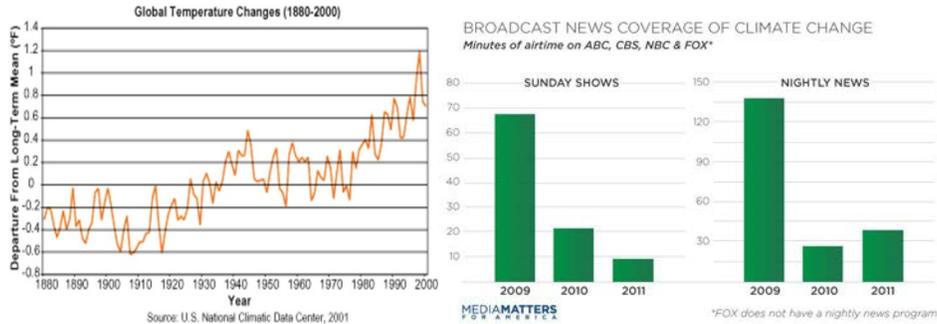


COM 400/600, Sec. 3

Multimedia Reporting on Climate Change and Sustainability

Spring, 2015--Wednesdays, 12:15-3:30; 252 Newhouse 3



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Introduction-

Welcome to our course in communicating science, *Multimedia Reporting on Climate Change and Sustainability*. This is a new offering from our Newhouse Science Communications Program. It is a collaboration between the Newhouse School of Public Communications, the College of Arts and Sciences and SUNY-ESF.

The title of the class is a fit for the course catalogue but doesn't fully describe what we hope to achieve. This is a core experience in learning the principles and practices of communicating science to the public, using all the skills and tools in a good storyteller's armamentarium: writing, resourcing, shooting visual material, recording audio, editing and distribution; leveraging social media like Twitter and Facebook to find and build audiences; analyzing the good and the bad of science communications to broad audiences. We may even experiment with new story gathering tools like drones and delivery technology like

wearable digital devices. Most importantly, you will learn how to identify good stories, capture and shape them and deliver them, with clout.

COURSE OUTLINE

Purpose

This course will teach the principles, practices and processes of science storytelling, including documentary and journalism, in the context of public understanding. The goal will be to create a better understanding among both cohorts of students as to how science and the media work, to teach pertinent skills and to create a template for better relations between the two professions.

Methods

What is science and how does it do its business? What is journalism and how does it operate as both a public service and a commodity? These fundamental questions will be addressed by you in an inaugural discussion. Faculty will moderate this opening event and tailor subsequent seminars and discussions to what is right and what is wrong about each groups' perception of the other's work.

Traditional seminars and lectures will be only one teaching approach. The class will be built on small science/reporting teams, made up of one science student and one communications student, where possible. You will collaborate on real world exercises in evaluating science and in gathering, writing and producing science-based content. Guest lecturers and speakers will be prominent.

Student Learning Outcomes

Students will complete this course with:

1. A comprehensive understanding of how the processes of science and journalism work; how they are similar and how they are different and what those dynamics mean to the science of climate change in particular.
2. An understanding of the way information is communicated to audiences through mediated news messages; how those messages are perceived and consumed; how they influence behavior; how interactive media have impacted traditional roles. This will include familiarity with basic communications theory, agenda setting, framing theory and audience research.
3. An appreciation of new methods scientists and researchers may adopt to communicate directly to targeted audiences and get around traditional news gatekeepers, especially using social media.

4. Ability to assess science research data and studies.
5. Basic skills in writing and producing science news content for multiple platforms, including online and interactive.

Student Assessment

This will be a project-based course. You will be graded on the quality of the news product, including analysis, interpretation and representation of scientific data; journalism research, writing and production skills; story strategies, including framing and structure; impact; and integration of multimedia.

Project--

There is one major project. The class will be creating a tablet-based interactive magazine using [iBooks Author](#), which will then be offered through the iBooks store. This product will allow you to create text and multimedia stories. We will have an orientation and practice session for the iBooks Author application during a class. Students will also be offered training in shooting stills and video, in editing video and audio and in creating interactive graphics.

In addition, we will work with Prof. Dan Pacheco on new story gathering techniques, including the use of drone-based video gear.

Students will determine both the editorial content and the design of the magazine. You will work in teams of two people—ideally, one member with a communications background, one with a science background—to produce the content. Each team will choose the story or stories they want to pursue and produce, as well as the form in which they want to tell it. We encourage the production of visual, interactive stories that will draw in the audience and will make for an immersive experience.

