Comm 6660/STS 6661
Public Engagement in Science
Fall 2012
This syllabus (including any updates) appears at http://blackboard.cornell.edu
This version updated: 15 August 2012

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Office hours
Tues., 2-4 pm, in Kennedy 321
and happily by appointment

Time and location
Thursday, 2:30-4:25, 326 Kennedy Hall

Course description
In recent years, both the scientific community and the science studies community have increasingly referred to "public engagement in science." But as more people have started using the term, its meaning has become less clear; "public engagement" has become a label to which people concerned about science and public have attached their own concerns.

In the past year, four separate "texts" (two peer reviewed and published, one performed as a research symposium, one posted as a semi-scholarly wiki) have summarized the state of the literature. This semester, we will read, compare, and contrast these texts. We will seek to understand how (or if) they are in conversation with each other.

Everyone will be expected to do the reading and come to class prepared to explore the readings. To "explore the readings" means you've read (or viewed) the texts, you've thought about them, and you're ready to see where the arguments lead. It also means you've identified inconsistencies or problems with the logic and are ready to tear the texts apart. You will usually find material that is intellectually challenging: it may require multiple readings to make sense, or it may challenge beliefs you already have (even though you may not have known that you have them). You will be expected to justify your reactions to the texts with specific references to the texts or, when relevant, to other texts. As the class meets in physical space only once a week, cyberspace discussions via Blackboard will play a key role in the course.
Each student will be responsible for helping lead one of the in-class discussions. You will come to class with a specific set of questions raised by the texts. Those questions may emerge from the content of the reading, or they may question the logic or approach taken by the author(s). It will be helpful for discussion leaders to bring the questions on a handout for everyone. Even better would be to circulate the questions a couple of days before class, via the class bulletin board (on the Blackboard system).

**Texts**

Rödder, S., Franzen, M., & Weingart, P. (2012). *The sciences' media connection: public communication and its repercussions*. Dordrecht; New York: Springer. [You can download .pdfs of the individual chapters through the Cornell Library, http://www.springerlink.com.proxy.library.cornell.edu/content/j7t241/#section=996487&page=1. Because Cornell "subscribes" to the book, you can also order a print copy for about $25 – see the button at the top of the page when you click the link above]


**Grades**

Grades will be based on class participation (30%, including written comments on the readings and contributions to class discussions) and on the final paper (70%).

**Academic integrity**

Academic integrity is crucial to your personal scholarly identity. Your rights and responsibilities in this area are outlined in the Cornell University Code of Academic Integrity: http://cuinfo.cornell.edu/Academic/AIC.html.

Violations of the code of conduct include but are not limited to:

- Submitting work in this class that has also been submitted for a grade in another course without prior permission of both instructors.
- Using, obtaining, or providing unauthorized assistance on examinations, papers, or any other academic work.
- Misrepresenting another person's work as your own. You are responsible for obeying the Code of Academic Integrity. Ignorance of the code is not an excuse.
The most common problem for many students is plagiarism, which will not be tolerated and will be sanctioned by failure of the course. Students from cultures outside the United States should be especially aware that American standards of acknowledgement and use of material prepared by others (especially one's professors) can be much different than those in other cultures. More information about plagiarism is available at http://plagiarism.arts.cornell.edu/tutorial/index.cfm.

If you have any questions about how to interpret the Code in the context of assignments or activities in this class (especially any that involve collaboration with your colleagues), please feel free to contact the instructors or the University Ombudsman.

Tentative course schedule

23 August: Introduction

30 August: Three perspectives
Science of science communication
- *The Macro View: Social Dynamics in Science Communication*, Dietram Scheufele, University of Wisconsin, Madison (21 mins)

Social relations of science and media
- Rödder et al., Part I (Introduction)

Public engagement in science

6 September: Science of science communication, 1 (Sackler videos, day 1)
Keynote Talk
- *Why We Can’t Trust Our Intuitions: Communication as a Science*, Arthur Lupia, University of Michigan (25 mins)

