.

Unit 1: Ethics of Climate Change

An ethical analysis of an engineering issue or technology related to climate change.

Week 1	Tu 8/24	Introduction to course and climate change communication—environmental justice Get-acquainted activities—introductions Climate change audience paragraph
	Th 8/26	<i>Ethics of climate change and the role of technology</i> Reading: Gardiner, “A Perfect Moral Storm” [BB]
Week 2	Tu 8/31	Ethical issues of energy technologies Reading: Jamieson, “Energy, Ethics, and the Transformation of Nature” [BB] Introduce ethics assignment
	Th 9/2	Ethical theory and application Reading: Palmer, “Contested Frameworks in Environmental Ethics” [BB] Introduction to ethics paper assignment Case study: Joshua trees (or TBA)
Week 3	Tu 9/7	Ethics paper topics Research day—use Ethics Paper Research Guide Example papers on Blackboard Bibliography managers
	Th 9/9	Abstracts and introductions—use Abstract Template In-class work on abstracts Style: Clear subjects Abstracts due in Google folder by Friday morning
Week 4	Tu 9/14	Individual Zoom conferences—Sign up for appointment on Google doc

- Wed 9/15** Individual Zoom conferences—Sign up for appointment on Google doc
- Th 9/16 Individual Zoom conferences—Sign up for appointment on Google doc
- F 9/17** Individual Zoom conferences—Sign up for appointment on Google doc

Unit 2: Interdisciplinary Technology Reviews

A collaboratively written report on a technology related to climate change.

- Week 5**
- Tu 9/21 Editing workshop
Style: Clear verbs
Formatting: Introduction to LaTeX
Online, asynchronous peer review begins. Upload papers to Google folder by class time (9:30 a.m. or 3:30).
- Th 9/23 **Peer reviews due by class time (9:30 a.m. or 3:30)**
Introduction to interdisciplinary technology review
Select groups and topics
- Week 6**
- Su 9/26 Ethics papers due on Blackboard by 11:59 p.m.**
- Tu 9/28 Group meetings in breakout rooms
Proposal writing
- Th 9/30 **Proposals due on Blackboard by 11:59 p.m.**
Group meetings
Meeting notes
- Week 7**
- Tu 10/5 Technical description and research summaries
- Th 10/7 Climate change data visualization
In-class work on technical descriptions
- Week 8**
- Tu 10/12 **Technical description/research summary rough drafts due in class (pair with group members)**
Draft workshop with group members
Style: Cohesion and coherence
- Technical description/research summary due by 11:59 on Blackboard**
- Th 10/14 **Fall recess—no class**

Week 9	Tu 10/19	Work on interdisciplinary reviews Style: Managing emphasis Go over LaTeX, executive summaries
	Th 10/21	Asynchronous work on interdisciplinary reviews
Week 10	Tu 10/26	Online team conferences with Prof. Warford. Sign up for a time on Google. Send Prof. Warford a Google link to the draft of the report before your conference.

Unit 3: Writing for the General Public: Op-Ed Articles

An opinion piece for a mainstream news outlet about your ethics topic or your technology review topic.

	Th 10/28	Introduction to op-ed assignment Yale Climate Communication Reading: Somerville & Hassol, "Communicating the Science of Climate Change" [BB]
	Su 10/31	Interdisciplinary reviews due by 11:59 p.m. on Blackboard
Week 11	Tu 11/2	Reading: Stephens, "Tips for Aspiring Op-Ed Writers" https://www.nytimes.com/2017/08/25/opinion/tips-for-aspiring-op-ed-writers.html
	Th 11/4	Professional and student examples Professional examples Lecture: Editing for concision
Week 12	Tu 11/9	Online, asynchronous peer review of op-eds. Upload op-ed drafts to Google folder by noon, Pacific Time
	Wed 11/10	Peer reviews due by 11:59 p.m., Pacific time

Oral Presentations

A 5-minute oral presentation—in-person or online TBD. The presentation will be based on your op-ed/interdisciplinary review or ethics paper.

	Th 11/11	Presentation assignment prompt Video: How to give effective talks
	Su 11/14	Op-ed articles due on Blackboard by 11:59 p.m., Pacific time

WRIT 340 Communication for Engineers

Week 13	Tu 11/16	Slide design Assertion-Evidence template
	Th 11/18	Op-ed presentations (modality TBD)
Week 14	Tu 11/23	Op-ed presentations
	Th 11/24	Thanksgiving holiday
Week 15	Tu 11/30	Optional portfolio online conferences. Sign up for a time slot on Google
	Th 12/2	Portfolios due; class wrap-up