

Course name: Science Writing (An Introduction)

Course code: JOU4930 and PUR4932

Institution: University of Florida

Instructor: Dr. Czerne M. Reid, adjunct lecturer, UF College of Journalism; science writer/editor, UF Health Science Center

Course level: Undergraduate

Audience: Juniors and seniors majoring in journalism and PR

Semester: Spring 2013

Class schedule: Mondays, 5:10 p.m.-7:05 p.m. and Wednesdays, 5:10 p.m.-6 p.m.

Required texts and reading

A Field Guide for Science Writers, Second Edition (2005, paperback)

Editors: Deborah Blum, Mary Knudson, Robin Marantz Henig

On Writing Well: The Classic Guide to Writing Nonfiction

30th anniversary edition (2006, paperback) by William K. Zinsser

Science commentary: Knight Science Journalism Tracker: <http://ksjtracker.mit.edu>

Assorted handouts

Course overview

This course introduces the basics of writing about science and medicine for a general audience. We will focus on writing explanatory prose, finding news angles in published research, interviewing scientists, writing key story elements creatively and responding to editing.

We'll also discuss science writing as a career. Writers work as freelance journalists and at online news sites, magazines, newspapers, university news offices, research labs, federal agencies, museums and many other venues.

We will have several guest speakers who are luminaries in the field of science writing who are writers and editors for organizations such as The New York Times, Scientific American, MSNBC.com and National Public Radio (see below for speaker details). This will provide an opportunity for networking.

You will hone your science writing skills through short assignments and in-class exercises.

For the major course assignment, you will propose at least two ideas for a story (1250-1500 words) about a research project at UF or elsewhere. We will select one of the two ideas and you will interview the scientists involved and write three story drafts. As part of the revision process, you will peer-edit the work of some of your classmates. The aim is to have a publishable final version.

Near the end of the course we will visit with some scientists in their laboratories.

All students are expected to contribute in class by sharing comments on assigned reading and discussing their own work. You must submit assignments by the stated deadlines. First drafts are due at 5 p.m. on Wednesdays. Second drafts are due in class on Monday the week after you receive my comments.

Grades

You will receive a single grade at the end course rather than letter grades for each assignment. Review and respond to my comments about what you are doing well and what revisions you need to make. Good revisions go beyond the specific comments made by an editor. Take the opportunity to rethink the entire piece; look for areas to strengthen, cuts to make, phrases to add and paragraphs to reorganize or move. Use my edits as a guide to improve and tighten each piece as well as you can.

In this course each assignment builds on the previous one. The later assignments will carry more weight in your final grade than the earlier ones. Your major research story will account for roughly half of your grade.

These criteria will factor into your final grade:

Quality and effort of first drafts: 40%

Effectiveness of revisions: 40%

Participation in class discussions, in-class assignments, and peer editing: 20%

Earning an A in this course requires diligences and excellent performance in all areas: attendance, participation, attentiveness, meeting deadlines and spending time to research, draft and revise each assignment. I also will assess the journalistic quality of your written work: grammar, structure, style, accuracy and your use of interviews and details from your own observations.

Any documented instance of plagiarism from a published article will result in a failing grade.

Office hours

I will hold office hours immediately after class on Wednesdays. During this time we can discuss individual assignments, your progress in the course and career paths.

SCHEDULE OF CLASSES AND ASSIGNMENTS

Graded assignments

Assignment 1: Explainer (200-250 words)

Draft 1: Wed Jan 16

Draft 2: Mon Jan 28

Assignment 2: News story (400-500 words)

Draft 1: Wed Jan 23

Draft 2: Mon Feb 4

Assignment 3: Two pitches for research story (100-150 words each)

Draft 1: Wed Jan. 30, by 8 p.m., by email

No revision

Assignment 4: Scientist talk (500-750 words)

Draft 1: Wed Feb 13

Draft 2: Mon Feb 25

Assignment 5: Major research story (1250-1500 words)

Draft 1: Wed March 13

Draft 2: Mon March 25

Draft 3: Mon Apr 10 (in lieu of final exam)

Class schedule

WEEK 1

Mon Jan 7:

Introductions

Overview of science writing

Review of major assignments and course schedule

Wed Jan 9:

What is science news? How the media covers science

MIT's Knight Science Journalism Tracker

Discussion due: Bring in a recent science story. Read the first 1-2 paragraphs, then discuss: What makes this science news? Why should readers care?

