

Communication 4240

Science Communication

Mondays 9:10am– 11:00am, Denny Hall 238

Instructor: Dr. Erik C Nisbet

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Office Hours: Mondays 3pm-5pm

Course Description

This course is a seminar focusing on the theory and practice of science communication to public audiences, designed for both communication majors and non-majors. Topics include how audiences understand and process science information, expert communication by scientists and policy-makers to public audiences, informal communication about science in museums and science centers, science journalism, the role of the mass media in shaping understanding and beliefs about science, edu-tainment and documentaries, and citizen-science.

We will also focus heavily on the role that communication processes play in publicly controversial scientific issues such as fracking, global climate change, evolution/intelligent design, autism & vaccines, etc. Students in this class come from a variety of personal and academic backgrounds, so realize that they may look at these issues from different perspectives. Expect to disagree with what others say during class discussions. Debate is not just welcome, it is strongly encouraged. Your responsibility is to be civil to others and to opinions that differ from yours. Listening, questioning, and debate are encouraged; personal attacks are not. Consider the class as a forum to exchange ideas, not to go after fellow students. Bottom line – be open-minded and mature during class discussion

Course requirements

<u>Grading/ Assignments</u>	<u>% of Final Grade</u>
Class Participation/ Attendance / Field Trips	25%
Online Engagement /Film Assignments	25%
Essay Exams (Midterm/Final)	30%
Science Communication Brief	20%
<hr/> Total	<hr/> 100%

Required Readings

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 and turn in all assignments on time. 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.

Class attendance/participation/ field trips (25%)

A portion of your grade is based on your attendance, engagement, and participation in class, including reading and synthesizing the materials and actively participating in class discussion and class activities. Attendance will be taken every class.

In addition, we will be engaging in two required field trips during the semester to COSI and the Franklinton STEAM Factory. After each field trip, you will be required to submit a brief experiential memo detailing your insights on the practice of science communication at these venues. If you cannot attend one of the field trips due to a conflict, an alternative writing assignment will be arranged. Collectively, attendance, active class participation, field trips, and memos will account for 25% of your grade.

Online Activities/Films (25%)

Most weeks, there will be an assigned film or documentary to be viewed online, followed by participation online discussion forums and/or short response prompt. Collectively, these assignments will be 25% of your grade.

Midterm and Final Essay Exams (30%)

There will be two-take home essay exams assigned, a midterm and final exam. The exam formats will be 2-3 short essay questions based on class materials. They will each be worth 15% of your class grade for a total of 30%. They will be based on class material and the assigned films.

Science Issue Brief (Team Project)

By the third week of the semester, you and a partner (it is a team project) will each be assigned a controversial science issue/topic (e.g. nuclear power, GMOs, wind power, human evolution, vaccine safety, etc.) about which you write an issue brief. This brief will be a summary memo discussing the public understanding/public opinion about a prominent scientific or technological issue, the information environment and public discourse about it, the primary communicators on both sides of the issue, the public communication challenges surrounding the issue, and discussion of possible science communication strategies to improve public understanding/acceptance of the issue. More information on exact format and expectations will be provided when assigned.

Extra Credit (maximum 3%)

During the course of the semester, through the Communication Research Experience (C-REP) you have the opportunity to participate in experiments or surveys conducted by School of Communication faculty or graduate students for extra credit toward your final grade. CREP is designed to give students direct exposure to the topics, goals, methods, and ethical issues of communication research. You may earn a MAXIMUM of 3% credit toward your final grade through participation in CREP.

Participation can take the form of:

- Completing up to THREE hours (1 hour = 1% extra credit) of C-REP research studies, OR
- Completing up to THREE C-REP alternative written assignments (1 assignment = 1% extra credit), OR
- Completing a combined total of THREE hours of research studies and alternative writing assignments.

