Instructor: Graham Dixon
Email address: Dixon.716@osu.edu
Office hours: Wednesdays 12pm to 1:30pm EST, zoom only

Course description

This course will be delivered 100% online. 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.
Course learning goals and outcomes

**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.

**Mode of delivery**
This course will be presented fully online.
- All lectures will be recorded and posted online, meaning delivery of lectures and course content is done in an Asynchronous manner.
- Exams will be online and there will be a window of access time on a particular day (see course schedule)
- Office hours are conducted 100% via zoom.

**How this course works**
- Students access online course lectures that are assigned for each week
- All content will be available on the course’s Carmen page.

**Course materials**

**Required**
There is no textbook for this course. Instead, PDFs of selected chapters and articles are posted on Carmen for each week – refer to the course schedule for each week’s assigned readings. Students are expected to complete all readings. 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.
Grading and faculty response

Grading

Following are the point values and/or percentages for each assignment:

<table>
<thead>
<tr>
<th>Assignments</th>
<th>Points</th>
<th>% of Final Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Movie Review</td>
<td>25</td>
<td>25%</td>
</tr>
<tr>
<td>Weekly assignment</td>
<td>25</td>
<td>25%</td>
</tr>
<tr>
<td>Exam I</td>
<td>25</td>
<td>25%</td>
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<tr>
<td>Exam II</td>
<td>25</td>
<td>25%</td>
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<tr>
<td>Final Exam</td>
<td>25</td>
<td>25%</td>
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</table>

*lowest exam score is dropped*
Assignments

Weekly assignment. Each week, you will be asked to write a brief response to a question pertaining to risk/science communication. There will be 11 in total. I excuse one missed response. I do not allow makeups for this reason. You’ll be graded on completion. The questions will be made available at the beginning of each week starting August 26 and are due the following Monday night. These responses are turned in directly on Carmen.

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 roughly 10 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 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.

Late assignments

Because I drop your lowest exam score and excuse one missed weekly report, I do not accept late assignments. Please turn in your assignments on time.

Grading scale

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
Please note: For final grades, I manually round up grades. Meaning a 92.5 is considered a 93. However, a 92.4, is considered a 92.

Attendance, participation, and discussions

Credit hour and work expectation
This is a 3-credit-hour course. According to Ohio State policy, students should expect around 3 hours per week of time spent on direct instruction (instructor content and Carmen activities, for example) in addition to 6 hours of homework (reading and assignment preparation, for example) to receive a grade of (C) average. ASC Honors provides an excellent guide to scheduling and study expectations.

Student participation requirements
Because this is a 100% distance-education course, your attendance is based on your online activity and participation. The following is a summary of everyone’s expected participation:

- **Viewing lectures:** 
  Make sure you view the lectures according to the course schedule

- **Weekly assignments**
  Your weekly assignments are important makers of your attendance and participation in the online course. They are brief, but also important opportunities for you to reflect on important aspects of the course material.

- **Office hours:**
  We are available to help you to learn, understand, and grow as individuals. If your question is something that you believe may be of interest to others in the class, please post to the “Ask the instructor” discussion board. Office hours are digital via Carmen Zoom.

Faculty feedback and response time
I am providing the following list to give you an idea of my intended availability throughout the course. (Remember that you can call 614-688-HELP at any time if you have a technical problem.)

Grading and feedback
For large weekly assignments, you can generally expect feedback within 7-10 days.
E-mail
I will reply to e-mails within **24 hours on school days**.

Discussion board
I will check and reply to messages in the discussion boards every **24 hours on school days**.

**Discussion and communication guidelines**
The following are my expectations for how we should communicate as a class. Above all, please remember to be respectful and thoughtful.

- **Tone and civility:** Let’s maintain a supportive learning community where everyone feels safe and where people can disagree amicably. Remember that sarcasm doesn’t always come across online. The instructor and TA both work very hard to provide a positive learning experience. Please keep this in mind and remain civilized and respectful in your email and discussion board communications.

- **Citing your sources:** When we have academic discussions, please cite your sources to back up what you say. (For the textbook or other course materials, please use APA style. For online sources, be sure to include a link.)

**Course technology**

For help with your password, university e-mail, Carmen, or any other technology issues, questions, or requests, contact the OSU IT Service Desk. Standard support hours are available at [https://ocio.osu.edu/help/hours](https://ocio.osu.edu/help/hours), and support for urgent issues is available 24x7.

