

COMM 3115: Communicating Science, Health, Environment

University of Utah, Spring 2022

Department of Communication

LNCO, Room 1100

Monday/Wednesday 11:50 a.m. - 1:10 p.m.

Professor: Robin E. Jensen, Ph.D. (she, her, hers)

E-mail: r.e.jensen@utah.edu (this is the best way to contact me, rather than by Canvas)

Office Hours: by appointment

Office Location: LNCO 2619

Graduate Teaching Assistant: Allison Blumling, M.A. (she, her, hers)

E-mail: allison.blumling@utah.edu

Office Hours: by appointment

Description

Communication plays a fundamental role in public perceptions of science, health, and the environment. This class provides students with an overview of how these topics tend to be communicated in contexts ranging from the mass media to public hearings to patient-provider interactions. Students will be encouraged to break down the symbolic practices facilitating such communication and assess their associated consequences in terms of lay beliefs about issues such as climate change, pandemics, nanotechnology, and genetics. Emphasis will be placed on understanding what research describes as best practices in terms of persuasively, accurately, and ethically communicating about science, health, and the environment to various audiences.

Objectives

By the end of this class, students will be able to:

- **Think critically** about how issues related to science, health, and the environment have been communicated to various publics
- Identify tactics that one might employ to **persuasively communicate issues** surrounding science, health, and the environment to a variety of different audiences
- **Delineate key ethical quandaries** that must be considered when communicating to various publics about science, health, and the environment
- Understand and **report on central lines of research** related to science, health, and the environment
- **Identify scholars doing research in areas of scholarly interest and careers they might pursue** if they were to receive an undergraduate or advanced degree in the study of communication about science, health, and/or the environment
- **Differentiate among types of methodologies** that are commonly used in research on communication about science, health, and the environment

Assignments

<i>Assignment</i>	<i>Percentage of Final Grade</i>	<i>Due</i>
Exam 1	30%	Feb. 14 (class time)
Exam 1 covers all lectures, discussions, and readings from Jan. 10 to Feb. 14.		
Exam 2	30%	March 23 (class time)
Exam 2 covers all lectures, discussions, and readings from Feb. 16 to March 23.		
Exam 3	30%	April 27 (class time)
Exam 3 covers all lectures, discussions, and readings from March 28 to April 27.		
Activity Week Assignment	10%	April 1 st (5:00 p.m.)

During the week of March 28th to April 1st, you will identify and attend a lecture, event, performance, or film (you can do so in-person or virtually) related to science, health, and/or the environment (please note that there will be no class meetings during this week to allow you time to select an event and attend it). Then, you will write a two-page, double-spaced summary of the event. In your paper, you should:

- (1) identify the event you attended, who put it on, and what it was designed to do;
- (2) describe the ideas communicated and arguments made at the event; and
- (3) describe one or more communication strategies used during the event, and consider why or why not those strategies might have been persuasive for the audience at hand.

You will need to use at least one article that we discussed in this course to back up your analysis (provide both in-text citations and a reference list in APA citation style). You might, for instance, discuss how a talk about genetics testing for people planning to have children employed specific types of metaphors to communicate what genetics is, and you might draw from the Condit and Condit (2001) reading to consider why those specific metaphors used in the talk may or may not have been an effective way to communicate and achieve the event organizer's goal. Overall, it is most important that you make sure to tie your summary to specific concepts or ideas that we went over in class.

Policies

Attendance:

In a non-pandemic semester, students would be expected to be physically in-class for all class meetings. **Given our ongoing public-health crisis, this policy is revised this semester to allow for increased flexibility so that students can participate remotely if they find themselves quarantined, are worried about the levels of community-wide viral spread, or are otherwise needing to stay home.** To allow for remote class participation, I will record every class meeting and post the video to Canvas following class. The recordings will be available to everyone in class for the entirety of the semester. All three exams will be administered online via Canvas.

Sickness and other emergencies: If you are sick, under quarantine, experiencing possible COVID-19 symptoms, or waiting on COVID-19 test results, **do not come to class**. Please participate in class remotely when you are able by watching the recording of the lecture online.