Reading due: *Field Guide*, foreword, editors' note, chs. 7-8; Zinsser, chs. 1-7

WEEK 2

Mon Jan 14:

Explanatory writing: How to describe a science process to a lay reader

In-class exercise: Describe a scientific concept to your family and friends

Discussion due: Bring in a favorite explanatory passage from a science story

Reading due: *Field Guide*, chs. 19-20; Zinsser, chs. 8-10 and ch. 15

Assignment 1, draft 1: Explainer (200-250 words), due Jan. 16

Wed Jan 16:

News writing: Converting a scientific paper and a news release into a story for the general public

In-class exercise: Writing a news lede

Writing due: Assignment 1, draft 1

Reading due: Scientific paper and news release handouts

Assignment 2, draft 1: News story (400-500 words), due Jan 23

WEEK 3

Mon Jan 21:

No class. Martin Luther King Jr. Day

Wed Jan 23: Discussion of explainer assignment
Editing and revising

Writing due: Assignment 2, draft 1

Reading due: *Field Guide*, chs. 4-6 and ch. 16; Zinsser, chs. 20-21

Assignment 1, draft 2: Explainer, due Jan 28

WEEK 4

Mon Jan 28:

Long-form science writing, news features and science blogging

Finding ideas for your major research story

Guest speaker: Carl Zimmer, renowned Yale University lecturer and science writer, author and blogger. The author of 12 books about science, Zimmer's work has been featured in *The Wall Street Journal*, *The New York Times* and *The Guardian*. His website is www.carlzimmer.com

Writing due: Assignment 1, draft 2

Reading due: *Field Guide*, chs. 1-2, ch. 10 and handouts

Assignment 3: Propose ideas for major research story. Submit two pitches (100-150 words each) by email on Jan 30 by 8 pm. I will choose one for you to present in class on Feb. 4.

Wed Jan 30:

Pitching stories to an editor

Discussion of news story assignment

Editing and revising

Writing due: Assignment 3, by 8 p.m. by email

Assignment 2, draft 2: News story, due Feb 4

WEEK 5

Mon Feb 4:

Present your idea for your major research story for class discussion. How will the story take shape? Why is it interesting to readers? Who will you interview, where will you go, and what will you see?

Requesting the time of a faculty member or researcher

Writing due: Assignment 2, draft 2

Wed Feb 6:

Style: Creative story ledes, narrative story structure

Discussion due: Bring in a favorite science story opening

Reading due: *Field Guide*, chs. 9, 21, and any chs. 23-36 you wish to peruse

Assignment 4, draft 1: Scientist talk (500-750 words), due Feb 13

WEEK 6

Mon Feb 11:

Interviewing: How to ask questions about a scientist's work

Guest speaker: Campus scientist to present a recent study and answer your questions

Reading due: Scientist's handouts; *Field Guide*, ch. 17; Zinsser, ch. 12

Wed Feb 13: Interviewing: Review of what worked and what didn't, how to quote sources
Other elements of successful reporting: Preparation, site visits, observations

Writing due: Assignment 4, draft 1

Reading due: Zinsser, chs. 22-23

Assignment 4, draft 2: Scientist talk, due Feb 25

Assignment 5, draft 1: Major research story (1250-1500 words), due March 13

WEEK 7

Mon Feb 18: AAAS Feb 14-18 in Boston. I will be away at the meeting.
During the class session, review the conference lineup and select a session you think would make a good news story.

<http://aaas.confex.com/aaas/2013/webprogram/>

Write a one-page proposal for a news story. Due Feb. 20

Wed Feb 20: Review of progress on major research stories; overcoming challenges
Organizing your notes and sitting down to write

Guest speaker

Writing due: AAAS story proposal

Discussion due: Voluntary progress reports

Reading due: *Field Guide*, ch. 22; Zinsser, ch. 25, handouts

WEEK 8

Mon Feb 25: Communicating science to lay audiences

Guest speaker: Dennis Meredith. Dennis is a science writer and research communication consultant. He is the author of *Explaining Research*. His career as a science communicator has included service at some of the country's leading research universities, including MIT, Caltech, Cornell, Duke and the University of Wisconsin. He was a creator and developer of EureAlert! an international research news service of the American Association for the Advancement of Science.

