Comm 4660/STS 4661:
Public Communication of Science & Technology
Spring 2015

This syllabus (including any updates) appears at http://blackboard.cornell.edu
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Professor
Bruce Lewenstein
304 Rockefeller Hall
Cornell University
Ithaca, NY 14853
Phone: 255-3810
E-mail: b.lewenstein@cornell.edu

Office hours
Weds., 12:30 – 2:30 in Rockefeller 304
and happily by appointment

Time and location
MW 2:55-4:10
Kennedy 103

Course description
Our broad topic is "public communication of science and technology" (PCST); this semester, our specific topic will be science museums (including natural history museums, interactive science centers, zoos, aquariums, pop-up museums, online museums, etc.). We will explore them by reading about current research in the field. We will begin with some history, then look at a variety of specific issues in science museums. We’ll also have a number of guest speakers, both in-person and electronically. If the schedule allows, we’ll have one or two field trips to local museums.

The course objectives are:
- To learn to read, analyze, and critique scholarly literature (about science museums)
- To understand current issues (about science museums)
- To learn to apply scholarly analyses (of PCST more broadly) to real-world examples

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 a couple of days before class, via Blackboard.
Readings
All readings should be done before the first session of the week. 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). Two books are required, which you can purchase through your favorite online bookseller. Please order soon, as we will be reading the Rader & Cain book early in the semester.

- Chicone, Sarah J., & Kissel, Richard A. (2013). Dinosaurs and Dioramas: Creating Natural History Exhibitions. Walnut Creek, CA: Left Coast Press. ($27 in paperback on Amazon; Kindle version only $16.)

You will also be browsing journals in the field, looking for relevant articles. Some key journals to look at include:

- Museum & Society (open access; full list of articles available at http://www2.le.ac.uk/departments/museumstudies/museumsociety/full-title-and-author-list).
- JCOM: Science Communication Journal (open access; http://jcom.sissa.it/)
- The Science Museum Group Journal (open access: http://journal.scientemuseum.ac.uk/).

You might also be exploring blogs focused on science museums. A nice guide to them appears at http://museummedia.nl/links/100-best-curator-and-museum-blogs/.

Grades
About 40% of your grade will depend on class participation, electronic bulletin board participation, your activity as a discussion leader, and small assignments during the semester; 20% on a mid-semester paper; and the remaining 40% will depend on a final group project (exact format to be determined).

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.
Course plan, as of 20 January 2015

Week 1: Studying science museums
Readings: None

Wednesday, 21 January: Class introduction and discussion

Week 2: Issues in science museums
Readings:

Monday, 26 January: Before class, scan at least three of the following science museum websites. Be ready with questions about issues raised by the websites.
- National Zoo (Washington, DC), [http://nationalzoo.si.edu/](http://nationalzoo.si.edu/)
- National Museum of Natural History (Washington, DC), [http://www.mnh.si.edu/](http://www.mnh.si.edu/)
- The Exploratorium (San Francisco), [http://www.exploratorium.edu/](http://www.exploratorium.edu/)
- Questacon (Canberra, Australia), [https://www.questacon.edu.au/](https://www.questacon.edu.au/)
- CapeTownScienceCentre (Cape Town, South Africa), [http://ctsc.org.za/](http://ctsc.org.za/)
- Or select from the TripAdvisor lists of best zoos, aquariums, and museums:
  - [http://www.tripadvisor.com/TravelersChoice-Attractions-cZoos-g1](http://www.tripadvisor.com/TravelersChoice-Attractions-cZoos-g1)
  - [http://www.tripadvisor.com/TravelersChoice-Attractions-cAquariums-g1](http://www.tripadvisor.com/TravelersChoice-Attractions-cAquariums-g1)
  - [http://www.tripadvisor.com/TravelersChoice-Attractions-cMuseums-g1](http://www.tripadvisor.com/TravelersChoice-Attractions-cMuseums-g1) (consider which museums on this list fit the category of “science” museum)