COVID-19 campus resources and guidance:

Following the CDC's guidelines, The University of Utah encourages all who are eligible to take the following actions to protect themselves and others from COVID-19:

1. [Vaccination and boosters](#)
2. [Masking indoors, especially during times of high transmission](#)
3. If unvaccinated, getting weekly asymptomatic coronavirus testing
4. Quarantining after exposure

The University of Utah also notes that testing centers are open and convenient:

- [Online scheduling](#)
- Saliva test (no nasal swab)
- Free to all students returning to campus
- Results often within 24 hours
- Visit <https://alert.utah.edu/covid/testing/>

The University of Utah requires students, faculty, and staff to self-report if they test positive for COVID-19 via this website: <https://coronavirus.utah.edu/>

In light of the pandemic and the associated mental health toll associated with it, the University also encourages its community members to seek out help if needed via the following resources available to them: [student mental health resources](#).

Disability and access accommodation:

Any student who, because of disability, may require some special arrangements in order to meet course requirements should contact the professor during the first week of class so that the necessary accommodations can be made. University's Disability and Access policy: <http://disability.utah.edu/>

Content accommodation:

No content accommodations will be available for this class. Please review the syllabus, readings, assignments, and materials to be sure that this is a course you wish to take.

Details on the university's accommodation policy are available at this link:

<http://regulations.utah.edu/academics/6-100.php> (see Section Q)

Campus safety:

The University of Utah values the safety of all campus community members. To report suspicious activity or to request a courtesy escort, call campus police at 801-585-COPS (801-585-2677). You will receive important emergency alerts and safety messages regarding campus safety via text message. For more information regarding safety and to view available training resources, including helpful videos, visit safeu.utah.edu.

Addressing sexual misconduct and student discrimination:

Title IX makes it clear that violence and harassment based on sex or gender (which includes sexual orientation and gender identity/expression) is a civil rights offense subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories such as race, nation of origin, color, religion, age, status as a person with a disability, veteran's status or genetic information. For more information regarding harassment or assault, visit: [Sexual Misconduct - Office of Equal Opportunity & Affirmative Action - The University of Utah](#) For resources and contact information having to do with the University of Utah's commitment to anti-racism and anti-violence, see: [A Call to Action - Equity, Diversity, and Inclusion \(utah.edu\)](#) See also the Department of Communication's anti-racist code of conduct: [Department of Communication Anti-Racist Code of Conduct - Department of Communication - The University of Utah](#)

Electronics/media policy: To foster an engaged and focused classroom environment, students are asked to silence all phones and other electronic devices during class. Laptops and the like should be used for taking notes rather than e-mailing or searching the web. Violation of this policy will result in a final grade deduction or, in extreme cases, elimination from the course.

Plagiarism: Any student who deliberately or unintentionally plagiarizes will immediately receive a failing grade on the assignment at hand. Plagiarism is:

- Turning in someone else's work with or without that person's knowledge.
- Copying a paper from a source text without proper acknowledgment.
- Copying materials from a source text, supplying proper documentation, but leaving out quotation marks.
- Paraphrasing materials from a source text without appropriate documentation.
- Submitting the same work in more than one course without prior permission from both faculty members.

Save a copy of all your cited work; if there are questions or concerns about the authenticity of your work, you must have these readily available. See the following link for the University of Utah's regulations regarding plagiarism:

<http://www.regulations.utah.edu/academics/6-400.html>

Materials

All readings are available via the course Canvas page. Go to "files" and click on the "course readings" folders. The readings will be categorized by lecture number, author last name, and date of publication. Under "files" you will also find an updated copy of the syllabus and power points from past lectures. Please check the Canvas page regularly for course updates.

Grading

COMM 3115 modifies the typical plus/minus system in two key ways:

(1) there is no A+ or A- because the university does not recognize an A+ as uniquely different from an A (thus making the A- problematic), and

(2) the plus/minus system is designed to conform to the full letter grade system with the following cut-offs: A (90-100), B (80-89), C (70-79), D (60-69), and F (59 and below). The plus/minus system implemented in this course has the same basic endpoints (i.e., B grades range from 80 to 89, C grades range from 70 to 79), but adds a traditional 3-4-3 plus/minus hierarchical scheme. For example, a B- is the first 3 percentage points (80, 81, 82), a B is the middle 4 percentage points (83, 84, 85, 86), and a B+ is the final 3 percentage points (87, 88, 89) (i.e., a 3-4-3 scheme).