- **Carmen:**
  - Carmen, Ohio State’s Learning Management System, will be used to host materials and activities throughout this course. To access Carmen, visit [Carmen.osu.edu](http://Carmen.osu.edu). Log in to Carmen using your name.# and password. If you have not setup a name.# and password, visit [my.osu.edu](http://my.osu.edu).
  - Help guides on the use of Carmen can be found at [https://resourcecenter.odee.osu.edu/carmen](https://resourcecenter.odee.osu.edu/carmen).
  - This online course requires use of Carmen (Ohio State's learning management system) and other online communication and multimedia tools. If you need additional services to use these technologies, please request accommodations with your instructor.
• Carmen accessibility

• Carmen Zoom:
  o Office hours will be held through Ohio State’s conferencing platform, Carmen Zoom. A separate guide to accessing Carmen Zoom and our office hours is posted on the course Carmen page under Files.
  o Students may use the audio and video functions if a webcam and microphone are available. If not, there is still a chat function within Carmen Zoom for the student to live chat with the professor or TA in the virtual office hours room.
  o Carmen Zoom help guide

• Turnitin:
  o Students at The Ohio State University are accountable for the integrity of the work they submit. Therefore, you should be familiar with the guidelines provided by the Committee on Academic Misconduct (COAM) and Section A of OSU's Code of Student Conduct in order to meet the academic expectations concerning appropriate documentation of sources. In addition, OSU has made Turnitin, a learning tool and plagiarism prevention system, available to instructors. For this class, you will submit your papers to Turnitin from Carmen. When grading your work, I will interpret the originality report, following Section A of OSU's Code of Student Conduct as appropriate. For more information about Turnitin, please see the vendor’s guide for students. Note that submitted final papers become part of the OSU database.

• Self-Service and Chat support: http://ocio.osu.edu/selfservice
• Phone: 614-688-HELP (4357)
• Email: 8help@osu.edu
• TDD: 614-688-8743

Baseline technical skills necessary for online courses
• Basic computer and web-browsing skills
• Navigating Carmen

Necessary equipment
• Computer: current Mac (OS X) or PC (Windows 7+) with high-speed internet connection
• Web cam and microphone

Necessary software
• Word processor with the ability to save files under .doc, .docx, .rtf, or .pdf. Most popular word processing software programs including Microsoft Word and Mac Pages have these abilities.
• OSU students have access to Microsoft Office products free of charge. To install, please visit https://osuitsm.service-now.com/selfservice/kb_view.do?sysparm_article=kb04733

Other course policies

Student Academic Services
Arts and Sciences Advising and Academic Services’ website provides support for student academic success. Information on advising issues such as tutoring, transfer credits, academic standing, and contact information for Arts and Sciences advisors can be obtained through this website. The site is: http://advising.osu.edu/welcome.shtml

Student Services
The Student Service Center assists with financial aid matters, tuition and fee payments. Please see their site at: http://ssc.osu.edu

Copyright Disclaimer
The materials used in connection with this course may be subject to copyright protection and are only for the use of students officially enrolled in the course for the educational purposes associated with the course. Copyright law must be considered before copying, retaining, or disseminating materials outside of the course.

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 Interim Ohio State Title IX Coordinator, Molly Peirano, at titleix@osu.edu
Mental Health
As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce a student's ability to participate in daily activities. The Ohio State University offers services to assist you with addressing these and other concerns you may be experiencing.

If you are or someone you know is suffering from any of the aforementioned conditions, you can learn more about the broad range of confidential mental health services available on campus via the Office of Student Life’s Counseling and Consultation Service (CCS) by visiting ccs.osu.edu or calling 614-292-5766. CCS is located on the 4th Floor of the Younkin Success Center and 10th Floor of Lincoln Tower. You can reach an on-call counselor when CCS is closed at 614-292-5766.

If you are thinking of harming yourself or need a safe, non-judgmental place to talk, or if you are worried about someone else and need advice about what to do, 24-hour emergency help is also available through the Suicide Prevention Hotline (Columbus: 614-221-5445)

COVID-19 and Illness Policies

University COVID policies
This is a placeholder for policies to be announced by OSU.

Student illness or absence
If you are too ill to participate in this course due to COVID-19 or another illness, please contact the instructor as soon as you are able. All materials will be made available on Carmen, including lecture recordings and slides. Alternate assignments or extensions may be arranged.

Instructor illness or absence
If the instructor is too ill to teach the course for a period of time, the designated backup for this course will step in. You will be notified via email from the School of Communication.

Academic integrity policy

Policies for this online course
• Written assignments: Your written assignments should be your own original work. In formal assignments, you should follow APA style to cite the ideas and words of your research sources. You are encouraged to ask a trusted person to proofread your assignments before you turn them in--but no one else should revise or rewrite your work.
• **Reusing past work:** In general, you are prohibited in university courses from turning in work from a past class to your current class, even if you modify it. If you want to build on past research or revisit a topic you've explored in previous courses, please discuss the situation with me.

• **Falsifying research or results:** All research you will conduct in this course is intended to be a learning experience; you should never feel tempted to make your results or your library research look more successful than it was.

• **Plagiarism:** Lifting material from other papers and passing it off as your own is unacceptable and will be met with stiff academic penalties, with the maximum penalty being failure of the entire course.

