

**Course Name:** Science Writing for ~~Mass~~ Media  
**Institution:** Cornell University  
**Instructor:** Bruce Lewenstein, professor  
**Course level:** Undergraduate  
**Audience:** Mainly juniors and seniors in the natural sciences  
**Semester:** Fall 2010  
**Class schedule:** Mondays and Wednesdays, 11:15 a.m. to 12:05 p.m.,  
Lab: Wednesdays, 12:20 p.m. to 2:15 p.m.  
**Office hours:** Tuesdays, 2:00 p.m. to 4:00 p.m. or happily by appointment  
**Typical Enrolment:** 25-45

### **Course overview**

#### *What's the OVERALL GOAL?*

This course is about science journalism (one aspect of “science in the media), especially "how-to-do-it." It looks at opportunities for covering science, constraints that shape that coverage, and techniques needed to write about science. You will write a lot in this course, and at the end you should know how to begin writing about science for the media. We will also talk some about "why-we-do-it," but that's a secondary goal.

#### *What are we GOING TO ACTUALLY DO?*

Most of our classes will be discussions (based on readings, handouts, and your own reading and watching of the media) about science writing. Some classes will feature outside speakers, both science writers and scientists. Some classes will involve intensive review of the writing you've been doing. Some class discussions will focus on background issues that will help put science writing in its social context. In the weekly labs, you will write, write, and write some more. All major assignments will be media stories of one kind or another.

### **Required texts and reading**

All required readings will be on Blackboard or online.

#### *First, read science news – daily!*

Use your favorite site – *New York Times*, CNN, Yahoo!News, your hometown paper's website, or whatever. Also look for more feature-oriented stories – sites such as <http://www.livescience.com>, <http://whyfiles.org>, <http://www.scientificamerican.com>, and <http://www.popsci.com> are all good.

#### *Second, read science journalism commentary – daily!*

<http://ksjtracker.mit.edu> (Experienced science journalists review the day's news, and also comment on science journalism)  
[http://www.cjr.org/the\\_observatory/](http://www.cjr.org/the_observatory/) (Commentary on current science journalism)

*Third, consider reading some of the science blogs that comment on science communication.*

I'm a little reluctant to push this too hard; lots of blogwars are useless. But at least you can see what people are talking about. Some blogs to look at:

<http://blogs.discovermagazine.com/intersection/> (Chris Mooney & Sheril Kirshenbaum, particularly concerned with science literacy)

<http://blogs.discovermagazine.com/loom/> (Carl Zimmer, a superb writer)

<http://bigthink.com/blogs/age-of-engagement> (Matt Nisbet, a former TA for this course, now a professor at American University)

*Bookmark the following websites, and plan to look at them at least once a week (we will use in lab a lot):*

<http://www.eurekalert.org> (Basic source for science press releases)

<http://www.alphagalileo.org/> (A European counterpart to EurekAlert!)

<http://www.sciencedaily.com/> (An independent alternative to EurekAlert!)

*Finally, some recommended readings (available via Amazon or your favorite online bookstore)*

- Deborah Blum, Mary Knudson, and Robin Marantz Henig ('73), eds., *A Field Guide for Science Writers*, 2<sup>nd</sup> ed. (2005). (Do not try to use the first edition – there are *substantial* changes in the second edition.) This is a series of short chapters about various aspects of science journalism – a good intro to the field.
- Victor Cohn and Lew Cope, *News and Numbers: A Guide to Reporting Statistical Claims and Controversies in Health and Related Fields*, 2nd ed. (2001). Just what it says.
- Dennis Meredith, *Explaining Research: How to Reach Key Audiences to Advance Your Work*. New York: Oxford University Press. (2010). See also the accompanying website, <http://www.explainingresearch.com>. This is the best of many “how to do it” handbooks.

*And, for those looking for introductions to journalism:*

- Any “Introduction to media writing” textbook
- <http://www.NewsU.org> (requires registration, but it's free)
- <http://www.courses.vcu.edu/ENG-jeh/BeginningReporting/Introduction/home.htm>
- [http://www.journalism.org/resources/j\\_tools](http://www.journalism.org/resources/j_tools)
- <http://cubreporters.org/education.html>
- <http://content.hks.harvard.edu/journalistsresource/>

## **Grades and related matters**

### *Deadlines, Spelling, Facts, and Grammar*

Papers are due at the time specified in the assignment. Papers will be graded down for being late. Spelling errors (including typos), incorrect names, and other factual errors will count against your grade. Grammatical problems will enter into the general evaluation of your assignments.

### *Computers, typing, and other mechanical details*

See the copy of "Bruce Lewenstein's Idiosyncratic Style Guide for Student Papers," available online through the class website. You are responsible for grammar and stylistic points listed in this document.

