

LMC 4813/8803: Science Communication and Public Engagement

Semester: Fall 2026

Days/Times: TR 9:30-10:45 AM

Credit hours: 3.0

Location: Skiles 010

Instructor: Dr. Kelly Ritter

Email: kelly.ritter@gatech.edu

Office: Skiles 337

Office Hours: 8:45-9:15 AM TR or appt.

Course Description:

This advanced undergraduate and graduate-level course prepares students to communicate scientific and technical knowledge effectively to diverse public audiences. Students will examine how scientific information (and misinformation) circulates across media, institutions, and communities, and will practice skills for engaging with publics in the scientific research enterprise.

Through a combination of readings, small and large group discussion, case studies, and multimodal assignments, students will analyze how science is communicated today to diverse audiences, and learn strategies for designing their own public-facing communication products, engaging with potential stakeholders, and participating in dialogues about emerging scientific issues. The course centers around thoughtful discussions of readings from both the scientific and non-scientific community that lead to practical skill development, including rhetorical awareness, audience research, message framing, visual communication, narrative design, and community-engaged approaches. By the end of the semester, students will be able to communicate their own research (or scientific topics within their domain) in ways that build trust, support informed decision-making, and foster meaningful public engagement.

Course Learning Outcomes:

Students completing the requirements for LMC 4813/8803 will be able to:

- Articulate communication goals for engaging non-expert audiences with scientific research.
- Demonstrate effective framing, message design, and multimodal communication based on research in science communication, rhetoric, and public engagement
- Evaluate science communication products for accuracy, and ethical responsibility
- Engage diverse publics using participatory approaches and dialogue.
- Create written, visual, and digital materials that effectively convey scientific information
- Articulate how effective science communication contributes to the professional success of scientists and societal well-being
- Articulate how communicating scientific research effectively has the potential to benefit society and contribute to the achievement of specific, desired societal outcomes.
- Develop personal science communication goals aligned with personal and professional aspirations.
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Required Course Materials:

Students do not need to purchase any textbooks for this course. All readings listed below are available on our Canvas site. We will also discuss podcasts, social media, and online videos relevant to science communication practices and controversies, as listed below.

Course Readings:

- American Association for the Advancement of Science. "Tips for Science Journalists." 2022. <https://www.aaas.org/programs/public-engagement/tips-science-journalists>.
- American Association for the Advancement of Science. "Using Science to Combat Misinformation and Disinformation." February 26, 2026. <https://www.sciline.org/learn/using-science-to-combat-misinformation-and-disinformation/>.
- American Association for the Advancement of Science. "Many Approaches to Public Engagement." 2026. <https://www.aaas.org/resources/communication-toolkit/many-approaches-public-engagement>.
- American Red Cross. "Measles and Rubella Awareness Campaign." 2026. <https://www.redcross.org/red-cross-youth/resources/activity-guides/measles-rubella-awareness-campaign.html>.
- American Society for Cell Biology. "ASCB Advocacy Toolbox: The Two-Minute Speech Checklist." 2022. <https://www.ascb.org/wp-content/uploads/2022/05/ASCB-Advocacy-Toolbox-checklist.pdf>.
- American Society for Cell Biology. "Casual Conversations." 2023. <https://www.ascb.org/wp-content/uploads/2025/01/BE-AN-ADVOCATE-FOR-SCIENCE-Casual-Conversations-2023.pdf>.
- Bauer, Martin W. and Bankole A. Falade. "Public Understanding of Science: Survey Research Around the World." *Routledge Handbook of Public Communication of Science and Technology*. Massimiano Bucchi and Brian Trench, Eds. Routledge, 2008: 125-144.
- Bowater, Laura and Kay Yeoman. "Chapter One: A Guide to Science Communication." *Science Communication: A Practical Guide for Scientists*. Wiley and Sons, 2013: 1-20.
- Bucchi, Massimiano and Brian Trench. "Actors and Platforms: The Who and Where of Science Communication," "The Social Conversation Around Science," "Understanding Different Viewpoints on Science Communication: More Complex, More Perplexing," "Challenges and Priorities for Science Communication" and "A Short Lexicon of Science Communication." *Science Communication: The Basics*. Routledge, 2025: 1-15; 65-88; 89-105; 106-123; 124-133.
- Cheng, Jia. "Conversations: Scientific Communication on TikTok." *Cell* 185 (August 2022): <https://www.cell.com/action/showPdf?pii=S0092-8674%2822%2900918-7>.
- DeBruin, Wandi Bruine and Ann Bostrom. "Assessing What to Address in Science Communication." *PNAS*, 2013. www.pnas.org/cgi/doi/10.1073/pnas.1212729110.
- Einsiedel, Edna F. "Public Participation in Science and Technology: Dialogue, Disputations, and Collaborations." *Routledge Handbook of Public Communication of Science and Technology*. Massimiano Bucchi and Brian Trench, Eds. Routledge, 2021: 267-290.
- European Citizen Science Association. "Ten Principles of Citizen Science." Berlin, September 2015. <http://doi.org/10.17605/OSF.IO/XPR2N>.
- European Citizen Science Association. "Characteristics of Citizen Science." April 1, 2020. PDF.
- Fahnestock, Jeanne. "The Controversy Behind the Controversies: Scientific Discourse in the Twenty-First-Century." *Rhetoric Society Quarterly* 55.3 (2025): 223-43.
- Finkler, Wiebke and Bienvenido León. "The Power of Storytelling and Video: A Visual Rhetoric for Science Communication." *JCOM* 18.5 (2019): 1-23.
- Fischhoff, Baruch. "The Sciences of Science Communication." *PNAS* 110.3 (August 2023): www.pnas.org/cgi/doi/10.1073/pnas.1213273110.

