



Cornell University

Comm 4660/STS 4661: Public Communication of Science & Technology Spring 2017

This syllabus (including any updates) is also available through Cornell's Blackboard site
This version updated: 25 January 2017

Professor

Bruce Lewenstein
303 Morrill Hall
Cornell University
Ithaca, NY 14853
Phone: 255-3810
E-mail: b.lewenstein@cornell.edu

Office hours

Weds., 1:00-3:00 in Morrill 303
and happily by appointment

Class time and location

Thurs 12:20-2:15
Kennedy 101

Course description

Our broad topic is "public communication of science and technology" (PCST); this semester, our specific topic will be science and culture – how can we understand science as a part of the public culture around it? What do popular science toys tell us about childhood? How do responses to the atomic bomb tell us about American culture after World War II? What do celebrity scientists tell us about celebrity in the modern world? In the later parts of the semester, we'll design a study to explore the meaning of science in today's culture – or do I mean the meaning of today's culture when viewed through science?

The course objectives are:

- To learn about various points of intersection of science and public culture in the last 100 years or so (especially in the United States)
- To learn to read, analyze, and critique scholarly literature (about science and culture)
- To learn to design and conduct a study exploring science and culture

This will be a seminar course. That means that everyone does the reading and everyone comes 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 text 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.

For most class sessions, one or two of you will lead the discussion. The leader(s) will come to class with a specific set of questions raised by the readings. 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 will circulate the questions the day before class, via Blackboard.

Readings

All readings should be done before the week's class session. Most readings will be posted online (with direct links to publications, links through the Cornell library system, and occasionally to scanned copies of material not available online). Several books are required – although you can read some of them online through the Cornell library, you'll probably want to purchase them through your favorite online bookseller. *Please order soon*, in case delivery takes a while.

- Boyer, P. (1994). *By the Bomb's Early Light: American Thought and Culture at the Dawn of the Atomic Age* (with new preface by the author ed.). Chapel Hill: University of North Carolina Press. [Available through Cornell library, but a bit hard to read that way; purchase used online for about \$10]
- Davies, S. R., & Horst, M. (2016). *Science Communication: Culture, Identity, and Citizenship*. London: Palgrave. [Available through Cornell library]
- Fahy, D. (2014). *The new celebrity scientists : out of the lab and into the limelight*. London: Rowman and Littlefield. [purchase online; about \$25] [It's possible I'll replace this with some articles that you won't need to purchase.]
- Onion, R. S. (2016). *Innocent Experiments: Childhood and the Culture of Popular Science in the United States*. Chapel Hill: University of North Carolina Press. [purchase online; about \$25]

Grades

About 40% of your grade will depend on class participation, electronic bulletin board participation, your activity as a discussion leader, and short reading response assignments during the semester; 30% on two short mid-semester papers; and the remaining 30% will depend on a final group project (exact format to be determined).

Assignments

1. Each week, post a short (less than one page) response to the readings on the Blackboard discussion site. I also encourage you to respond to the postings of other students, so that we have discussion going on throughout the week.
2. A 2-page report on visiting a science museum. DUE: 23 February.
3. A 2-page report on science in a recent entertainment movie. DUE: 23 March
4. A final report from a group project. DUE: During finals week, date TBD

Academic integrity

As you know, you are responsible for following Cornell's Code of Academic Integrity. You should review the Code at <http://cuinfo.cornell.edu/Academic/AIC.html>. In particular, any work that you hand in should be your own. 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 me or the University Ombudsman.

Disabilities

Cornell University (as an institution) and I (as a human being and as instructor of this course) are committed to full inclusion in education for all persons. Services and reasonable accommodations are available to persons with temporary and permanent disabilities when conditions cause barriers to equal educational opportunity. The Office of Student Disability Services (<http://sds.cornell.edu/>) determines the eligibility of students to receive formal accommodations and works collaboratively with the student and university faculty and staff to recommend appropriate accommodations. Please visit the Student Disabilities Services site for more information about accessibility at Cornell.

Course plan, as of 25 January 2017

Because of my travel schedule, this semester will be a bit choppy. But you'll have things to do on the weeks that we don't meet.