**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/](http://studentlife.osu.edu/csc/)

**Accessibility accommodations for students with disabilities**

**Requesting accommodations**

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; slds.osu.edu.
## Course schedule (tentative)

<table>
<thead>
<tr>
<th>Week and Dates</th>
<th>Week Overview</th>
<th>Readings/Major Assignments</th>
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</table>
| 1 8/25-8/31    | Introduction to the course  
What is Science Communication? | • Burns et al. 2003  
• Scheufele, 2013  
• Brossard and Scheufele, 2013  
*weekly assignment due by 08/31, 11:59pm EST * |
| 2 8/31-9/6    | The (counter)norms of scientists  
Public perception of scientists | • Mitroff article  
• Pew Research Report, 2019 (skim through)  
• Suldovsky et al. 2019  
* weekly assignment due by 09/7, 11:59pm EST * |
| 3 9/6-9/13    | Public understanding of science  
Science and entertainment media | • Funk and Goo, 2015  
• Leiserowitz  
• Sparks  
• Bullock et al 2019  
* weekly assignment due by 09/14, 11:59pm EST * |
| 4 9/13-9/20   | Science in the news part 1  
Science in the news part2 | • Boykoff & Boykoff, 2004;  
• Maier et al., 2014  
• Jensen et al., 2011  
* weekly assignment due by 09/21, 11:59pm* |
| 5 9/20-9/27   | Science “denialism”  
Science communication persuasion | • Nisbet et al., 2015  
• Cook 2016;  
• Pennycook et al. 2020  
• Hart and Nisbet, 2013 |
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<tr>
<th>#</th>
<th>Date</th>
<th>Topic</th>
<th>Reading Material</th>
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| 6   | 9/27-10/4  | Environmental communication introduction  
Environmental values                                   | • McCright et al;  
• Feinberg and Willer                          |
|     |            |                                                                      | * weekly assignment due by 09/28, 11:59pm EST *                                  |
| 7   | 10/4-10/11 | Environment and organizations  
Green marketing                                              | • Schuldt 2013                                                                    |
|     |            |                                                                      | * weekly assignment due by 10/05, 11:59pm EST *                                  |
| 8   | 10/11-10/18| Environmental advocacy and campaigns                                  | • Carrico and Reimer, 2011  
• Dixon et al., 2015                                                                 |
|     |            |                                                                      | Exam 1 link available on 10/16 from 8am to 5pm EST                              |
|     |            |                                                                      | No assignment this week                                                           |
| 9   | 10/18-10/25| What is Risk?                                                       | • Slovic, 1987  
• McComas, 2006                                                                       |
|     |            |                                                                      | * weekly assignment due by 10/26, 11:59pm EST *                                  |
| 10  | 10/25-11/1 | Risk and Rationality part 1  
Risk and Rationality part 2                                                | • Loewenstein et al. 2001  
• Kahneman Ch 13 and 14                                                                 |
|     |            |                                                                      | Movie Review Due by 11/01, 11:59PM Eastern time, on Carmen                       |
|     |            |                                                                      | No assignment this week                                                           |
| 11  | 11/1-11/8  | Risk and technology  
Communicating Risk                                                   | • Abraham et al., 2016  
• Fischoff article                                                                   |
<p>|     |            |                                                                      | * weekly assignment due by 11/09, 11:59pm EST *                                  |
|     |            |                                                                      | Health communication: why is it                                                 |</p>
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<thead>
<tr>
<th>Week</th>
<th>Dates</th>
<th>Topic</th>
<th>Readings</th>
<th>Assignments</th>
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<tbody>
<tr>
<td>12</td>
<td>11/8-11/15</td>
<td>necessary? Public health campaigns</td>
<td>• Drope and Chapman, 2001</td>
<td>* weekly assignment due by 11/16, 11:59pm EST *</td>
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<tr>
<td>13</td>
<td>11/15-11/22</td>
<td>Digital health</td>
<td>• Ahn, 2015</td>
<td>* weekly assignment due by 11/23, 11:59pm EST *</td>
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<td>• Willoughby 2015</td>
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<td>• Li et al., 2011</td>
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<td>14</td>
<td>11/22-11/25</td>
<td>Health controversies, part 1</td>
<td>• Nyhan et al, 2014</td>
<td>No assignment this week</td>
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<td>• Horne et al., 2015</td>
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<td>• Islam et al., 2020</td>
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<td>Thanksgiving break 11/26-11/27</td>
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<tr>
<td>15</td>
<td>11/29-12/4</td>
<td>Health controversies, part 2 Exam 2</td>
<td>Exam 2 link available on 12/4 from 8am to 5pm EST</td>
<td>No assignment this week</td>
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<tr>
<td>Final Exam</td>
<td>Fri Dec 11</td>
<td>Final exam link available on December 11 from 8am to 5pm EST.</td>
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