The Science of Science Communication I: What Do People Need to Know about Science?
- *The Content of Scientific Communication: Identifying the Scientific Knowledge that Is Most Relevant to Personal and Policy Decisions*, Detlof von Winterfeldt, University of Southern California (22 mins)
- *Trust in Scientists, Controversy Among Scientists, and American Public Opinion on Climate Change: How Attitude Formation and Change Unfolds*, Jon Krosnick, Stanford University (26 mins)

The Science of Science Communication II: Developing Strategies for Effective and Trustworthy Communication
- *Generating the Science Needed for Relevant Communication: How Can Social, Behavioral, and Decision Research Extract the Information that the Public Needs Most from the Wealth of Scientific Knowledge?*, Lisa Schwartz and Steven Woloshin, Dartmouth Medical School (27 mins)
• *What Do We Mean?: On the Importance of Not Abandoning Scientific Rigor When Talking about Science Education*, David Klahr, Carnegie Mellon University (24 mins)


Annual Sackler Lecture

• *Thinking That We Know*, Daniel Kahneman, Princeton University

13 September: Science of science communication, 2 (Sackler videos, day 2)

The Science of Science Communication III: Communication Dynamics in Socio-Political Contexts – How Science Is Presented and Understood in Modern Mass Cultures

• *Effects of Mass Media on the Political Process: How Do Mass Media Shape the Nature of Public Debates About Science?*, Matthew C. Nisbet, American University (24 mins)

• *Effects of Mass Media on Knowledge and Beliefs: How Do Mass Media (Across Different Channels and Content) Influence the Public?*, William P. Eveland, Ohio State University (23 mins)

• *New Media Landscapes: Where Do People Go for Information About Science and How Do They Evaluate What They Find?*, Dominique Brossard, University of Wisconsin, Madison (24 mins)

The Science of Science Communication IV: Developing Organizational Infrastructures for Evidence-Based Communication about Science

• *Institutional Constraints and Incentives: What Factors Determine When Scientists Act as Communicators and How They Succeed?*, Hans-Peter Peters, Research Center Jülich (24 mins)

• *Building Organizational Infrastructures for Effective Communication: What Have We Learned from Experiences in the Corporate, Governmental, and Academic Worlds?*, Ed Maibach, George Mason University (22 mins)

• *Communication as an Empirical Endeavor: Why Is Systematic Evaluation So Rare and How Can We Make It the Norm?*, Martin Storksdieck, National Research Council (23 mins)

Bold Proposals: Harnessing Communication Science

• *The Science & Entertainment Exchange: Fast Forward*, Barbara Kline Pope, National Academy of Sciences (15 mins)

• *Science Communication as the “New Political Science” for Democracy*, Dan M. Kahan, Yale Law School (16 mins)

• *Risk Communication and Risky Decision Making: From Viruses to Vaccines*, Valerie Reyna, Cornell University (31 mins)

• *The National Partnership for Climate Communication*, Anthony Leiserowitz, Yale University (15 mins)

Keynote talk [OPTIONAL]

• *Lost in Translation? Journalists as Conduits Between Science and the Public*, David Pogue, New York Times/NOVA (25 mins)
20 September: Social relations of science and media
- Rödder et al., Part 2, Medialization of Science – Theoretical Considerations (ch. 2)
- Rödder et al., Part 3, Media Coverage of Science (chs. 3-6)
- Rödder et al., Part 4, Scientists’ Attitudes to Media Visibility (chs. 7-9)

27 September: Social relations of science and media
- Rödder et al., Part 5, Organizational Responses to Media Expectations (chs. 10-13)
- Rödder et al., Part 6, Media Impact on Scholarly Communication (chs. 14-18)
- Rödder et al., Part 7, Conclusions (ch. 19)

4 October: Public engagement in science, 1
S&EE special issue, engagement and democracy:

FALL BREAK (but notice that, for this class, we don't miss any class time)

11 October: Public engagement in science, 2
S&EE special issue, engagement examples:

18 October: What counts as public engagement scholarship?

25 October: Compare & contrast

1 November: Paper topic presentations
   Last names M-Z [to be adjusted as necessary]

8 November: Paper topic presentations
   Last names A-L [to be adjusted as necessary]

15 November: NO CLASS (BVL out of town)

22 November: NO CLASS (Thanksgiving)

29 November: Future directions

11 December, noon (Tuesday): Final paper due