

Communication 4240

Science Communication

Mondays 10:05am- 11:55am, Denny Hall 253

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Office Hours: Wednesdays 9:30-11:30am

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

Grading/ Assignments	Points	% of Final Grade
Class Participation/ Attendance	15	15%
Online Engagement	15	15%
Essay Exams	30	30%
COSI Team Project	40	40%
Total	100	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/ in-class activities (15%)

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. Attendance will be taken every class. Participation and class attendance is worth 15 points. PARTICIPATION IS MORE THAN ATTENDANCE

Online Engagement (15%)

Guest speakers via Carmen Connect, occasional online quizzes or assignments, discussion forums, supplementary online lectures, and viewing movies or documentaries online will be assigned during the course of the semester. Participation in these online activities accounts for 15% of your grade.

COSI Team Research & Evaluation Project (40%)

A large component of this class will be a field research experience conducted in collaboration with the Center of Industry & Science (COSI) in Columbus. Overall, the COSI project accounts for 40% of your class grade. This will require considerable time commitment outside of class that includes an orientation to the operations and research that takes place at COSI, as well as data collection onsite at COSI during specified periods.

Each student will be assigned to a team composed of 4-5 other classmates and assigned to evaluate one of five science communication & learning activities at COSI under the guidance of the research and evaluation staff at COSI. Teams will receive an orientation to the activity they are evaluating and research goals, will collect data, analyze it, and prepare a written report and class presentation on key findings regarding science communication and learning outcomes. Students will be graded individually for participation in the data collection activities, and collectively as a team for a brief final report and class presentation.

Key dates and times for the COSI are listed on the last page of the syllabus. These dates will be updated or specified in more detail as needed.

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.

Extra Credit (maximum 3%)

Students may earn extra credit by completing a film diary in which the view from a selected list and then write a brief 2-3 page reaction paper for each film. For each reaction paper completed, you may earn up to 1pt of extra credit toward your final grade, for a maximum of 3pts. ALL EXTRA CREDIT REACTION PAPERS ARE DUE BY LAST DAY OF CLASS

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 or one of your TAs 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.

COURSE TOPIC SCHEDULE

DATE	TOPIC / Assignment
1/11	Course Introduction / Basic approaches to Science Communication
1/18	Martin Luther King Day – No Class (But Background readings on COSI Project on Carmen)
1/25	Informal learning about science
2/1	Science Edutainment
2/8	Citizen Science
2/15	Public Engagement with Science
2/22	Expert / Lay Science Communication
2/29	Deficit Model / Social Marketing Approaches / MIDTERM EXAM ASSIGNED
3/7	Science & Popular Culture
3/14	SPRING BREAK – ENJOY!
3/21	Science Online
3/28	Science Journalism
4/4	Science & Celebrity
4/11	Science & Values
4/18	Science & Denialism
4/25	TEAM COSI PROJECT PRESENTATIONS & FINAL REPORTS DUE / EXTRA CREDIT FILM DIARIES DUE / FINAL EXAM ASSIGNED

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

COSI DATES (as of 1/11)

DATE	Activity
1/19	Science Café Evaluation Team Orientation (time to be set)
1/27	WOSU@COSI Science Forum 7pm-8:30pm (Gene Editing)
1/28 OR 1/29	COSI Tour & Orientation
2/7	Science Café Evaluation Team Data Collection 10am-3pm
2/26	Youth Robots 3-D Evaluation Team Data Collection 5:30pm -9:30pm
3/3	Adult Theater Evaluation Team Data Collection 5:30pm-9:30pm
3/3	Adult Robots 3-D Evaluation Team Data Collection 5:30pm-9:30pm
3/4	Youth Robots 3-D Evaluation Team Data Collection 5:30pm -9:30pm
3/10	Science Café Evaluation Team Data Collection 10am-3pm
3/10	Adult Theater Evaluation Team Data Collection 10am-3pm
4/7	Adult Robots 3-D Evaluation Team Data Collection 5:30pm-9:30pm
TBD	Adventure Audience Team Data Collection
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