

# ESM 440: Strategic Environmental Communication

Spring 2018

Bren Hall 3526, Tues/Thurs, 2:00-3:15 pm

## INSTRUCTORS

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## COURSE OVERVIEW

Successful environmental communication is not just about getting the facts right. Before tackling an issue, it's critical to consider the intended audiences and their values and attitudes—and to use effective storytelling to reach them. To learn to message effectively, you will study the theory behind persuasion and communication, including how logic, emotion, and social influence work. You will learn about strategic messaging and how to develop compelling stories using conflict, drama, and character. You will also practice writing for different audiences, and will gain an understanding of the complex media environment in which your messages compete for attention.

## REQUIREMENTS

**Participation.** Strategic communication requires effective and open communication of ideas. In fact, the ability to communicate clearly and articulately is crucial to producing successful media. Therefore, a substantial portion of the grade will be tied to participation in class discussions. While regular participation will be expected, the quality of contributions is more important than the quantity. In addition, you may be asked to comment on readings or films on Gauchospace.

**Attendance.** Since participation is central to the value of the course, you are expected to attend every lecture. We also have no textbook, so what we review in class is essential; a sign-in sheet will be circulated at the beginning of each class. If for some reason you cannot make it to class due to an emergency or illness, please notify the instructors *in advance*. Planned absences can also be excused for academic or professional activities, such as conferences or interviews.

**However, if you miss three lectures or more, you will not pass the course.**

**Grading.** Your grade will be dependent upon eight homework assignments and a final project, as well as your participation in class. Grading guidelines will be provided with each assignment, and your grade will be calculated out of a total 150 points. The grading breakdown is:

Assignment	Points	Due Date	Assignment	Points	Due Date
Favorite Science Comm	5	Apr 5 @ 12 noon	Narrative X-Ray	10	May 15 @ 12 noon
Message Grid	15	Apr 12 @ 12 noon	Press Release	10	May 16 @ 5 pm
Strategy Assignment	5	Apr 19 @ 12 noon	Funding Pitch	10	May 29 @ 12 noon
6 Word Story	5	Apr 25 @ 5 pm	Character Portrait	15	May 31 @ 12 noon
Storytelling Basics	10	Apr 30 @ 5 pm	Final Group Project	30	Jun 5/7 @ 2 pm
Midterm Pitch	15	May 8/10 @ 2 pm	Class participation	20	n/a

**Assignment Format.** Assignments should be uploaded to Gauchospace as a Word document (so your instructors can provide edits using “track changes”). Please be mindful of the time each

assignment is due. Please be sure to include your name, assignment name, and date in a header; assignments should be saved as: **Lastname\_Firstname\_AssignmentName\_MMDDYY.docx**.

## COURSE OUTLINE

Week	Lecture	Topic
Week 1	Apr 3	Science Communication Basics
	Apr 5	Context: Audience + Message Environment
Week 2	Apr 10	Science of Science Communication I
	Apr 12	Science of Science Communication II
Week 3	Apr 17	Strategy I
	Apr 19	Strategy II
Week 4	Apr 24	Storytelling Basics (Hutton)
	Apr 26	Engaging the Public (Hutton)
Week 5	May 1	Conflict & Drama (Hutton)
	May 3	The Hero's Journey
Week 6	May 8	Midterm Pitch I
	May 10	Midterm Pitch II
Week 7	May 15	Journalism I: Science Narratives
	May 17	Journalism II: Broadcast Media
Week 8	May 22	Journalism III: Interviewing Session (Hutton)
	May 24	Art & Visual Storytelling
Week 9	May 29	Funding Your Ideas
	May 31	Controversy in Science (Hutton)
Week 10	Jun 5	Final Presentations I
	Jun 7	Final Presentations II

## LECTURES & READINGS

**\*Please note that Readings/Topics are subject to change; always check GauchoSpace**

**Apr 3: Science Communication Basics.** Course intro, framing, basic science communication tips

- ❖ Bearzi, M. (2013) 5 Simple Tips for Communicating Science, *National Geographic, Ocean Views*.
- ❖ Zimmer, C. (2009) The Index of Banned Words (The Continually Updated Version), *The Loom, Discover Magazine*.