- Henderson, Mark. "Scientists Should Recognize Their Own Political Biases." *Nature* 655 (July 2, 2026): 9.
- Horowitch, Rose. "The End of Reading is Here." *Atlantic Monthly* July 8, 2026: 12-24.
- Institute for Science and Policy, The. "The National Institutes of Health: An Impressive Past and a Precarious Future." July 11, 2025. <https://institute.dmns.org/perspectives/posts/the-national-institutes-of-health-an-impressive-past-and-a-precarious-future/>.
- International Union for Conservation of Nature. "Explainer Brief: Citizen Science." January 2026. www.iucn.org/iucn-briefs.
- Kahan, Dan. "Fixing the Communication Failure." *Nature* 463 (2010): 296-97.
- Koerber, Amy and Tameem Al-Shawaf. "'What's Crazy is How Better Looking I Got.': Rethinking Ethos in the Crisis of Perpetual Stasis." *Rhetoric Society Quarterly* 55.3 (2025): 263-76.
- Lewandowski, Stephan, Michael E. Mann, Nicholas J.L. Brown, Harris Feldman. "Science and the Public: Debate, Denial, and Skepticism." *Journal of Social and Political Psychology* 4.2 (2016): 537-553.
- Lindenfeld, Laura, John C. Besley, Xia Zheng, Anthony Dudo, and Todd P. Newman. *Science Communication for Scientists*. Routledge, 2026. PDF. <https://www.taylorfrancis.com/books/oa-mono/10.4324/9781003493938/science-communication-scientists-john-besley-anthony-dudo-laura-lindenfeld-todd-newman-xia-zheng>.
- Metag, Julia and Florian Wintterlin. "Why Multimodality Matters When Science is Contested." *JCOM* 25.3 (2026): 1-14.
- Montgomery, Scott L. "CH2: The Language of Science: Historical Realities for Readers and Writers" and "CH4: Writing Well: A Few Basics." *The Chicago Guide to Communicating Science*. University of Chicago P, 2017: 13-28; 39-58.
- Morais, Ricardo and Clara Eloise Fernandes. "Scrolling Through Science: How Accurate is Science Content on Tiktok?" *JCOM* 25.2 (2026): 1-22.
- National Institutes of Health. "The Bethesda Declaration." June 9, 2025. <https://www.standupforscience.net/bethesda-declaration>.
- Nisbet, Matthew N. and Dietram A. Scheufele. "What's Next for Science Communication? Promising Directions and Lingering Distractions." *American Journal of Botany* 96.10 (2009): 1767-78.
- Toomey, Anne E. and Kevin C. Elliott. "Does Science Communication Have Its Goals Wrong? From Persuading Science Skeptics to Promoting Scientific Empowerment." *JCOM* 25.01 (2026): 1-12. <https://doi.org/10.22323/331620251101084537>.
- Tyler, Chris, K.L. Akerlof, Musa al-Gharbi, Bjørn Bedsted, Laura Boeira, Tracey Brown, Elizabeth Christopherson, Dietram A. Scheufele, Mahmud Farooque, Brian W. Head, Tepring Piquado & David Budtz Pedersen. "Six Ways to Put the Public at the Heart of Science and Policy." *Nature* 655 (July 2, 2026): 34-37.
- Vivas-Peraza, Ana Cristina. "Pathos as a Persuasive Resource for Online Research Funding: Exploring Emotion-Based Rhetorical Strategies in Science Crowdfunding Videos." *JCOM* 24.6 (2025): 1-23.
- Walsh, Lynda. "The Visual Rhetoric of Climate Change." *WIREs* 6 (2015): 361-68.
- Zerbe, Michael J., Cristina Hanganu-Bresch, and Gabriel Cutrufello. "The Rhetoric of Science in (Times of) Crisis." *Rhetoric Society Quarterly* 55.3 (2025): 207-22.

