

**Course code and name:** JOU4930 Section 1G51, Science Writing

**Semester:** Spring 2014

**Instructor:** Dr. Czerne M. Reid, Adjunct Lecturer, UF College of Journalism and Communications

**Course level:** Undergraduate

**Institution:** University of Florida

**Class schedule:** Mondays, periods 10 and 11 and Wednesdays, period 10

**Required texts and reading**

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

Editors: Deborah Blum, Mary Knudson, Robin Marantz Henig

*Ideas into Words: Mastering the Craft of Science Writing*, (2003 paperback)

By Elise Hancock

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

Assorted handouts

**Recommended texts**

*The Science Writers' Handbook: Everything You Need to Know to Pitch, Publish and Prosper in the Digital Age*, (2013, paperback)

By Writers of Scilance. Editors: Thomas Hayden, Midhelle Nijhuis

*The Best American Science and Nature Writing 2013* (2013, paperback)

Editor: Siddhartha Mukherjee. Series editor: Tim Folger

*The Best American Science Writing 2012* (2012, paperback)

Editor: Michio Kaku. Series editor: Jesse Cohen

**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 valuable opportunities for networking. During the semester we also will have the opportunity to visit with scientists in their laboratories.

You will hone your science writing skills through several assignments and in-class exercises. For the major course assignment, you will propose at least two ideas for a 1,250-1,500-word story about a research project at UF or elsewhere. I will advise you on selecting 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.

All students are expected to contribute in class by sharing comments on assigned readings and discussing their own work and the work of their peers. Students must submit assignments by the stated deadlines.

Students will be notified of any changes to the stated schedule.

### **Assignments and Grades**

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.

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.

These criteria will factor into your final grade:

Quality and effort of first drafts

Effectiveness of revisions

Participation in class discussions, in-class assignments, and peer editing

### **Grading scale:**

A ≥ 95%	A- 90-94.99%	B+ 87-89.99%	B 83-86.99%
B- 80-82.99%	C+ 77-79.99%	C 73-76.99%	C- 70-72.99%
D+ 67-69.99%	D 63-66.99%	D- 60-62.99%	E ≤ 59.99%

View the current UF Grading Policy at

<https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

Earning an A in this course requires diligence 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 will result in a failing grade.

### **Important notes regarding assignment submission**

Name your assignment files with the following format:

YourLastName\_GeneralTitleofAssignment\_DraftNumber e.g. Reid\_Explainer\_1

Submit assignments as Microsoft Word documents

Include the following information at the top of every assignment you submit:

Course code/section (JOU 4930, 1G51) and course name (Science Writing) and semester (Spring 2014)

Your full name and UFID

The name of the instructor (Dr. Czerne Reid)

The date

General assignment title (e.g. Research Story Draft 3)

Headline

### **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, career paths and other issues you may wish to raise.

### **Accommodations for Students with Disabilities**

Students requesting accommodations must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student, who must then provide this documentation to the course instructor when requesting an accommodation. Contact the Disability Resources Center, <http://www.dso.ufl.edu/drc/>, for information about available resources for students with disabilities.

### **Late/Make up policy**

If you believe you have a legitimate reason for missing work, you may request an extension from the course instructor before the deadline passes. Students will be allowed one unexcused absence during the semester. Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at <https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>. View the UF policies regarding medical excuse from classes at <http://shcc.ufl.edu/forms-records/excuse-notes/>.

### **Course Evaluation**

Students are expected to provide feedback on the quality of instruction in this course.

Evaluations are conducted online at <https://evaluations.ufl.edu> and are typically open during the last two or three weeks of the semester. Students will be told the specific times when evaluations are open. Students who complete the evaluation by the specified time will be awarded 2 extra-credit points. Summary results of these assessments are available at <https://evaluations.ufl.edu>.

## **SCHEDULE OF CLASSES AND ASSIGNMENTS**

### **Major assignments**

Assignment 1: Explainer (200-250 words)

Draft 1: Wed Jan 15

Draft 2: Mon Jan 27

Assignment 2: News story (400-500 words)

Draft 1: Wed Jan 22

Draft 2: Mon Feb 3

Assignment 3: Research story pitches (100-150 words each)

Draft 1: Wed Jan. 29, by 8 p.m.