**Apr 5: Understanding Context: Audience & the Message Environment.** Audience considerations, the science media landscape, US public perceptions of science, anti-science, pop science

- ❖ Lakoff, G. (2010) Why it Matters How We Frame the Environment. *Environmental Communication, 4*, p. 70-81.
- ❖ Oreskes & Conway (2010) Defeating the merchants of doubt, *Nature, 465(7299)*, 686-687.
- ❖ Lazer et al. (2018) The science of fake news. *Science, 359*, p. 1094-1096
- ❖ National Academies of Sciences, Engineering, and Medicine. (2017). Communicating Science in a Complex, Competitive Communication Environment *Communicating Science Effectively: A Research Agenda*. Washington, DC: The National Academies Press.

*Examples of anti-environmental propaganda (optional):*

- ❖ Introduction from: Singer & Avery (2007) *Unstoppable Global Warming*, Rowman & Littlefield: Lanham, MD.
- ❖ Bailey, Ronald (2002). *Global Warming and Other Eco-Myths: How the Environmental Movement Uses False Science to Scare Us to Death*, Prima Publishing: Roseville, CA.

**April 10: The Science of Science Communication I.** Deficit model, persuasion, dual-process theories, fear appeals

- ❖ Chess, C., & Johnson, B. B. (2007). Information is not enough. In S. C. Moser & L. Dilling (Eds.), *Creating a climate for change: Communicating climate change and facilitating social change*. Cambridge, UK: Cambridge University Press. (p. 223–233)
- ❖ Marshall, G. (2014) Ch 10: The Two Brains: Why We Are So Poorly Evolved to Deal With Climate Change, in *Don't Even Think About It: Why Our Brains Are Wired To Ignore Climate Change*, New York, NY: Bloomsbury. (p. 46-51)
- ❖ Kollmuss, A., & Agyeman, J. (2002). Mind the gap: Why do people act environmentally and what are the barriers to pro-environmental behavior? *Environmental Education Research*, 8, p.239-260.

**April 12: The Science of Science Communication II.** Group identity and social influence, motivated reasoning, social networks; Message grid presentations

- ❖ Stoknes, P. E. (2015) Ch 6: The Roots of Denial and Ch: 7 The Five Psychological Barriers to Climate Action, In *What We Think About When We Try Not To Think About Global Warming*, Chelsea Green, White River Junction, VT. P. 70-84.
- ❖ Stoknes, P. E. (2015) Chapter 9: The Power of Social Networks, In *What We Think About When We Try Not To Think About Global Warming*, White River Junction, VT: Chelsea Green. (p. 95-109)
- ❖ Kahan, D. M. (2017) Misconceptions, Misinformation, and the Logic of Identity-protective Cognition. *The Cultural Cognition Project Working Paper*, Yale University.

**April 17: Strategy I.** (Guest Speaker: Eric Cadenas, Loa Com) Developing goals & objectives, campaign design, theories of change

- ❖ Cox, R. (2009) Ch 7: Environmental Advocacy Campaigns, In. *Environmental Communication and the Public Sphere* (2nd ed.). Thousand Oaks, CA: Sage Publications. (p. 225 – 252)
- ❖ Grant Craft (n.d.) Mapping change: Using a theory of change to guide planning

**April 19: Strategy II.** Community-based social marketing, message evaluation, ethics of marketing and strategic messaging

- ❖ McKenzie-Mohr et al. (2012). Chapter 1: Fostering sustainable behavior, In: *Social Marketing to Protect the Environment: What Works*, Sage, Thousand Oaks, p. 3-20.
- ❖ McKenzie-Mohr et al. (2012). Chapter 7: Protecting Fish and Wildlife Habitats, In: *Social Marketing to Protect the Environment: What Works*, Sage, Thousand Oaks, p. 109-132.
- ❖ Mann, Michael. If you see something, say something, *New York Times* (Jan 17 2013).

**April 24: Storytelling Basics.** Relationship between science and media; importance of compelling communication; storytelling basics; consuming/producing media; *Eviction Day* screening and discussion.

- ❖ *The Storytelling Animal: How Stories Make Us Human*, by Jonathan Gottschall (Houghton Mifflin, 2012) preface and Chapter 1; pp. xi-xvii; 1-20.