Videos, Audio Lectures, and Podcasts:

- Barber, Sarah Jane. “How Age Stereotypes Shape Cognitive Performance in Older Adults.” National Academy of Sciences Distinctive Voices series. YouTube, May 16, 2025. https://www.youtube.com/watch?v=j-Xzx_7rOik.
- Browning, Jo Filshie. “Science Communication Matters and How to Do It Better.” TEDxBasel. YouTube, July 7, 2023: <https://www.youtube.com/watch?v=7Rt8sgt7gNE>.
- CNN. “Special Report: The Origins of Vaccine Hesitancy in the US with Dr. Sanjay Gupta.” YouTube, April 9, 2021. <https://www.youtube.com/watch?v=ufXBL9CCtvs>.
- EU Sparks for Climate. https://www.instagram.com/eusparks_eu/reels/.
- HGSAC Penn State. “Effective Science Communication Through Posters, Presentations, and Infographics.” March 27, 2021. <https://www.youtube.com/watch?v=2cdF6H7DIQc>.
- Luebke, Michelle Anne. “We the People: Using the Power of Citizen Science.” YouTube, March 25, 2014. <https://www.youtube.com/watch?v=RvWEOVuBttQ>.
- Monahan, Kerryane. “Citizen Science.” TedX Talk, November 13, 2019. <https://www.youtube.com/watch?v=dpjirjUycL0>.
- PBS. “Science Denial in a Post-Truth Era.” <https://www.pbs.org/video/science-denial-in-a-post-truth-era-wv6tlr/>.
<https://www.pbs.org/video/science-denial-in-a-post-truth-era-wv6tlr/>
- Richards, Abbie (Tofology). “Videos.” *Tiktok*.
- Science Moms. https://www.instagram.com/science_moms/reels/.
- Science Moms. “The Facts: Understand Climate Change in a Few Short Videos.” 2025. <https://sciencemoms.com/climate-change-videos/>.
- Zarefsky, David. “Science and Rhetoric: Two Cultures Or One?” Iowa State University Lecture Series, April 8, 2013. YouTube (Audio recording only; lecture is from 03:00-1:02:00). <https://www.youtube.com/watch?v=d3EuUzGfHA4>.

Grading Policy:

All course grades, as well as students' final grades, will be based on the following scale:

Grade	Description	Grade Point (%)
A	Excellent	90%-100%
B	Good	80-89%
C	Satisfactory	70-79%
D	Passing	60%-69%
F	Fail	0-59%

Course Requirements and Percentage of Final Grade:

As this course enrolls both graduate and undergraduate students, all three major assignments are required for both groups of students. Graduate students have two additional assignments, as noted below. The 1-minute research explainer, and the requirement of leading class discussion on readings once during the semester, which is part of the attendance and participation grade for graduate students. Finally, graduate students are required to submit items for "Science in the Headlines" each Tuesday, whereas undergraduates will be required to submit a "Question of the Day" on assigned readings each Thursday.