No revision

Assignment 4: Scientist talk (500-750 words)

Draft 1: Wed Feb 19

Draft 2: Mon March 10

Assignment 5: Research story (1250-1500 words)

Draft 1: Wed March 12

Draft 2: Mon March 24

Draft 3: Wed Apr 9 (in lieu of final exam)

## Class schedule

### WEEK 1

Mon Jan 6:

Introductions

Overview of science writing

Review of major assignments and course schedule

**Writing due:** In class ... Write no more than a page indicating why you took this class, what you hope to gain from it, and what your interest in science communication is beyond this class.

Wed Jan 8:

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; Hancock, foreword, ch. 1

### WEEK 2

Mon Jan 13:

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

**Assignment 1, draft 1:** Explainer (200-250 words), due Jan. 15

Wed Jan 15:

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 22

### WEEK 3

Mon Jan 20: **No class. Martin Luther King Jr. Day**

Wed Jan 22: Discussion of explainer assignment  
Editing and revising

**Writing due:** Assignment 2, draft 1  
**Reading due:** *Field Guide*, chs. 4-6 and ch. 16  
**Assignment 1, draft 2:** Explainer, due Jan 27

### WEEK 4

Mon Jan 27: Communicating science to lay audiences; finding stories

**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 EurekAlert! an international research news service of the American Association for the Advancement of Science. His website is [http://dennismeredith.com/dennis-meredith-bio\\_269.html](http://dennismeredith.com/dennis-meredith-bio_269.html)

**Writing due:** Assignment 1, draft 2  
**Reading due:** *Field Guide*, chs. 1-2, ch. 10; Hancock, ch. 2; handouts  
**Assignment 3:** Propose ideas for major research story. Submit two pitches (100-150 words each) by 8 p.m. on Jan 29. I will choose one for you to present in class on Feb. 3.

Wed Jan 29: Pitching stories to an editor  
Discussion of news story assignment  
Editing and revising

**Writing due:** Assignment 3, by 8 p.m.  
**Assignment 2, draft 2:** News story, due Feb 3

### WEEK 5

Mon Feb 3: 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 5: 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

## **WEEK 6**

Mon Feb 10:

Interviewing: How to ask questions about a scientist's work  
How to cover a scientist talk/panel. How to quote sources  
Other elements of successful science reporting: Preparation, site visits, observations

**Reading due:** Hancock, ch. 3

Wed Feb 12:

**Guest speaker:** A UF scientist will present a recent study and answer questions for a news story based on a scientist's talk

**Assignment 4, draft 1:** Scientist talk (500-750 words), due Feb 19

**Assignment 5, draft 1:** Major research story (1250-1500 words), due March 12

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

## **WEEK 7**

Mon Feb 17:

AAAS Feb 13-17 in Chicago. I will be at the meeting.

**Assignment, Due Feb 19:** Review the conference's online program at <http://meetings.aaas.org/program/> and select a session you think would make a good news story, and write a one-page proposal for that story. Start your proposal with a good lead, as you would start the story itself. Say why the story you choose would be appealing for readers. Say whether it would be a news, feature or other type of story. Say what types of sources you would ideally include in the story.

Check the AAAS Virtual newsroom during the meeting to see if there's a news release or news conference related to the talk in which you are interested <http://www.eurekalert.org/aaasnewsroom/2014/>.

**Assignment 4, draft 2:** Scientist talk, due Mar 10

Wed Feb 19:

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

**Guest speaker: Christie Aschwanden.** Christie is an award-winning freelance writer and editor. She is a contributing editor for *Runner's World* and was a contributing editor for *Health* from 2000 to 2010. She has been a contributing writer for *Skiing* and her articles and essays have appeared in more than 50 other publications including *The New York Times*, *The Los Angeles Times*, *The Washington Post*, *O—the Oprah Magazine*, *Men's Journal*, *Slate*, *NPR*, *Mother Jones*, *National Wildlife*, *Backpacker*, *Reader's Digest*, *Self*, *WebMD*, *Science*, *Cell* and *New Scientist*. Christie has written and edited books and reports for the World Health Organization, the National Institutes of Health and other national and international organizations. Her website is <http://christieaschwanden.com/>

**Writing due:** AAAS story proposal **AND** Assignment 4, draft 1

**Discussion due:** Progress reports

**Reading due:** *Field Guide*, ch. 22; Hancock, ch. 4; handouts

## **WEEK 8**

Mon Feb 24: **Guest speaker:** Long-form science writing, news features and science blogging

