

Communication 2596: Introduction to the Communication of Science, Health, Environment, & Risk

Wednesday & Friday 12:45pm– 2:05pm, Dreese Lab, 305

Instructor: Dr. Graham Dixon

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Office Hours: Wednesdays 2:00pm – 3:30pm

GE category: Cross-Disciplinary Seminar

Goals: Students demonstrate an understanding of a topic of interest through scholarly activities that draw upon multiple disciplines and through their interactions with students from different majors.

Expected Learning Outcomes

1. Students understand the benefits and limitations of different disciplinary perspectives.
2. Students understand the benefits of synthesizing multiple disciplinary perspectives.
3. Students synthesize and apply knowledge from diverse disciplines to a topic of interest.

Course Description

This course is an introduction to science, health, environment, and risk communication. This course meets the GE goals and expected learning outcomes by examining...

- How audiences understand and process science and risk information
- The effectiveness of public health and environmental campaigns
- The role of the mass media in shaping scientific understanding and beliefs
- Informal science learning
- Risk perception and its role in shaping public policy

In many cases we will focus on issues that have high public salience such as climate change, vaccination, research ethics, nuclear power, genetically modified foods, cancer, human evolution, etc. While many of the topics we discuss are controversial and polarizing, the purpose of the course is to understand the communication processes and effects behind these topics. For example, why are so many science and health issues controversial? What role do cultural and political values play in polarizing people's views on science and risk? And can communication interventions change people's minds about controversial issues? Rather than advocate for a particular position, our goal is to explore these topics through an objective lens as academic observers.

Due to its high relevance, COVID-19 will be prominently featured in this course.

Content from this course benefits students with an interest in a variety of careers, including public policy, public health, communication research, advertising, science education, and public relations, to name a few.

Mode of Course Delivery and Attendance Policy

This course is delivered as an in-person lecture. However, all lecture content will be recorded and posted promptly on the Carmen site; all assignments and exams will be offered online. Thus, students are given an option to complete the course outside of lecture if they choose to do so without any penalty so long as assignments and exams are completed on time. Given the continued high prevalence of COVID, including breakthrough cases among vaccinated individuals, **students should not attend class if they are feeling sick**. It is very important that individuals avoid spreading the virus to others. Most students should be able to complete a successful semester despite illness-induced absence. If you are absent due to illness, including but not limited to COVID, I will give you a reasonable opportunity to make up missed work. **You do not need to provide a physician's document of illness, but you should advise me via email as soon as you are safely able to do so.**

Grading

Assignments	Points	% of Final Grade
Movie Review	25	25%
In-Class/Online Assignments	25	25%
Exam I	25	25%
Exam II	25	25%
Final Exam	25	25%

lowest exam score is dropped

A = 93-100; **A-** = 90-92; **B+** = 87-89; **B** = 83-86; **B-** = 80-82; **C+** = 77-79; **C** = 73-76; **C-** = 70-72; **D+** = 67-69; **D** = 60-66; **F** = Below 60

Assignments and Exams

Required Readings. There is no textbook for this course. Instead, PDFs of selected chapters and articles will be posted on Carmen for each class – refer to the course schedule for each day's assigned readings. Students are expected to complete all readings prior to class so that they will be prepared to discuss the material in class. If any student is interested in additional readings on the assigned or related topics, please feel free to contact me and I can suggest additional resources.

In-class/online Assignments. Throughout the semester, I will stop lecturing and pass out in class assignments. Some assignments will involve solo work with class discussion; other times I will break the class up into groups. You will be graded on your participation and completion of the assignment. There will be ten in-class assignments in total. **Students who are absent from class can complete an alternative online assignment on CARMEN with a 24 hour deadline for completion.** Email announcements will be regarding the availability of the alternative online assignment.

Movie Review. Students will conduct an academic review of a science-based film from a list of approved films. Specifically, students will apply theories and concepts learned in class when assessing their chosen film. Importantly, this is a fun assignment that gets students thinking more deeply about how popular films/entertainment might impact public understanding of science. The paper will be between 10-12 pages double spaced, not including references. You will turn in your paper digitally through Carmen.

Exams. You have three online exams in this course. However, I drop your lowest score. This means that if you do well on the first two exams, you can skip the final exam. Also, if you miss one exam, then that will be treated as your dropped exam. Because of this policy, I do not allow makeup exams. All exams will be assessed with multiple choice, fill in the blank, and short answer questions. Access to exams will be for a 9 hour period on a specific date (see course schedule). The first exam covers our science and environmental sections; the second exam covers our health and risk sections. The final is cumulative, covering all material taught in class. All exams are open book and are administered on the course's Carmen site.

All exams cover in-class material as well as content from your readings. To do well in this course means you will need to read every assigned reading.

Course Policies

Mutual Respect. Students in this class come from a variety of personal, political, and academic backgrounds, so realize that there will be different perspectives. Your responsibility is to be civil to others and to opinions that differ from yours.

Technology use and General Politeness. Technology (phones, laptops, etc) use for non-class related reasons can be very distracting for the professor and for classmates. You're paying a lot of money for this course, so don't waste it on Facebook and texting with friends that you'll see later in the day. The professor reserves the right to take off grade points for repeat offenders.

Professor and Teaching Assistant's Use of Electronic Mail and Messaging. There may be occasions where I will need to get in touch with you outside of regular class hours. Email will usually be the first means by which contact will be initiated. It is important that you check your OSU email account regularly, and make sure you purge your account of unneeded email so that new email can get through. If you do not use your OSU email address as your primary email account, please arrange through OIT to have your OSU email forwarded to your preferred account. For instructions on how to have your email forwarded, see http://8help.osu.edu/forms/mail_forwarding.html.