Assignments	Weight	Due Date	Required of:
A#1: Science Communication Audit	25%	R 10/8 by 8:00 AM	All Students
A#2: Public-Facing Explainer	25% UGs 15% Grads	T 11/5 in class (9:30 AM)	All Students
A#3: Public Engagement Initiative or Communication Campaign	30%	<u>Draft</u> presentation T 12/8 in class <u>Final</u> presentation F 12/11, 5 PM	All Students
1-minute research explainer videos	10%	<u>Initial Draft due</u> M 8/30 by 6:00 PM <u>Revision due</u> M 11/30 by 6:00 PM	Grads only
Attendance and Participation; for graduate students, this includes <u>leading</u> discussion	10%	N/A	All Students
"Science in the Headlines:	10%	Every Tuesday	Grads only
Question of the Day	10%	Every Thursday	Undergrads only

Assignment #1: Science Communication Audit (Written Report)

Students will select an existing organization, research topic, community initiative, or public controversy and conduct a detailed audit of its current science communication practices. Students will assess strengths, limitations, gaps, and risks.

Assignment #2: Public-Facing Explainer (Poster Presentation)

Students will create an accessible, engaging explainer that translates a scientific concept or research finding for a non-expert audience. Students must demonstrate audience analysis,

effective framing, and clear communication supported by plain language and narrative techniques.

Assignment #3: Public Engagement Initiative or Communication Campaign (Multimodal)

Students will design, prototype, and implement a comprehensive public-engagement initiative or communication campaign aimed at building trust, informing the public, or facilitating dialogue around a scientific issue. Projects may include public workshops, participatory activities, outreach events, short campaigns, or educational toolkits.

One Minute “Research Explainer” Video

Graduate students will record a one-minute (on camera) overview of their current research in science as delivered to an imaginary non-scientific audience, with a draft due in Week 2 of the course and a revision of the video due in Week 15 of the course.

Attendance and Participation

This is a hands-on, workshop-style course that requires strong participation from everyone, such as engaging with your peers and with me, carefully going over readings and assigned videos and taking notes (as well as noting questions), and posting in our digital spaces.

I expect students to attend class regularly and arrive to class on time. Your grade will be an automatic F if you miss 7 or more class periods for reasons beyond documented illness or emergency, religious holiday observance, or participation in GT athletics events as part of a sports team. Please see me ASAP if you have any concerns about being able to attend class and participate regularly in it this semester.

Attendance and Participation grades are also based completion of the following:

1. “Science in the Headlines” Tuesdays—Graduate students only

Each Tuesday, all graduate students will be asked to share a headline or emergent news story on science (any subtopic within or about science and society) in print or online from the last 48 hours. Students will post a link to (or description of) their findings on our Canvas site by 10:00 PM each Monday night so that we can briefly discuss these in class on Tuesday morning.

In class, students will be expected to provide a brief a summary of the story, and the likely intended audience for it, as well as why they chose it. We will use these headlines as check-ins on how science is being communicated to us *right now*, while we are all studying it.

Students **must** post this news item **and** come to class to explain it or else be counted absent for that Tuesday.

2. “Question of the Day” Thursdays—Undergraduate students only

Each Thursday, all undergraduate students will submit one “Question Of The Day” (QOTD) post to our Canvas discussion board that **engages with the readings and/or viewings overall for that day** I will look through these before class and will choose 1-2 at random to form the leaping-off point for our discussions that day.

Questions should not be factual or yes/no but instead, **should be discussion focused** (“I was curious as to how we might apply the principle of Position Z in Article X to Article Y”). In other words, these are *thinking* questions designed to elicit *conversation or debate*. **It’s also OK to ask a question to help *your* understanding** of video or a reading, so long as it is specific and illustrates that you have engaged with the video or the reading (“I was confused about the author’s argument that X—did they mean Y or Z?”)

Students **must** post their QOTD **and** come to class ready to discuss it, or else be counted absent for that Thursday.

3. Leading Discussion—Graduate students only

Twice during the semester, each graduate student will be assigned to lead discussion on a particular reading or set of readings. We will determine the dates for each student after the course begins, via a sign-up sheet distributed during class time in Week 2.