Grade Calculation: One's course grade will be determined by the (weighted) average of the grades on the course assignments. Each assignment will receive a percentage (and a letter grade to help students interpret their score), with numerical equivalents as follows:

<u>Test Grade</u>	<u>Letter Grade</u>
90% and up	A
87% and up	B+
83% and up	B
80% and up	B-
77% and up	C+
73% and up	C
70% and up	C-
67% and up	D+
63% and up	D
60% and up	D-
59% and below	F*

*Students who score lower than a 55% on a test (after any curve or extra credit is incorporated into the grade) will be assigned a grade of 55% (so that one low grade cannot jeopardize their chances of passing). However, students who cheat, fail to show up for the test, or otherwise exhibit poor behavior will receive a zero (00%).

A student who received an 83% (B) on the first test, a 68% (D+) on the second test, an 94% (A) on the third test, and an 87% (B+) on the Activity Week Assignment (AWA) would have a course average of 81.6% (B-).

(test 1 % × test 1 weight) + (test 2 % × test 2 weight) + (test 3 % × test 3 weight) + (AWA % × AWA weight)

$$(83 \times .30) + (68 \times .30) + (94 \times .30) + (87 \times .10) = 82.2\%$$

$$24.9 + 20.4 + 28.2 + 8.7 = 82.2$$

To convert the course average into a course grade, apply the final percentage to the above scale. In this case, our hypothetical student would have a B- (82.2% is above 80% and below 83%).

Course Schedule

Unit 1: Science, health, environment

Week 1

January 10 Monday

Course Introduction

*Please note that, due to high community-spread of COVID-19 and the University's decision to have classes go online for the first day if instructors choose, there will be no in-class meeting on this day. I will post an introductory video to Canvas that students should watch before the class meeting on Wednesday (which will be in-person but will also be recorded for those who need or want to stay home).

January 12 Wednesday

1.1 Science Journalism

Dunwoody, S. (2008). Science journalism. In M. Bucchi & B. Trench (Eds.), *Handbook of public communication of science and technology* (pp. 15-25). New York: Routledge.

Week 2

January 17 Monday

MLK Day—No Class

January 19 Wednesday

1.2 Public Understanding of Science

Landau, J., Groscurth, C. R., Wright, L., & Condit, C. (2009). Visualizing nanotechnology: The impact of visual images on lay American audience associations with nanotechnology. *Public Understanding of Science*, 18(3), 325-337. <https://doi.org/10.1177/0963662507080551>

Week 3

January 24 Monday

1.3 Scientific Debate in Medicine

Keränen, L. (2005). Mapping misconduct: Demarcating legitimate science from “fraud” in the B-06 lumpectomy controversy. *Argumentation and Advocacy*, 42(2), 94-113. <https://doi.org/10.1080/00028533.2005.11821644>

January 26 Wednesday

1.4 Scientific Debate in Public Policy

Jensen, R. E. (2007). Using science to argue for sexual education in U.S. public schools: Ella Flagg Young and the 1913 “Chicago Experiment.” *Science Communication*, 29(2), 217-241. <https://doi.org/10.1177/1075547007309101>

Week 4

January 31 Monday

1.5 Scientific Debate in Regulation

Boyd, J. (2002). Public and technical interdependence: Regulatory controversy, out-law discourse, and the messy case of Olestra. *Argumentation and Advocacy*, 39, 91-109. <https://doi.org/10.1080/00028533.2002.11821579>

February 2 Wednesday

1.6 Scientific Reporting and Ethics

Solomon, M. (1985). The rhetoric of dehumanization: An analysis of medical reports of the Tuskegee syphilis project. *Western Journal of Communication*, 49, 233-247. <https://doi.org/10.1080/10570318509374200>

Week 5

February 7 Monday

1.7 Clinical Trials and Recruitment

Ridley-Merriweather, K. E., & Head, K. J. (2017). African American women's perspectives on donating healthy breast tissue for research: Implications for recruitment. *Health Communication, 32*(12), 151-1580.
<https://doi.org/10.1080/10410236.2016.1250191>

February 9 Wednesday

Review Day

Review readings, recorded lectures, and key concepts covered.

Week 6

February 14 Monday

EXAM 1

Unit 2: Health, environment, science

February 16 Wednesday

2.1 Mediated Health

Condit, C. M., & Condit, D. M. (2001). Blueprints and recipes: Gendered metaphors for genetic medicine. *Journal of Medical Humanities, 22*, 29-39.
<https://doi.org/10.1023/A:1026634010579>

Week 7

February 21 Monday

Presidents Day—No Class

February 23 Wednesday

2.2 Educational Patient Materials

Upshaw, S., Jensen, J. D., Giorgi, E. A., Pokharel, M., Lillie, H. M., Adams, D. R., John K. K., Wu, Y., & Grossman, D. (in press). Developing skin cancer education materials for darker skin populations: Crowdsourced design, message targeting, and acral lentiginous melanoma. *Journal of Behavioral Medicine*.

