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

Wednesday & Friday 11:10am– 12:30pm, Journalism Building 371 Instructor: Dr. Graham Dixon Derby Hall 3045A Email: dixon.716@osu.edu 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.

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.

Grading

Assignments	Points	% of Final Grade
Movie Review	25	25%
In-Class 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 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 inclass assignments in total. I only count nine of your in-class assignments for your grade, meaning you can miss one (but only one) and still make full points. I <u>will not</u> announce ahead of time which days have inclass assignments, so be sure to attend every class if you want to obtain all points. **In-class assignments cannot be made up**.

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. I do not accept late papers.

Exams. You have three 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 <u>do not</u> allow makeup exams. All exams are inclass and will be assessed with multiple choice, fill in the blank, and short answer questions. 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 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 <u>http://studentlife.osu.edu/csc/</u>."

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, <u>slds@osu.edu</u>.

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

Date	Торіс	Readings/assignments
Aug 21	Introduction to the course	• Burns et al. 2003

Aug 23	What is Science	• Scheufele, 2013	
1106 20	Communication?	 Brossard and Scheufele, 	
		2013	
Aug 28	The (counter)norms of scientists	Mitroff article	
Aug 30	Public perception of scientists	Pew Research Report,	
<u> </u>		2019	
Sept 4	Public understanding of science	• Funk and Goo, 2015	
Sept 6	Science and entertainment media	• Leiserowitz;	
		• Sparks	
Sept 11	Science and in the news part 1	• Boykoff & Boykoff,	
		2004;	
Sept 13	Science in the news part 2	• Maier et al., 2014	
		• Jensen et al., 2011	
Sept 18	Science "denialism"	• Nisbet et al., 2015	
		• Lupia 2013	
Sept 20	Science communication	• Cook 2016;	
	persuasion	Hart and Nisbet, 2013	
Sept 25	Environmental communication		
a	introduction		
Sept 27	Environmental values	• McCright et al;	
		Feinberg and Willer	
Oct 2	Environment and organizations	Schuldt 2013	
Oct 4	Green marketing	Movie Review Due by	
		11:59PM Eastern time, on Carmen.	
Oct 9	Environmental advocacy and	Carrico and Reimer,	
	campaigns, part 1	2011	
Oct 11	FALL BREAK NO CLASS		
Oct 16	Environmental advocacy and	• Dixon et al. 2015	
00010	campaigns, part 2		
Oct 18	FIRST EXAM	FIRST EXAM	
Oct 23	What is risk?	• Slovic, 1987	
		• McComas, 2006	
Oct 25	Risk and rationality, part 1	• Loewenstein et al. 2001	
Oct 30	Risk and rationality, part 2	• Kahneman Ch 13 and 14	
Nov 1	Risk and technology	Abraham et al., 2016	
Nov 6	Communicating risk	Fischoff article	
Nov 8	Health communication: why is it		
	•		
	necessary?		
Nov 13	Public health campaigns	• Byrne et al., 2019	
Nov 13		Byrne et al., 2019Drope and Chapman,	
	Public health campaigns	•	
Nov 13 Nov 15		• Drope and Chapman,	
	Public health campaigns	• Drope and Chapman, 2001	
Nov 15	Public health campaigns	 Drope and Chapman, 2001 Ahn, 2015 	
	Public health campaigns	 Drope and Chapman, 2001 Ahn, 2015 Willoughby 2015 	

Nov 22	Health controversies, part 2	
Nov 27	THANKSGIVING NO CLASS	
Nov 29	THANKSGIVING NO CLASS	
Dec 4	SECOND EXAM	SECOND EXAM

***Final Exam time is Thursday Dec 12, 12pm-1:45pm