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

Wednesday & Friday 11:10am— 12:30pm, Pomerene Hall 250 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%
Exams	50	50%
In-Class Assignments	25	25%
Total	100	100%

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

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 nine inclass assignments in total. I only count eight of your in-class assignments for your grade, meaning you can miss one (but only one) and still make full points. I will not announce ahead of time which days have in-class 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 do not 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 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, slde@osu.edu.

Date	Topic	Readings/assignments
Aug 22	Introduction to the course	Burns et al. 2003;
Aug 24	What is Science	Scheufele, 2013; Brossard and
	Communication?	Scheufele, 2013
Aug 29	The (counter)norms of scientists	Mitroff article
Aug 31	Public perception of scientists	Losh article; Besley and Nisbet;
		Long et al., 2010
Sept 5	Public understanding of science	Pew Research PDF; Funk and
		Goo, 2015
Sept 7	Science and entertainment media	Leiserowitz; Sparks
Sept 12	Science and in the news part 1	Boykoff & Boykoff, 2004;
Sept 14	Science in the news part 2	Maier et al., 2014
Sept 19	Science "denialism"	Nisbet et al., 2015; Lupia 2013
Sept 21	Science communication	Cook 2016; Hart and Nisbet,
_	persuasion	2013;
Sept 26	Environmental communication	
	introduction	
Sept 28	Environmental values	McCright et al; Feinberg and
		Willer

Oct 3	Environment and organizations	Schuldt 2013
Oct 5	Green marketing	Movie Review Due by 11:59PM Eastern time, on Carmen.
Oct 10	Environmental advocacy and campaigns, part 1	Carrico and Reimer, 2011
Oct 12	FALL BREAK NO CLASS	
Oct 17	Environmental advocacy and campaigns, part 2	Dixon et al. 2015
Oct 19	FIRST EXAM	FIRST EXAM
Oct 24	What is risk?	Slovic, 1987; McComas, 2006
Oct 26	Risk and rationality, part 1	Loewenstein et al. 2001
Oct 31	Risk and rationality, part 2	Kahneman Ch 13 and 14
Nov 2	Risk and technology	Abraham et al., 2016
Nov 7	Communicating risk	Fischoff article
Nov 9	VETERANS DAY-NO CLASS	
Nov 14	Health communication: why is it necessary?	
Nov 16	Public health campaigns	Niederdeppe et al. ; Drope and Chapman
Nov 21	THANKSGIVING NO CLASS	
Nov 23	THANKSGIVING NO CLASS	
Nov 28	Digital health	Ahn, 2015; Willoughby 2015
Nov 30	Health controversies, part 1	Nyhan et al, 2014; Horne et al., 2015
Dec 5	SECOND EXAM	SECOND EXAM

^{***}Final Exam time is Thursday, December 13th, 12:00pm to 1:45pm