Wednesday, 28 January: Continued discussion

**DUE Friday, 30 January, 5:00 pm:** What questions do YOU want to know about? (1 page paper)

Week 3: History of science museums, 1
Readings:
- Rader & Cain, chs. 1-4

Monday, 2 February: GUEST: Warren Allmon, Director of the Paleontological Research Institution/Museum of the Earth

Wednesday, 4 February: Discussion of Rader & Cain, chs. 1-4
Week 4: History of science museums, 2
Readings: Rader & Cain, chs. 5-7

Monday, 9 February: Continued discussion of Rader & Cain

Wednesday, 11 February: NO CLASS

**DUE Friday, 13 February, 5:00 pm:** Scan the table of contents of one of the journals listed in syllabus for 2012-present. Identify at least two articles of interest and summarize them. Identify at least three other articles you would explore if time allowed. (1% extra credit for doing a 3rd article summary; no additional credit for additional summaries.)

Week 5: History of science museums, 3
Readings:

Monday, 16 February: NO CLASS – February break

Wednesday, 18 February: Continued discussion of Rader & Cain, plus Lightman

Week 6: Learning in science museums
Readings:

Monday, 23 February: Class discussion

Wednesday, 25 February: Class discussion

Week 7: Presenting science information
Readings:

Monday, 2 March: Class discussion

Wednesday, 4 March: GUEST: Sarah Chicone, Assistant Director, Johns Hopkins University Museum Studies Program

**DUE, Friday, 6 March, 5:00 pm:** Project memo from groups
Week 8: Presenting science process
Readings:


Monday, 9 March: Class discussion

Wednesday, 11 March: Class discussion

Week 9: Presenting science controversy
Readings:

- Case study: “Science in American Life” at the Smithsonian

Monday, 16 March: Class discussion

Weds, 18 March: Field trip to Sciencenter

DUE Friday, 20 March: Annotated reading list for final project

Saturday, 21 March: NanoDays volunteering (2% extra credit)

Week 10: Diversity and accessibility
Readings (tentative):


**DUE Monday, 23 March, 5:00 pm: Museum website analysis**

Monday, 23 March: GUEST: Kirsten Ellenbogen, Director, Great Lakes Science Center (Cleveland), via Skype

Wednesday, 25 March: Class discussion

**DUE Friday, 27 March, 5:00 pm: 2-page summary of final project structure & conclusions**

**SPRING BREAK**

**Week 11: Science museums in the digital age**

Readings:

Monday, 6 April: Class discussion

Wednesday, 8 April: Class discussion

**Week 12: Living museums**

Readings: Selections from the following:
- **Zoos:**
- **Aquariums:**
  - [http://en.wikipedia.org/wiki/Aquarium#History_and_popularization](http://en.wikipedia.org/wiki/Aquarium#History_and_popularization)
  - [http://diginole.lib.fsu.edu/cgi/viewcontent.cgi?article=1232&context=etd](http://diginole.lib.fsu.edu/cgi/viewcontent.cgi?article=1232&context=etd)
- **Public gardens:**
  - [http://longwoodgardens.org/history](http://longwoodgardens.org/history)
Monday, 13 April: Class discussion

Wednesday, 15 April: TENTATIVE: Field trip to Cornell Plantations

**DUE, Friday, 17 April, 5:00 pm:** Museum visit report

Week 13: Current issues in science museums
Readings: TO COME
   - We’ll be looking to see what happens this semester!

Monday, 20 April: Class discussion

Wednesday, 22 April: Class discussion

Week 14: Presentations

Mon, 27 April: Presentations, groups 1-3

Weds, 29 April: Presentations, groups 4-6

Week 15: Science museums in the world today

Monday, 4 May: Wrap up

Wednesday, 6 May: NO CLASS

Finals week

**Final paper/project due:** Tuesday, 12 May, 4:30 pm, via Blackboard.