Week #	Date	Content
1	26 Jan	Intro: Science and Culture
2	2 Feb	<p>Science, politics, people, and research on science communication</p> <ul style="list-style-type: none"> • <u>Critical, but a bit off what we'll do:</u> Maynard, A. D., & Scheufele, D. A. (2016). What does research say about how to effectively communicate about science? <i>The Conversation</i>. Retrieved from https://theconversation.com/what-does-research-say-about-how-to-effectively-communicate-about-science-70244 • <u>Alongside what we'll do:</u> Nisbet, M. (2017). Ending the Crisis of Complacency in Science. <i>American Scientist</i>, 105(January), available at http://climateshiftproject.org/wp-content/uploads/2016/12/Nisbet_EndingCrisisofComplacencyinScience_AmericanScientist_JanFeb2017.pdf • <u>What we will do:</u> Durant, J., Buckley, N., Comerford, D., Fogg-Rogers, L., Fooshee, J., Lewenstein, B., & Wiehe, B. (2016). <i>Science Live: Surveying the landscape of live public science events</i>. Cambridge, MA: MIT Museum, available at https://livescienceevents.org/portfolio/read-the-report/
3	9 Feb	<p>Science and culture</p> <ul style="list-style-type: none"> • Davies, S. R., & Horst, M. (2016). <i>Science Communication: Culture, Identity, and Citizenship</i>. London: Palgrave. (Read chs. 1 & 2, available through Cornell library: http://link.springer.com.proxy.library.cornell.edu/book/10.1057%2F978-1-137-50366-4)
4	16 Feb	<p>Science and museum culture</p> <ul style="list-style-type: none"> • NOTE: No regular class meeting • Farmelo, G. (2004). Only Connect: Linking the Public With Current Scientific Research. In D. Chittenden, G. Farmelo, & B. V. Lewenstein (Eds.), <i>Creating Connections: Museums and the Public Understanding of Current Research</i> (pp. 1-26). Walnut Creek, CA: Altamira Press. [on Blackboard] • This week (perhaps during break at beginning of week), visit a science or nature museum
5	23 Feb	<p>Science and American Culture</p> <ul style="list-style-type: none"> • Onion, R. S. (2016). <i>Innocent Experiments: Childhood and the Culture of Popular Science in the United States</i>. Chapel Hill: University of North Carolina Press. • DUE: Mid-semester paper #1: Report on visit to science museum

6	2 Mar	<p>Science and Defense Culture</p> <ul style="list-style-type: none"> Boyer, P. (1994). <i>By the Bomb's Early Light: American Thought and Culture at the Dawn of the Atomic Age</i> (with new preface by the author ed.). Chapel Hill: University of North Carolina Press. (Available through Cornell library, in two forms: Original 1985 edition: http://site.ebrary.com.proxy.library.cornell.edu/lib/cornell/detail.action?docID=10351497 [not clear if more than one person can check out at same time, or if it can be downloaded in some form] Reprinted 1994 edition: http://quod.lib.umich.edu.proxy.library.cornell.edu/cgi/t/text/text-idx?c=acls;idno=heb01617.0001.001 [awkward to read online]
7	9 Mar	<p>Science and Celebrity Culture</p> <ul style="list-style-type: none"> Fahy, D. (2014). <i>The new celebrity scientists: out of the lab and into the limelight</i>. London: Rowman and Littlefield.
8	16 Mar	<p>Science and Popular Culture</p> <ul style="list-style-type: none"> Kaiser, D., Durant, J., Levenson, T., Wiehe, B., & Linett, P. (2014). <i>The Evolving Culture of Science Engagement: Report of Findings -- September 2013 Workshop</i>. Cambridge, MA: MIT, available at http://www.cultureofscienceengagement.net/s/Evolving-Culture-of-Science-Engagement-Phase-1-Report.pdf Additional online readings
9	23 Mar	<p>Exploring Science and Culture, 1</p> <ul style="list-style-type: none"> NOTE: No regular class meeting Teamwork preparing for study design Readings to come DUE: Mid-semester paper #2: Science in a recent movie
10	30 Mar	<p>Exploring Science and Culture, 2</p> <ul style="list-style-type: none"> Designing a study Readings to come
	6 Apr	SPRING BREAK
11	13 Apr	<p>Exploring Science and Culture, 3</p> <ul style="list-style-type: none"> What did you find?
12	20 Apr	<p>Science and e-Culture</p> <ul style="list-style-type: none"> Readings to come
13	27 Apr	<p>Science and visual culture</p> <ul style="list-style-type: none"> Readings to come
14	4 May	Wrap-up
Finals		DUE: Final group paper due at time specified for this course