Comm 6660/STS 6661
Public Engagement in Science
Spring 2018
This syllabus (including any updates) appears at http://blackboard.cornell.edu
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Instructor
Bruce Lewenstein
Professor of Science Communication
303A Morrill Hall
Cornell University
Ithaca, NY 14853 USA
Phone: +1-607-255-8310
E-mail: b.lewenstein@cornell.edu

Office hours
Thursday, 1:00-3:00 pm in Morrill 303A
and happily by appointment at other times

Time and location
Thursday, 10:10-12:05, 101 Kennedy Hall

Course description
For more than 20 years, both the scientific community and the science studies community have
been referring 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 few years, various publications have summarized the state of the field. 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 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 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).
Discussion leaders should circulate the questions on the Blackboard discussion list by 6:00 pm on Tuesdays before class on Thursday.

**Texts**

Many (but not all) of the readings will come from various collections, mostly accessible through the Cornell Library or directly online. Some readings will be posted on Blackboard. You may want to download or bookmark the following texts:


Lewenstein, Bruce V. and Weitkamp, Emma (eds.) (2016). Citizen science [special issue]. *JCOM: Journal of Science Communication*, 15(1) and 15(3), published in two parts, online only at [https://jcom.sissa.it/archive/15/01](https://jcom.sissa.it/archive/15/01) and [https://jcom.sissa.it/archive/15/03](https://jcom.sissa.it/archive/15/03).

I have put on reserve at Mann Library: Jamieson, Kathleen Hall, Kahan, Dan, & Scheufele, Dietram A. (Eds.). (2017). *Oxford Handbook of Science of Science Communication*. New York: Oxford University Press. I will post a few chapters online.

**Assignments**

*Reading response:* Each week, you should submit a reading response of roughly 500 words. Responses should not be simple summaries of the readings, but *responses* – your statement of the key point of the reading and your sense of what works and what doesn’t work in the author(s)’s argument. Provide detail. When there are multiple readings, you may either make an overall response or choose one or two articles to look at. You must post your response on the Blackboard discussion board by Tuesday, 6:00 pm, of each week – and you should plan on reading your colleagues’ responses before class on Thursday.

*Final paper:* You will write a 10-20 page final paper exploring the scholarly literature on one topic (of your choice), starting from the class readings. A draft assignment is attached to this syllabus; we will discuss further in class.

**Grades**

Grades will be based on class participation (30%, including written comments on the readings and contributions to class discussions both physically and virtually) 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](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.

By taking this course, you acknowledge that all required papers may be subject to submission for textual similarity review to Turnitin.com for the detection of plagiarism. All submitted papers will be included as source documents in the Turnitin.com reference database solely for the purpose of detecting plagiarism of such papers. Use of the Turnitin.com service is subject to the Usage Policy posted on the Turnitin.com site.

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 instructor or the University Ombudsman.
Tentative course schedule

25 January: Introduction
http://informalscience.org/news-views/public-engagement
[short, read in advance if possible]

1 February: Three perspectives
Science of science communication

Public engagement in science
National Academies of Science, Engineering, and Medicine. (2017). Public Engagement. In Human Genome Editing: Science, Ethics, and Governance (pp. 125-137). Washington, DC: National Academies Press. [link] [This is a direct link; you can also register for a free account at the National Academies Press site, which will let you download the chapter or full report; you’ll probably want to register, as we will be reading other NASEM reports]

Citizen science

8 February: Science of science communication, 1
Fiske, Susan T., & Dupree, Cydney. (2014). Gaining trust as well as respect in communicating to motivated audiences about science topics. Proceedings of the National Academy of Sciences, 111(Supplement 4), 13583-13584. [link]


15 February: Science of science communication, 2


22 February: Public engagement, 1


1 March: Public engagement, 2


8 March: Citizen science, 1
We’ll read selections from Lewenstein, Bruce V. and Weitkamp, Emma (eds.) (2016). Citizen science [special issue]. *JCOM: Journal of Science Communication*, 15(1) and 15(3), published in two parts, online only

From Part 1, [https://jcom.sissa.it/archive/15/01](https://jcom.sissa.it/archive/15/01)

- Lewenstein, “Can we understand citizen science?”
• Kasperowski and Brounéus, “The Swedish mass experiments – a way of encouraging scientific citizenship”
• Hoover, “We’re not going to be guinea pigs”; Citizen science and environmental health in a Native American community

From Part 2, https://jcom.sissa.it/archive/15/03
• Weitkamp, “From planning to motivations: citizen science comes to life”
• Del Savio et al., “Crowdsourcing the human gut: Is crowdsourcing also “citizen science”?”
• Roger and Klistorner, “BioBlitzes help science communicators engage local communities in environmental research”

In addition, I encourage you to skim through the Citizen Science Association’s journal to see what people in the citizen science community are talking about: https://theoryandpractice.citizenscienceassociation.org/articles/.

15 March: Citizen science, 2

22 March: Science literacy NOTE: Class this week will meet on TUESDAY, 20 March, 7:30-9:30 pm, at my house. A detailed map is available on the Blackboard site.

29 March: Topic to be developed, based on class interests
Possibilities include:
Museums
Controversies
Science education
Development communication
Online engagement
Hobbies, DIY, Maker movement
Etc.

SPRING BREAK

12 April: Topic to be developed, based on class interests

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

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

3 May: Future directions

16 May (Wednesday): Final paper due [tentative]
DRAFT ASSIGNMENT: Course paper

As we will discuss in class, the paper for this course should be a literature-based exploration of a topic raised by one (or more – but a limited number) of the readings in the course.

Put another way: Take one of the readings that particularly interests, excites, or infuriates you, follow the notes and references, and explicate the issues raised in the set of literature you explore.

Clearly, some of our readings might be lumped together. But the idea is to take one key idea and find out more about its antecedents. What assumptions are built into the argument? What broader argument is the paper a part of? Would the authors of cited articles agree with the way your author has used them? If so, what would they like about the extended argument? If not, how would they counter-argue?

Length: as long as necessary, and no longer. (I'm guessing most of you will find yourselves writing 10-20 pages, double-spaced.) Format: either footnotes or in-text references are fine. Use a standard reference system from your field (ask if you're not sure; APA is usually a safe choice).