### *Grades*

Some assignments will be graded; others will merely receive a check-mark. In general, grades reflect the following evaluation:

- A = Excellent story. Worthy of prominent play in a newspaper, magazine, or major website after minor editing. Reporting shows enterprise; writing shows flair.
- B = Good story. Publishable with little editing. Well-written, reported, and edited. OK on a good blog.
- C = Fair story, but one that requires substantial editing. A wordy, slow-paced story. A story that needs more reporting.
- D = Dull story. Unpublishable without rewriting or major surgery during editing. Careless or sloppy writing. Unsupported material.
- F = Unpublishable story. Poor in content or structure.

All assignments are required. Before calculating the final grade, I will drop your lowest score. If you are missing more than 2 assignments (including ungraded ones), or if you are missing the final project, you will fail the course.

The final grade will be based on: major assignments (70%), labs, class participation, and professor's discretion (30%). I use my discretion mainly to help those who have shown real improvement and effort through the semester. Be warned, however, that I can use it in ways less beneficial to you when someone tries to slouch through the entire semester.

### *Academic responsibility*

As students at Cornell, you are subject to the University's Code of Academic Integrity. (<http://cuinfo.cornell.edu/Academic/AIC.html>). You should familiarize yourself with the full code. The key principles are:

1. A student shall in no way misrepresent his or her work.
2. A student shall in no way fraudulently or unfairly advance his or her academic position.
3. A student shall refuse to be a party to another student's failure to maintain academic integrity.
4. A student shall not in any other manner violate the principle of academic integrity.

If you violate the code, you may be assessed severe penalties (including potentially failing the course). Please take the time to review the code. If you have any questions about whether something falls under the code, or about any other aspect of the code, please feel free to ask.

The following comments on the Code apply *for this course only*.

1. After you have written an article, you may ask classmates or friends to comment on it. Indeed, I encourage you to do so. Commenting is not editing; it is merely reading and saying, "What do you mean here?" or "This isn't clear," or "Did you check this fact?" or similar remarks. You may not ask for detailed grammatical, stylistic, or similar comments, which would constitute editing.
2. You should use standard journalistic forms to cite the source of any information you use. You will learn these forms in class; common ones are: "According to Cornell geologist

Frank Rhodes," "in an article recently published by Dean Hamer," or "a Theory Center spokesperson said."

### 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://www.clt.cornell.edu/campus/sds/index.html>) 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.

**SCHEDULE OF CLASSES AND ASSIGNMENTS**

**Assignments**

Note: All assignments due at 5:00 pm on the day indicated

- Weekly bulletin board posting (ungraded)
- Weekly lab assignments (ungraded)
- News brief #1, due Friday, 10 September
- Speech #1, due Monday, 20 September
- News brief #2, due Monday, 4 October
- Speech #2, due Monday, 25 October
- Book review, due Wednesday, 1 December
- Feature:
  - Proposal, due Friday, 15 October (ungraded)
  - Outline, due Friday, 22 October (ungraded)
  - Feature, due Friday, 19 November
  - Revised feature, due 10 December

**Tentative Course Schedule**

*Note: in addition the readings listed, we will post links to many stories online, asking you to read them before the next class and to be ready to comment on them.*