The stories themselves can be about the science of climate change; the social, political and/or economic ramifications; or the value of natural, cultural and aesthetic assets. It is up to you. But each story should weave climate and sustainability science into its fabric in creative ways.

Grading

Media project--process.....60 points

Media project--product.....30 points

Class participation and professionalism.....10 points

Readings

Among candidate readings are:

- *Am I Making Myself Clear?* Cornelia Dean, Harvard University Press, 2009
- *A Field Guide for Science Writers*, NASW, Oxford University Press, 2005
- [Climate Change 2013: The Physical Science Basis](#). UN IPCC, Cambridge University Press, 2013
- [Yale Forum on Climate Change and the Media: Top Climate News Stories of 2013](#)
- *How scientists view the public, the media and the political process. Public Understanding of Science*. Besley, J. C., & Nisbet, M. C. (2011).
- *Constructing communication: Talking to scientists about talking to the public. Science Communication*, 29(4), 413-434. Davies, S. R. (2008).
- Pew Research Center: <http://www.people-press.org/2009/07/09/public-praises-science-scientists-fault-public-media/>
- *Communicating Climate Change: Why Frames Matter*, M. Nesbit 2009
- *Investigating science communication in the information age: Implications for public engagement and the popular media*. Holliman, R., Whitelegg, E., Scanlon, E., Smidt, S., & Thomas, J. (2009). New York: Oxford University Press.
- *Philosophical Issues in Journalism*, ed. Elliot Cohen, Oxford University Press, 1992
- *Science in Public: Communication, Culture and Credibility*. Gregory and Miller; Plenum, NY. 1998
- *Risk: A Practical Guide*. Ropeik and Gray. Houghton Mifflin, NY. 2002
- *Good Work: When Excellence and Ethics Meet*. Gardner, Csikszentmihalyi, Damon. Basic Books, NY. 2001
- *Designing and Developing Multimedia; a Practical Guide*. Elin. Allyn & Bacon, Boston. 2001
- [Science and Engineering Indicators, Science and technology: Public Attitudes and Understanding](#). National Science Board, 2012
- *Climate Confusion*. Spencer, Encounter Books, 2008
- *The Ethics of Climate Change: Right and Wrong in a Warming World*. Garvey, Athlone Press, 2008
- *Creating a Climate for Change: Communicating Climate Change* Moser, Dilling, ed; Cambridge University Press, 2007

Web Sites

- National Association of Science Writers: www.nasw.org
- American Association for the Advancement of Science: www.aaas.org
- [UN Climate Change](#)
- EurekAlert: www.eurekalert.org

- *International Network on Public Communication of Science and Technology:* www.PCSTNetwork.org
- *Society of Environmental Journalists:* www.sej.org
- *Environmental Communications Network* <http://www.esf.edu/ecn/>
- *Knight Foundation Science Journalism Tracker* <http://ksitracker.mit.edu/>
- *National Academy of Sciences Science and Entertainment Exchange* <http://www.scienceandentertainmentexchange.org/>

Popular Media:

- *New York Times/Science section (registration required for online content)*
- *Dot.Earth* <http://dotearth.blogs.nytimes.com/>
- *Climate Central*
- *Green Inc.* <http://greeninc.blogs.nytimes.com/>
- *Real Climate blog*
- *Science News (magazine or web)*
- *Scienceblog.com (blog)*
- *This Week in Science:* www.twis.org (podcast)
- *Framing Science* <http://scienceblogs.com/framing-science/>

Other readings are also being evaluated. In addition, students will be given access to science journals like *Science* and *Nature* and communications journals like *Public Understanding of Science* and *American Journalism Review*. There will also be many links and handouts, including examples of science research, reporting and writing.

Attendance, participation and original research-

Since participation will be a significant portion of your grade, class attendance is mandatory. If you miss class, you must provide a university-approved excuse or have discussed your absence with the professor.

When conducting research and applying it to any class project, you must attribute your information to its source. Even when you are paraphrasing information or someone else's line of thought, you must cite the source. Failure to do so is plagiarism and will be treated as failing work according to the rules detailed in the Newhouse Student Handbook.

Academic Integrity. *Don't cheat.* It diminishes you as a person, your college, your university, and it can seriously damage your academic and professional career. *As in most situations in life, you'll do well to trust your instincts - if it feels like it might be cheating, it probably is.* Always err on the side of caution, as all good journalists do - *when in doubt, cite the source - no student ever got in trouble for too many citations.*

The university academic policy will be monitored and strictly enforced in this class. There aren't very many new ways to cheat, but there are a lot of new ways to catch it. Protect your career.