You must complete at least one whole hour/credit of CREP in order to receive extra credit. Completing your C-REP requirement must take place during the semester. You should definitely NOT wait until the last minute to sign up for participation for extra credit because people tend to procrastinate and research opportunities will be limited. In fact, it is probably wise to complete your C-REP requirement as early as possible in the semester when demands on your time are the lightest. The C-REP Student Guide on the School of Communication website tells you everything you need to know about this requirement:

<http://www.comm.ohio-state.edu/images/stories/PDFs/crepstudentguideupdate.pdf>

Both COMM 1100 and COMM 1101 require C-REP participation, and thus you may be enrolled in CREP for those courses simultaneously or another communication class for extra credit. The same C-REP participation CANNOT be counted for more than one course. Please direct any questions regarding C-REP to **Golnoosh Behrouzian (behrouzian.1@buckeyemail.osu.edu)**

Cell Phones and General Politeness

A ringing cell phone during a lecture or discussion is annoying to the instructor (i.e., me) and others in the room. Please be respectful of those around you by turning off your cell phone prior to the start of lecture. If you anticipate that you will need to leave the lecture hall before the end of a lecture, please select a seat near the edge of a row or in the back of the room to avoid disrupting others when you leave. To maintain an atmosphere conducive to learning, please be courteous to other members of the class and treat them with the dignity and respect that you expect from others.

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.

Some Words About Academic Honesty

It is your responsibility to complete your own work as best you can in the time provided. The Ohio State University's Code of Student Conduct (Section 3335-23-04) defines academic misconduct as: "Any activity that tends to compromise the academic integrity of the University, or subvert the educational process." Examples of academic misconduct include (but are not limited to) plagiarism, collusion (unauthorized collaboration), copying the work of another student, possession of unauthorized materials during an examination, and falsification of laboratory or other data. Ignorance of the University's Code of Student Conduct is never considered an excuse for academic misconduct, so I recommend that you review the Code of Student Conduct and, specifically, the sections dealing with academic misconduct at http://studentaffairs.osu.edu/resource_csc.asp

Academic misconduct is a serious offense, and it is my responsibility to make sure it does not occur. If I suspect that a student has committed academic misconduct in this course, I am obligated by University Rules to report my suspicions to the Committee on Academic Misconduct (COAM). If COAM determines that you have violated the University's Code of Student Conduct, the sanctions for the misconduct could include a failing grade in this course and suspension or dismissal from the University. If you have any questions about this policy or what constitutes academic misconduct, please contact your TA or visit the COAM web page at <http://oaa.osu.edu/coam/home.html>.

Special Accommodations

If you need an accommodation based on the impact of a disability, you should contact the professor to arrange an appointment by the end of the second week of classes. At the appointment we can discuss the course format, anticipate your needs and explore potential accommodations. I rely on the Office for Disability Services for assistance in verifying the need for accommodations and developing accommodation strategies. If you have not previously contacted the Office for Disability Services, I encourage you to do so.

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

COURSE TOPIC SCHEDULE

DATE	TOPIC / Assignment
1/8	Course Introduction / Science of Science Communication
1/15	Martin Luther King Day – Major Challenges for Science Communication
<i>Module One</i>	<i>How Do Audience's Make Sense of Science?</i>
1/22	Deficit Model / Informal Learning
1/29	Trust/Credibility
2/5	Cognitive Biases / STEAM Factory Franklinton Friday 7-9pm
2/12	Narrative / Story Telling
<i>Module Two</i>	<i>Channels of Science Communication</i>
2/19	Science Centers / Citizen Science / COSI Visit (Tentative)
2/26	Science and Popular Entertainment / Midterm Exam Assigned (Due 3/5)
3/5	Science Documentaries/ Edutainment
3/12	Spring Break
3/19	Science Journalism / News
3/26	Science Communication Online
<i>Module Three</i>	<i>Message Strategies</i>
4/2	Social Marketing / Advocacy Strategies Part 1
4/9	Science Marketing / Advocacy Strategies Part 2
4/16	Science Denialism
4/23	Countering Disinformation / Communication Brief Due / Final Exam Assigned (Due 4/30)

Readings are posted as PDFs on Canvas for date listed under course content, or available at link as noted.