<b>Week</b>	<b>Date</b>	<b>Topics, readings, assignments</b>
1	25 Aug	<p><i>What is science, what is the media, and so what is science in the mass media?</i>  <i>Basic science news</i></p> <p>LAB 1: News briefs</p> <ul style="list-style-type: none"> <li>• For this and future labs, you will want to bookmark and scan the following websites:               <ul style="list-style-type: none"> <li><a href="http://www.eurekalert.org">http://www.eurekalert.org</a> (Basic source for science press releases)</li> <li><a href="http://www.alphagalileo.org/">http://www.alphagalileo.org/</a> (A European counterpart to EurekAlert!)</li> <li><a href="http://www.sciencedaily.com/">http://www.sciencedaily.com/</a> (An independent alternative to EurekAlert!)</li> </ul> </li> </ul>
2	30 Aug, 1 Sep	<p><i>What is science, what is the media, and so what is science in the mass media?</i>  <i>Basic science news (cont.)</i></p> <p>Readings:</p> <ul style="list-style-type: none"> <li>• Lots and lots of science news</li> <li>• From the class website:               <ul style="list-style-type: none"> <li>○ Wisdom from the late Alton Blakeslee, AP science writer</li> <li>○ Barton, Emily. "Review of Francine Prose, <i>Reading Like a Writer</i>." <i>New York Times Book Review</i>, 27 August 2006, 6.</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>○ Bruce Lewenstein's Style Guide</li> </ul> <p>LAB 2: News briefs</p>
3	6, 8 Sep	<p><i>Story structures; documenting with quotes and other sources</i></p> <p><b>NOTE: No class on Monday, 6 September – Labor Day</b></p> <p>Readings:</p> <ul style="list-style-type: none"> <li>• From the class website: <ul style="list-style-type: none"> <li>○ Guidance on using quotations</li> <li>○ Series on “starting a career in science writing”</li> </ul> </li> </ul> <p>LAB 3: Speeches</p> <p><b>DUE: Friday, 10 Sep: News brief #1</b></p>
4	13, 15 Sep	<p><i>Reporting</i></p> <p>Readings: TO COME</p> <p>LAB 4: Reporting</p>
5	20, 22 Sep	<p><i>Simplifying and Explanations</i></p> <p>Readings:</p> <ul style="list-style-type: none"> <li>• From the class website: <ul style="list-style-type: none"> <li>○ Simplifying</li> </ul> </li> </ul> <p>LAB 5: Simplifying</p> <p><b>DUE (Monday, 20 Sept): Speech #1</b></p>
6	27, 29 Sep	<p><i>Simplifying and Explanations (continued)</i></p> <p>Readings:</p> <ul style="list-style-type: none"> <li>• From the class website: <ul style="list-style-type: none"> <li>○ Simplifying</li> </ul> </li> </ul> <p>LAB 6: Explanations</p>
7	4, 6 Oct	<p><i>Planning and reporting a feature story</i></p> <p>Readings:</p> <ul style="list-style-type: none"> <li>• From the class website: <ul style="list-style-type: none"> <li>○ Franklin, <i>Mrs. Kelly's Monster</i></li> </ul> </li> </ul> <p>LAB 7: Features</p>

		<b>DUE (Monday, 4 Oct): News brief #2</b>
8	11, 13 Oct	<p><i>Profiles</i></p> <p><b>NOTE: Fall Break, NO CLASS on Monday, 11 Oct</b></p> <p>Readings:</p> <ul style="list-style-type: none"> <li>• Profile stories online, to be assigned</li> </ul> <p>Lab 8: Profiles</p> <p><b>DUE (Friday, 15 Oct): Feature proposal</b></p>
9	18, 20 Oct	<p><i>Science literacy and the context for science writing</i></p> <p>Readings:</p> <ul style="list-style-type: none"> <li>• National Science Board, "Public Attitudes and Public Understanding" 2010 (<a href="http://www.nsf.gov/statistics/seind10/c7/c7h.htm">http://www.nsf.gov/statistics/seind10/c7/c7h.htm</a>)</li> </ul> <p>LAB 9: Writing for the Web (including blogs)</p> <p><b>DUE (Friday, 22 Oct): Feature outline</b></p>
10	25, 27 Oct	<p><i>Writing about health, risk, and numbers</i></p> <p>Readings:</p> <ul style="list-style-type: none"> <li>• From the class website <ul style="list-style-type: none"> <li>○ Notes on risk</li> <li>○ Comments on media coverage of epidemiology and health</li> </ul> </li> </ul> <p>LAB 10: Working with numbers</p> <p><b>DUE (Monday, 25 Oct): Speech #2</b></p>
11	1, 3 Nov	<p><i>Covering Controversies</i></p> <p>Readings:</p> <ul style="list-style-type: none"> <li>• Current controversy stories online, to be assigned (hey, there's an election this week, there's <i>gotta</i> be some kind of controversy!)</li> </ul> <p>LAB 11: Environmental controversy</p>
12	8, 10 Nov	<p><i>Covering the politics of science</i></p> <p>Readings:</p> <ul style="list-style-type: none"> <li>• Current politics stories online, to be assigned</li> </ul>

		LAB 12: Controversies
13	15, 17 Nov	<p><i>Covering the economics of science</i></p> <p>Readings:</p> <ul style="list-style-type: none"> <li>• Economics of science stories online, to be assigned</li> </ul> <p>LAB 13: Cultural science writing (reviews)</p> <p><b>DUE (Fri, 19 Nov): Feature story</b></p>
14	22, 24 Nov	<p><i>Cultural science writing</i></p> <p>Readings:</p> <p><b>NOTE: Thanksgiving, NO LAB on Wednesday, 24 Nov. Class will meet that day in Prof. Lewenstein's office</b></p>
15	29 Nov, 1 Dec	<p><i>Putting all the pieces together: Science writing for the mass media</i></p> <p>LAB 14: Science writing for the mass media</p> <p><b>DUE (Wednesday, 1 Dec): Book review</b></p>
Finals		<b>DUE: Friday, 10 December, 5:00 pm</b>