Take the time to read the university policy on [academic integrity](#).

All your class work must be original; no buying, borrowing, downloading or otherwise acquiring material created by others. When you conduct research and apply it to any class project, you must attribute your information to its source. Even when you are paraphrasing information or another's line of thought, *you must cite the source*. Failure to do so is plagiarism and will be treated as failing work according to the rules detailed in the Newhouse Student Handbook.

Following are highlights from the Academic Integrity policies of the University and the Newhouse School:

Syracuse University Academic Rules and Regulations

"Syracuse University students shall exhibit honesty in all academic endeavors. Cheating in any form is not tolerated, nor is assisting another person to cheat. The submission of any work by a student is taken as a guarantee that the thoughts and expressions in it are the student's own, except when properly credited to another.

Violations of this principle include giving or receiving aid in an exam or where otherwise prohibited, fraud, plagiarism, the falsification or forgery of any record, or any other deceptive act in connection with academic work.

Plagiarism is the representation of another's words, ideas, opinions, or other products of work as one's own, either overtly or by failing to attribute them to their true source. Sanctions for violations will be imposed by the dean, faculty, or student standards committee of the appropriate school or college. Documentation of such academic dishonesty may be included in an appropriate student file at the recommendation of the academic dean."

S.I. Newhouse School of Public Communication Rules

II C 1. "Any piece of work bearing a student's name is assumed by the School to guarantee that the thoughts, expressions, editorial and photographic material not credited to another are literally the student's own. If such credit is not given for another's work the student shall be guilty of committing plagiarism. Plagiarism proceedings will begin when a teacher submits evidence thereof to the Academic Standards Committee of the School.

2. "It is not permissible for any student to submit the same material, with substantially the same style, structure, or wording, to instructors in two or more courses."

Students needing special consideration because of a disability should make an appointment to see the professor during office hours. Please refer to the university's policy on disabilities at the following link:

<http://universitysenate.syr.edu/curricula/disability-syllabus-statement.html>

This syllabus is subject to change during the semester, especially as we react to news events.

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COM 400/600: The Classes

(Calendar is subject to change without notice. We want this course to be as fluid as possible. We will react to breaking science news. The speakers' schedules are likely to change. Be open to anything.)

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| <p>1/14- Science and communications—How does each do its business? How does each perceive the other? A student discussion.</p> <p>Read: The Science Journalist Online: Shifting Roles and Emerging Practices</p> <p>The scientific method. The journalist's method. The documentarian's method.</p> |
| <p>1/21</p> <ul style="list-style-type: none">• Read: Climate Change 2013: The Physical Science Basis. UN IPCC, Cambridge University Press, 2013• — iBooks Author; a tutorial and practice |
| <p>1/28—Agenda setting in the news media-Why is this news? “Front page thought”</p> <ul style="list-style-type: none">• Read: How scientists view the public, the media and the political process. Public Understanding of Science. Besley, J. C., & Nisbet, M. C. (2011).• Framing theory and science story structures |
| <p>2/4—Finding and choosing stories. Story pitches and selection.</p> <p>Read: Read/Listen to Joe's Big Idea, NPR story</p> <p>Guest presentation: Joe Palca, senior science correspondent, NPR</p> |
| <p>2/11—Scientific studies as story sources: methodology, data, variables, meaning</p> |
| <p>2/18—TBA field visit (Pacheco and drone technology)</p> <p>Editorial decisions for interactive magazine</p> |
| <p>2/25—Issues of accuracy, precision and representation for science storytellers.</p> |

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| <p>Read: Risk: A Practical Guide intro, D. Ropeik</p> |
| <p>Environmental risk communications</p> |
| <p>3/4—Semiotics. How pictures and sound work. Bringing data to digital life.</p> |
| <p>—Preparing for the field</p> |
| <p>3/8-3/15— Spring break (Trip?)</p> |
| <p>3/18—Assessing the story assets and resources</p> |
| <p>3/25—Social meeting and scientists</p> |
| <p>Read: Scientists and the Public</p> |
| <p>—Editorial meeting</p> |
| <p>4/1—Social media and science storytellers</p> |
| <p>—Lab: writing, editing, post production</p> |
| <p>4/8—Advocacy and science storytelling</p> |
| <p>--Lab</p> |
| <p>4/15—Audiences and their expectations</p> |
| <p>--Lab</p> |
| <p>4/22—Final edits of iBook; tech check and submission</p> |
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