Academic Misconduct. It is the responsibility of the Committee on Academic Misconduct to investigate or establish procedures for the investigation of all reported cases of student academic misconduct. The term "academic misconduct" includes all forms of student academic misconduct wherever committed; illustrated by, but not limited to, cases of plagiarism and dishonest practices in connection with examinations. Instructors shall report all instances of alleged academic misconduct to the committee (Faculty Rule 3335-5-487). For additional information, see the Code of Student Conduct <http://studentlife.osu.edu/csc/>.

All instances of cheating and plagiarism will be reported to COAM for a formal hearing. Please do not cheat or plagiarize. Maximum grade penalty is failing the entire course.

Statement about disability services. Students with disabilities (including mental health, chronic or temporary medical conditions) that have been certified by the Office of Student Life Disability Services will be appropriately accommodated and should inform the instructor as soon as possible of their needs. The Office of Student Life Disability Services is located in 098 Baker Hall, 113 W. 12th Avenue; telephone 614- 292-3307, slds@osu.edu.

Diversity. The School of Communication at The Ohio State University embraces and maintains an environment that respects diverse traditions, heritages, experiences, and people. Our commitment to diversity moves beyond mere tolerance to recognizing, understanding, and welcoming the contributions of diverse groups and the value group members possess as individuals. In our School, the faculty, students, and staff are dedicated to building a tradition of diversity with principles of equal opportunity, personal respect, and the intellectual interests of those who comprise diverse cultures.

Title IX. Title IX makes it clear that violence and harassment based on sex and gender are Civil Rights offenses subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories (e.g., race). If you or someone you know has been sexually harassed or assaulted, you may find the appropriate resources at <http://titleix.osu.edu> or by contacting the Ohio State Title IX Coordinator, Kellie Brennan, at titleix@osu.edu

COVID-19 Accommodations. The university strives to make all learning experiences as accessible as possible. In light of the current pandemic, students seeking to request COVID-related accommodations may do so through the university's [request process](#), managed by Student Life Disability Services. If you anticipate or experience academic barriers based on your disability (including mental health, chronic, or temporary medical conditions), please let me know immediately so that we can privately discuss options. To establish reasonable accommodations, I may request that you register with Student Life Disability Services. After registration, make arrangements with me as soon as possible to discuss your accommodations so that they may be implemented in a timely fashion. **SLDS contact information:** slds@osu.edu; 614-292-3307; slds.osu.edu; 098 Baker Hall, 113 W. 12th Avenue.

Course Schedule

Week and Dates	Week Overview	Readings/Major Assignments
1 8/25-8/27	Introduction to the course What is Science Communication?	<ul style="list-style-type: none"> • Burns et al. 2003 • Scheufele, 2013 • Brossard and Scheufele, 2013
2 9/1-9/3	The (counter)norms of scientists Public perception of scientists	<ul style="list-style-type: none"> • Mitroff article • Pew Research Report, 2019 (skim through) • Suldovsky et al. 2019
3 9/8-9/10	Public understanding of science Science and entertainment media	<ul style="list-style-type: none"> • Funk and Goo, 2015 • Leiserowitz • Sparks • Bullock et al 2019 • Landrum et al., 2021
4 9/15-9/17	Science in the news part 1 Science in the news part2	<ul style="list-style-type: none"> • Boykoff & Boykoff, 2004; • Maier et al., 2014 • Jensen et al., 2011
5 9/22-9/24	Science “denialism” Science communication persuasion	<ul style="list-style-type: none"> • Nisbet et al., 2015 • Cook 2016; • Pennycook et al. 2020 • Hart and Nisbet, 2013 • Basol et al., 2020
6 9/29-10/1	Environmental communication introduction Environmental values	<ul style="list-style-type: none"> • McCright et al; • Feinberg and Willer
7 10/6-10/8	Environment and organizations Green marketing	<ul style="list-style-type: none"> • Schuldt 2013
8	Environmental advocacy and campaigns	<ul style="list-style-type: none"> • Carrico and Reimer, 2011

<p>10/13 Autumn break 10/15</p>		<ul style="list-style-type: none"> Dixon et al., 2015 <p>Exam 1 link available on 10/13 from 8am to 10pm EST</p>
<p>9 10/20-10/22</p>	<p>What is Risk?</p>	<ul style="list-style-type: none"> Slovic, 1987 McComas, 2006
<p>10 10/27-10/29</p>	<p>Risk and Rationality part 1 Risk and Rationality part 2</p>	<ul style="list-style-type: none"> Loewenstein et al. 2001 Kahneman Ch 13 and 14 <p>Movie Review Due by 10/29, 11:59PM Eastern time, on Carmen</p>
<p>11 11/1-11/8</p>	<p>Risk and technology Communicating Risk</p>	<ul style="list-style-type: none"> Abraham et al., 2016 Fischhoff article
<p>12 11/3-11/5</p>	<p>Health communication: why is it necessary? Public health campaigns</p>	<ul style="list-style-type: none"> Byrne et al., 2019 Drope and Chapman, 2001
<p>13 11/10-11/12</p>	<p>Digital health</p>	<ul style="list-style-type: none"> Ahn, 2015 Nowak et al., 2020 Li et al., 2011
<p>14 11/17-11/19 Thanksgiving break 11/24- 11/26</p>	<p>Health controversies, part 1</p>	<ul style="list-style-type: none"> Nyhan et al, 2014 Horne et al., 2015 Islam et al., 2020a Islam et al., 2020b
<p>15 12/1-12/3</p>	<p>Health controversies, part 2</p>	
<p>16 12/8</p>	<p>Health controversies, part 3</p>	<p>Exam 2 link available on 12/8 from 8am to 10pm EST</p>
<p>Final Exam</p>	<p>Fri Dec 11</p>	<p>Final exam link available on December 13 from 8am to 10pm EST.</p>