Reading due: Handouts,

Writing due: Assignment 4, draft 2

Wed Feb 27: Critiquing science writing

Reading due: Each student will bring in a piece of science writing and lead a discussion on what the writer did well and what didn't work quite so well

Mon March 4: **No class (Spring break, March 4-8)**

Wed March 6 **No class (Spring break, March 4-8)**

WEEK 9

Mon March 11: In-class presentation of major research stories (12 students)

Wed March 13: In-class presentation of major research stories (6 students)
Revisions, further reporting, fact-checking

Writing due: Assignment 5, draft 1

Assignment 5, draft 2: Major research story, due March 25

WEEK 10

Mon March 18: Perfecting the news feature

Guest speaker: Nancy Shute

Nancy Shute is the immediate past president of the National Association of Science Writers. An award-winning journalist, she has written news, feature articles, essays, and op-eds for a wide variety of national publications, including *Outside* and *Smithsonian* magazines, the *New York Times*, *US News & World Report*, *New Republic*, and *National Journal*. She frequently writes for the Web and appears on radio and television in major markets, including NPR, CNN, CBS, and NBC.

Reading due: Handouts

Wed March 20: Revising for brevity, impact, and style
In-class exercises to sharpen and enliven passages
What editors expect from writers

WEEK 11

Mon March 25: Peer editing of major research story (groups of 3-4 students)

Writing due: Assignment 5, draft 2 (Email as well to a subset of classmates)

Reading due: Classmates' stories

Discussion due: Substantive written comments on classmates' drafts

Assignment 5, draft 3: Major research story, due Apr 10 at 10 p.m.

Wed March 27: Tour of Florida Museum of Natural History labs

WEEK 12

Mon Apr 1: Science online 1

Science blogging, science writing on Twitter and other social media platforms

Guest speaker: Bora Zivkovic, blogs editor, *Scientific American*

Bora Zivkovic is the editor of *Scientific American's* blog network and the visionary behind the annual ScienceOnline conference. He is widely known in science writing circles as “The Blogfather” because of his commitment mentoring young science writers and assisting them with career opportunities.

Writing due: Pick a popular or not-so-popular science blog and offer a critique

Reading due: handouts

Wed Apr 3: Science online 2

Science writing for online news outlets

Guest speaker: Robin Lloyd, news editor *Scientific American* magazine. Robin is responsible for editing and assigning stories for *Scientific American's* Web site. She also manages *Scientific American's* Twitter feed: @sciam. She has a PhD in sociology and was an MIT Knight Science Journalism Fellow.
<http://www.scientificamerican.com/pressroom/howeare.cfm>

Reading due: handouts

WEEK 13

Mon Apr 8: Session for students to raise pressing issues and catch up on reading and writing assignments

Wed Apr 10: Covering controversy in science

Writing due: Assignment 5, draft 3. Email by 10 p.m.

WEEK 14

Mon Apr 15: Controversy in science writing (e.g. Junk DNA, Jonah Lehrer fabrications)

Wed Apr 17: Tour of labs UF Genetics Institute/Cancer Center labs

WEEK 15

Mon Apr 22: Careers in science journalism

Reading due: *Field Guide*, chs. 11-15, chs. 37-42, epilogue

Wed Apr 24: Closing class

The Big Picture: The future of science writing (readership trends, changes in coverage of science and medicine, science writing on the Internet)

Guest speaker: Alan Boyle, science editor at NBCNews.com for the last 15 years. Alan has won prestigious awards from the National Academies, the American Association for the Advancement of Science and several other organizations. He is author of "The Case for Pluto."

Writing due: Self assessment. Write an evaluation of how you performed in the class. What you learned, how you progressed since the beginning of the course, what you did well, ways in which you need to improve, etc.

Reading due: Handouts

WEEK 16

Mon Apr 29: No final exam

Wed May 1: No final exam