Course Policies:

Academic Honesty/Integrity:

Georgia Tech aims to cultivate a community based on trust, academic integrity, and honor. Students are expected to act according to the highest ethical standards. For information on Georgia Tech’s *Academic Honor Code*, see <http://www.catalog.gatech.edu/policies/honor-code/> or <http://www.catalog.gatech.edu/rules/18/>. Any student suspected of cheating or plagiarizing on a quiz, exam, or assignment, including through tools such as Chat GPT, will be reported to the Office of Student Integrity, who will investigate the incident and identify the appropriate penalty for violations.

Artificial intelligence (AI) can help you to generate ideas or to find relevant sources or references, or to provide summarized information from other sources. However, AI tools are not perfect and may produce inaccurate, incomplete, or biased information—as we will discuss in relation to science communication in particular. Therefore, you should always verify and evaluate the quality and reliability of the information generated by AI. You should also be aware of the potential ethical implications of using or spreading false or misleading information.

In this course, you should never use AI tools as a substitute for creating your own content, either in written/textual assignments or visual or multimodal work. You should not use AI to violate academic integrity, or intellectual property rights. AI cannot replace your creativity, critical thinking, or judgment. Therefore, you should use AI as a supplement, not a substitute, for your own efforts, thinking, and most important, learning in this course.

Classroom Environment and General Expectations:

In order to create a mutually respectful classroom environment, I will abide by the principles for student-faculty expectations laid out by Georgia Tech. This means that I will:

- create a positive, engaged academic environment;
- be available to meet with you outside of class, either in person or via Teams, at a mutually convenient time;

- provide you in advance with all necessary materials so that you can complete all course assignments;
- make my grading criteria and rubrics available to you so that you understand how I evaluate your work for the course.

In turn, I expect that you too will fulfill your responsibilities. Specifically, I expect that:

- you will work with me to create a respectful, engaged academic environment that is mindful of the diversity of the students enrolled and that practices inclusive discourse;
- you will attend classes regularly and on time;
- you will attend all class periods unless you have an emergency or formal, pre-approved excused absence;
- you will come to class prepared, having read the required material and viewed the film(s) under discussion for that day, and be ready to engage in class discussions and other activities;
- you will adhere to the principles of Georgia Tech Student Honor Code.

Student Use of Mobile Devices in the Classroom:

This is a seminar-style course in which we need to talk with one another and also listen with intention. Therefore I ask that students only use mobile devices to access course readings or other material under discussion. Students may use laptops for note-taking and/or if they need assistive technology in order to participate, or if they are watching videos or accessing other online content in small groups. Otherwise, when we are having class discussion, watching a video clip on the large screen, or listening to presentations, I ask that we do so with our personal "screens down," out of respect for our fellow classmates.

Accommodations for Students with Disabilities:

If you are a student with learning needs that require special accommodation, please contact the Office of Disability Services at (404)894-2563 or <http://disabilityservices.gatech.edu/>, as soon as possible to make an appointment to discuss your special needs and to obtain an accommodations letter. If you have an accommodation, please speak with me as soon as possible after the start of the semester so I can understand your needs in relation to completing the work of this course.

Additional Georgia Tech Student Resources:

Writing and Communication Center

The Naugle Writing and Communication Center is located at Clough Commons 447. As stated on their website, the Center staff can help with a variety of projects, including written and multimodal projects, graduate school applications, lab reports, senior design papers, individual and group presentations, poster designs, and much more. You can read more about their services at <https://communicationcenter.gatech.edu/>.

Counseling Services

The GT Center for Mental Health Care and Resources is located in the Smithgall Student Services Building, Suite 238, at 353 Ferst Drive. Walk-in help is available, and counselors are

also on call 24/7 for students who need assistance. Call 404-894-2575 and read more about their services at <https://mentalhealth.gatech.edu/>.

Wellness Empowerment Center

The Wellness Empowerment Center provides health and well-being educational programs, events and workshops, nutrition counseling, and sexual violence prevention, education and response. They are located at the Joseph P. Whitehead Building, 740 Ferst Drive NW, Suite 232. Their phone number is (404) 894-9980 and their email is healthy@gatech.edu. You can find more information about specific services and resources at the WEC, including VOICE (GT's 24-hour Georgia Tech's sexual violence prevention and survivor support initiative) at <https://wellnesscenter.gatech.edu/>.