**April 26: Conflict & Drama.** What is drama; what is its relationship to story? The spectrum of drama; use (and abuse) of emotions in media. *Judgment Day/When the Levees Broke* screenings.

- ❖ *The Sixth Extinction*, by Elizabeth Kolbert, Chapter 1
- ❖ *Sredni Vashtar*, by H.H. Munro

**May 1: Story (vs. Science) Research.** Elements a content producer looks for; importance of casting; a “God-like” knowledge of the subject; what your audience needs to know; tone; *Supersize Me* screening and discussion

- ❖ “Draft No. 4,” by John McPhee (The New Yorker)
- ❖ “What Writers Really Do When They Write,” by George Saunders (The Guardian)

**May 3: The Hero’s Journey.** *Guest Lecturer: Craig Chalquist*

- ❖ Readings TBD

**May 8: Midterm Pitch Sessions I.** Prepared pitches; critiques

**May 10: Midterm Pitch Sessions II.** Prepared pitches; critiques

**May 15: Journalism I: Science Narratives.** Journalistic norms, press releases, op-eds, science stories, effective narrative structures; discuss Narrative X-Ray assignment

- ❖ Burke, K. L. (2015) 12 Tips for Scientists Writing for the General Public, *American Scientist*.
- ❖ Jabr, F. (2014) A New Generation of American Chestnut Trees May Redefine America’s Forests. *Scientific American*.
- ❖ Kintisch, E. (2014) Into the Maelstrom, *Science* 344, p. 250-253.
- ❖ Kolbert, E. (2015) The Siege of Miami, *The New Yorker*. December 21 & 28, 2015 Issue.
- ❖ Rosen, J. (2015) Narrative X-Rays: Looking at Stories’ Structural Skeletons, *The Open Notebook*.

**May 17: Journalism II: Broadcast Media.** (*Guest Speaker: Lance Orozco, KCLU Ventura & Santa Barbara Public Radio.*) Broadcast media framing/storytelling, interviews in class, interviewing tips

- ❖ *Chapter 10, Fine-Tune for Radio and Television*, p. 143 – 151 in: Baron, N. (2010). *Escape from the Ivory Tower: A guide to making your science matter*. Washington, DC: Island Press.
- ❖ Lamott, A. (1995) Shitty First Drafts. In *Bird by Bird*, (pp. 21-27). New York, NY: Anchor Books.

**May 22: Journalism III: Interviewing Session.** Intro to interviewing; interviewing goals and techniques; three or four interviewees

- ❖ Sample profiles TBD
- ❖ “Elicitation,” by John McPhee (from *The New Yorker*)

**May 24: Art & Visual Storytelling.** Science communication in informal settings, environmental art, design, and creative indicators

- ❖ Readings TBD

**May 29: Funding Your Ideas.** (Guest Panel: Beth Pitton-August, Assistant Dean of Development, Bren School; Owen Bailey, Executive Director, Environmental Defense Center; Kathi King, Development Activities Manager, Community Environmental Council). The environmental funding landscape, how to prepare an effective funding pitch or proposal, project design

- ❖ Read example grant proposals posted on GauchoSpace

**May 31: Controversy in Science.** (Hutton) Role and importance of controversy; what is “objectivity” in journalism; delivering uncertain science; headwinds, and how journalists respond; screening *The Great Global Warming Swindle*

- ❖ *Merchants of Doubt*, by Naomi Oreskes and Erik M. Conway (Bloomsbury Press, 2010) TBD
- ❖ *Evolution* Foreword
- ❖ Cook et al. (2013) Quantifying the consensus on anthropogenic global warming in the scientific literature, *IOP Science, Environmental Research Letters*, 8.
- ❖ Friends of Science Society (2014) 97% Consensus? No! Global Warming Math Myths & Social Proofs, *Friends of Science Society, Calgary*.

*Anti-environmental propaganda (optional):*

- ❖ Idso, Carter, & Singer (2015) Why Scientists Disagree About Global Warming, *The Heartland Institute*.

**Jun 5: Final Presentations I.**

**Jun 7: Final Presentations II & Wrap-Up.**