Week 8

February 28 Monday

2.3 Health and Stigma

Shugart, H. A. (2011). Shifting the balance: The contemporary narrative of obesity. *Health Communication, 26*, 37-47.
<https://doi.org/10.1080/10410236.2011.527620>

March 2 Wednesday

2.4 Health in Cultural Context

Sastry, S. (2016). Long distance truck drivers and the structural context of health: Investigation of Indian truckers' health narratives. *Health Communication, 31*(2), 230-241. <https://doi.org/10.1080/10410236.2014.947466>

Week 9

March 7-10

Spring Break—No Class

Week 10

March 14 Monday

2.5 Interpersonal Health Communication

Bergstrom, M. J., & Holmes, M. E. (2000). Lay theories of successful aging after the death of a spouse: A network text analysis of bereavement advice. *Health Communication, 12*(4), 377-406. https://doi.org/10.1207/S15327027HC1204_4

March 16 Wednesday 2.6 Health/Organizational Communication
Haynes, A. B., Weiser, T. G., Berry, W. R., Lipsitz, S. R., Breizat, A. S., Dellinger, E. P., Herbosa, T., Joseph, S., Kibatala, P. L., Lapitan, M. C. M., Merry, A. F., Moorthy, K., Reznick, R. K., Taylor, B., & Gawande, A. A. (2009). A surgical safety checklist to reduce morbidity and mortality in a global population. *New England Journal of Medicine*, 360(5), 491-499.
<https://doi.org/10.1056/NEJMSa0810119>

Week 11

March 21 Monday Review Day
Review readings, recorded lectures, and key concepts covered.

March 23 Wednesday **EXAM 2**

Unit 3: Environment, science, health

Week 12—ACTIVITY WEEK

This week (March 28th – April 1st), you will find and attend a lecture, event, performance, or film (you can do so in-person or virtually) related to science, health, and/or the environment (please note that there will be no class meetings during this week to allow you time to select an event, attend it, and complete the writing assignment, which is due on Friday at 5:00 p.m.).

***ACTIVITY WEEK ASSIGNMENT DUE:** Friday April 1st at 5:00 p.m. on Canvas*

Week 13

April 4 Monday 3.1 Environmental Reporting on Invasion
Larson, B. M. H., Nerlich, B., & Wallis, P. (2005). Metaphors and biorisks: The war on infectious diseases and invasive species. *Science Communication*, 26(3), 243-268.
<https://doi.org/10.1177/1075547004273019>

April 6 Wednesday 3.2 Environmental Reporting on Climate
Craig, R. T., Yagatich, W., Patzer, S., Timm, K., & Maibach, E. (2021). Race/ethnicity and climate change reporting: Perceptions and interests of news personnel's interest to cover climate change based on race. *Environmental Communication*. Advance online publication. <https://doi.org/10.1080/17524032.2021.1967181>

Week 14

April 11 Monday 3.3 Advocacy Strategies
Schweizer, S., Thompson, J. L., Teel, T., & Bruyere, B. (2009). Strategies for communicating about climate change impacts on public lands. *Science Communication*, 31(2), 266-274. <https://doi.org/10.1177/1075547009352971>

April 13 Wednesday 3.4 Representations of Environmentalism
DeLuca, K. M., & Demo, A. T. (2000). Imaging nature: Watkins, Yosemite, and the birth of environmentalism. *Critical Studies in Media Communication*, 17(3), 241-260.
<https://doi.org/10.1080/15295030009388395>

Week 15

April 18 Monday

3.5 Public Argumentation

Endres, D. (2009) Science and public participation: An analysis of public scientific argument in the Yucca Mountain controversy. *Environmental Communication*, 3(1), 49-75. <https://doi.org/10.1080/17524030802704369>

April 20 Wednesday

3.6 Community-Based Intervention

Wong, C., Wu, H., Cleary, E. G., Patton, A. P., Xie, A., Grinstein, G., Koch-Weser, S., & Brugge, D. (2019). Visualizing air pollution: Communication of environmental health information in a Chinese immigrant community. *Journal of Health Communication*, 24(4), 339-358. <https://doi.org/10.1080/10810730.2019.1597949>

Week 16

April 25 Monday

Review Day

Review readings, recorded lectures, and key concepts covered.

April 27 Wednesday

EXAM 3