STAR (Student Temporary Assistance and Resources)

STAR provides help for students who need various kinds of temporary assistance, including those with food insecurity through the Klemis Kitchen, those with clothing needs through Campus Closet, those with housing needs through Crisis Housing, and those with financial needs through the Dean Griffith Hip Pocket Fund. You can learn more about these services here, including a video with more details about the Klemis Kitchen: <https://star.studentlife.gatech.edu/>.

Course Schedule

--Assignment due dates are highlighted in yellow--

Unit 1: Foundations of Science Communication and Rhetoric(s) of Science

Week 1	T 8/25	Course Introductions and Overview; First-day survey
	R 8/27	<i>Public Literacy Today: Issues and Challenges</i> Reading: Horowitch, “The End of Reading is Here.” <u>and</u> Lindenfeld et. al, “Introduction: Why Should Scientists Communicate?” <u>GRADS:</u> American Society for Cell Biology, “ASCB Advocacy Toolbox: The Two-Minute Speech Checklist” <u>and</u> “Casual Conversations.”
Week 2	M 8/30	<i>1-Minute Research Explainer Videos due in Cqnvas by 6 PM (Grads ONLY)</i>
	T 9/1	<i>Writing (and Talking) with Scientists vs. Non-Scientists</i> Reading: Montgomery, “CH2: The Language of Science: Historical Realities for Readers and Writers,” “CH4: Writing Well: A Few Basics” Viewing: Browning, “Science Communication Matters and How to Do It Better.”
	R 9/3	<i>What is Rhetoric? What is the “Rhetoric of Science”?</i> Viewing/Listening: Zarefsky, David. “Science and Rhetoric: Two Cultures Or One?”
Week 3	T 9/8	<i>What is Science Communication?</i> Reading: Bowater, Laura and Kay Yeoman. “Chapter One: A Guide to Science Communication” <u>and</u> Lindenfeld et. al, “Why are You Communicating? Starting with Strategy.” <i>Discuss Assignment #1</i>
	R 9/10	<i>Understanding Audiences and Publics</i> Reading: Lindenfeld et. al, “Zooming in on Strategy,” “Who’s Your Audience?” <u>and</u> Bucchi, Massimiano and Brian Trench. “Actors and Platforms: The Who and Where of Science Communication.”
Week 4	T 9/15	<i>Understanding Audiences and Exigency</i> Reading: Bucchi and Trench, “The Social Conversation Around Science” <u>and</u> Fahnestock, “The Controversy Behind the Controversies.” Viewing: PBS, “Science Denial in a Post-Truth Era.”

	R 9/17	Message Design and Framing Reading: Nisbet and Scheufele, “What’s Next for Science Communication?” <u>and</u> Fischhoff, “The Sciences of Science Communication.”
Week 5	R 9/22	Message Narrative Reading: Lindenfeld et. al, “Designing Effective Messages” <u>and</u> “Tell Me a Story!” <u>and</u> American Association for the Advancement of Science, “Using Science to Combat Misinformation and Disinformation.”
	R 9/24	Misinformation, Trust, and Ethics Reading: Lewandowski et. al, “Science and the Public: Debate, Denial, and Skepticism” and “Kahan, “Fixing the Communication Failure.” Viewing: CNN Special Report, “The Origins of Vaccine Hesitancy.”
Week 6	T 9/29	Misinformation, Trust, and Ethics Guest Lecture via Zoom by Dr. Leah Ceccarelli, Professor of Rhetoric, University of Washington-Seattle, “Scientists as Public Rhetors in a Post-Truth Era.” https://washington.zoom.us/j/98092474610?pwd=GZnb6sX32tXn41a0dalkC6maW0xC6G.1 Meeting ID: 980 9247 4610 Passcode: 809930
	R 10/1	Visual and Multimodal Communication Reading: Lindenfeld et. al, “The Role of Visuals in Science Communication” <u>and</u> Finkler and León, “The Power of Storytelling and Video.”
Week 7	T 10/6	No Class—Fall Break
	R 10/8	Visual and Multimodal Communication Reading: Walsh, “The Visual Rhetoric of Climate Change” <u>and</u> Metag and Winterlin, “Why Multimodality Matters When Science is Contested.” Assignment #1 due in Canvas, 8:00 AM Discuss Assignment #2

Unit 2: Analyzing Public Communication and Engagement

Week 8	T 10/13	Public Engagement Models and Practices Reading: Lindenfeld et. al, “Communicating in Person,” <u>and</u> “Communicating in Writing.” <u>And</u> American Association for the Advancement of Science,
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“Tips from Science Journalists.”