**Reading due:** Hancock, ch. 5; Handouts

Wed Feb 26: 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 Mar 3: **No class (Spring break, March 3-7)**

Wed Mar 5 **No class (Spring break, March 3-7)**

## **WEEK 9**

Mon Mar 10: In-class presentation of major research stories

**Writing due:** Assignment 4, draft 2

Wed Mar 12: In-class presentation of major research stories, cont'd  
Revisions, further reporting, fact-checking

**Writing due:** Assignment 5, draft 1

**Assignment 5, draft 2:** Major research story, due March 24

## **WEEK 10**

Mon Mar 17: **Guest speaker:** Perfecting the news feature

**Reading due:** Handouts

Wed Mar 19: Revising for brevity, impact, and style  
In-class exercises to sharpen and enliven passages  
What editors expect from writers

**Reading due:** Hancock, chs. 6, 7, afterword

## **WEEK 11**

Mon Mar 24: (Tentative) Tour of Florida Museum of Natural History laboratory and research areas

Visit to the museum's fish collection, bird collection and DNA/tissue bank collection laboratory and research areas.

**Assignment:** Write pitches for two science stories you identified during the museum visit, due March 31

**Writing due:** Assignment 5, draft 2

Wed Mar 26: Peer editing of major research story (groups of 3-4 students)

**Reading due:** Classmates' stories

**Writing due:** Substantive written comments on classmates' drafts. Also, two pitches from museum visit due.

## **WEEK 12**

Mon Mar 31:

Science online 1

**Guest speaker 1, TBD:** Science blogging, science writing on Twitter and other social media platforms

**Guest speaker 2:** Rebecca Burton, science blogger, freelance science writer, master's student, University of Florida.

**Reading due:** handouts

**Assignment:** Pick a popular or not-so-popular science blog and offer a critique. Due April 7

**Assignment 5, draft 3:** Major research story, due Apr 9 at 11:55 p.m.

Wed Apr 2:

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>. Her Twitter feed is at <https://twitter.com/robinlloyd99>

**Reading due:** handouts

## **WEEK 13**

Mon Apr 7:

Discuss blog critiques

Session for students to raise pressing issues and catch up on reading and writing assignments

**Writing due:** Blog critique

Wed Apr 9:

Covering controversy in science

**Writing due:** Assignment 5, draft 3 by 11:55 p.m.

## **WEEK 14**

Mon Apr 14:

Tour of UF Genetics Institute/Cancer Center labs Host: Lindy Brounley, communications director, UF Shands Cancer Center. Tentative plan: Visit the lab of Dr. David Ostrov, who uses computer/spatial modeling to help identify new drugs that based on their structure would best target a variety of conditions. <http://ostrovlab.pathology.ufl.edu/about-dr-ostrov/> . Also visit the C.A. Pound forensic anthropology laboratory. <http://web.anthro.ufl.edu/capoundlab.shtml>.

**Assignment:** Write pitches for two science stories you identified during the Genetics Institute visit, due April 16

Wed Apr 16: Controversy in science writing (e.g. ENCODE Project-Junk DNA, Jonah Lehrer fabrications)

**Writing due:** Two pitches from Genetics Institute tour

### **WEEK 15**

Mon Apr 21:

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

**Guest speaker1: 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.” His NBC bio is at <http://www.nbcnews.com/id/10912485#.UQ8QDejFy2w>

**Guest Speaker2:** Rosalind Reid, executive director, Council for the Advancement of Science Writing. Ros was editor of *American Scientist*, the interdisciplinary magazine of Sigma Xi, The Scientific Research Society; co-organizer of the MIT/Harvard Image and Meaning workshop series on visual communication of science; the first Journalist in Residence at the Kavli Institute of Theoretical Physics at the University of California, Santa Barbara; and a fellow at the Harvard Initiative in Innovative Computing. She served as Executive Director of the Institute for Applied Computational Science at Harvard's School of Engineering and Applied Sciences. Ros wrote for newspapers in Maine and North Carolina and was a research news editor at North Carolina State University.

**Reading due:** Handouts

Wed Apr 23:

Closing class  
Careers in science communication

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

**Assignment:** Complete course evaluation (extra credit)

### **WEEK 16**

Mon Apr 28:

No final exam

Wed Apr 30:

No final exam