Viewing: Barber, “How Age Stereotypes Shape Cognitive Performance in Older Adults.”

R 10/15 *Public Engagement Models and Practices*

Reading: Einsiedel, “Public Participation in Science and Technology: Dialogue, Disputations and Collaborations.”

Viewing: Monahan, “Citizen Science.”

Week 9 **T 10/20**

Communication Ecosystems and Media Landscapes

Reading: Zerbe, Hanganu-Bresch, and Cutrufello. “The Rhetoric of Science in (Times of) Crisis,” and Lindenfeld et. al, “Communicating with Journalists and Media Professionals.”

R 10/22 *Institutional Communication and Policy Contexts*

Reading: Bucchi and Trench, “Challenges and Priorities for Science Communication” and Institute for Science and Policy, “The National Institutes of Health: An Impressive Past and a Precarious Future” and National Institutes of Health, “The Bethesda Declaration”

(<https://www.standupforscience.net/bethesda-declaration>).

Week 10 **T 10/27**

Institutional Communication and Policy Contexts

Reading: Henderson, “Scientists Should Recognize Their Own Political Biases,” and Tyler et. al, “Six ways to Put the Public at the Heart of Science and Policy” and Lindenfeld et. al, “Communicating With Policymakers.”

R 10/29 *Assessing Public Communication: Tools and Frameworks*

Reading: DeBruin and Bostrom, “Assessing What to Address In Science Communication.”

Viewing: HGSAC, “Effective Science Communication Through Posters, Presentations, and Infographics.”

Week 11 **T 11/3**

Assessing Public Communication: Tools and Frameworks

Reading: Volk, “Evaluations in Science Communication” And American Red Cross, “Measles and Rubella Awareness Campaign.”

R 11/5 ***Assignment #2 Poster Presentations due (in-class)***

Discuss Assignment #3

Unit 3: Designing and Implementing Public Engagement Campaigns

Week 12 **T 11/10**

Social Media as Science Communication Tools

Reading: Lindenfeld et. al, “Communicating Through Social

		Media” <u>and</u> Koerber and Al-Shawaf, “‘What’s Crazy is How Better Looking I Got.” Viewing: EU Sparks for Climate <u>and</u> Science Moms (Instagram Reels <i>and</i> Explainer Videos)
	R 11/12	<i>Social Media as Science Communication Tools</i> Reading: Cheng, “Conversations: Scientific Communication on TikTok” <u>and</u> Morais and Fernandes, “Scrolling Through Science: How Accurate is Science Content on Tik Tok?” Viewing: Abbie Richards on Tiktok (@Tofology)
Week 13	T 11/17	<i>Participatory Science</i> Reading: ECSA, “Ten Principles of Citizen Science,” “Characteristics of Citizen Science,” <u>and</u> IUCN, “Explainer Brief.” Viewing: Luebke, “We The People: Using the Power of Citizen Science.”
	R 11/19	<i>Designing Public Engagement Initiatives</i> Reading: Building With Biology, “Public Engagement With Science.”
Week 14	T 11/24 R 11/26	<i>No Class—Thanksgiving Holiday</i> <i>No Class—Thanksgiving Holiday</i>
Week 15	M 11/30	<i>1-Minute Research Explainer Videos Revision due in Cqnvas by 6 PM (Grads ONLY)</i>
	T 12/1	<i>Designing Public Engagement Initiatives</i> Reading: Vivas-Peraza, “Pathos as a Persuasive Resource” <u>and</u> American Association for the Advancement of Science, “Many Approaches to Public Engagement.” <i>Course Evaluations (in-class)</i>
	R 12/3	<i>No Class—individual conferences/presentation prep</i>
Week 16	T 12/8	<i>Student Presentations of Assignment #3 (in-class)</i>
	F 12/11	<i>Final Assignment #3 due in Canvas, 5:00 PM</i>