

Environmental and Science Journalism
University of North Carolina at Chapel Hill
Hussman School of Journalism and Media
MEJO 560, Spring 2020
MW 2:00 - 3:15 p.m., Carroll Hall 21

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Course Description & Goals

The purpose of this course is to teach an appreciation of environmental and science journalism and provide you with skills to report on environmental and science news for a variety of media, principally print or text, but also video and audio. As a participant in this course, you'll learn the following:

- How to find news value in scientific research reports.
- How to integrate scientific statistics from source materials into news reports.
- How to research, report and write environmental and science news stories for popular media.

Reading

Readings for the course include a classic book on writing well, another classic book that led to the beginning of the environmental movement, a primer about science writing from masters in the field, a Pulitzer Prize-winning book about how humans are contributing to the extinction of many species and a book about racism in medicine. Please complete the reading assignments before the appropriate classroom discussions. In addition to the list below, I'll supply additional source materials and articles from various publications. Most of the following books are available at the UNC student store and copies of most of the books will be on reserve in the Park Library (second floor) in the School of Journalism & Media. Please note that the books on reserve in the Park Library may be earlier editions that can be substituted for current editions. Students should also consult the [AP Stylebook](#) for proper style and usage for all written assignments.

- 1) Blum, Deborah, Mary Knudson & Robin Marantz Henig, editors. [A Field Guide for Science Writers \(Second Edition\)](#), Oxford University Press (paperback), © 2005, ISBN: 0-19-5174992, \$19.95. (Electronic copy should be on Sakai -> Course Reserves).
- 2) Carson, Rachel. Silent Spring, 50th Anniversary Edition, Houghton Mifflin Harcourt, ©1962, 378 pp., ISBN: 978-0618249060, \$16.00.
- 3) Kolbert, Elizabeth, The Sixth Extinction: An Unnatural History, Holt, Henry & Company, Inc., © 2014, 319 pp., ISBN: 978-0805092988, \$18.00.
- 4) Tweedy, Damon. Black Man in a White Coat, Picador, \$19.95, 2015, 294 pp., ISBN: 978-125010542, \$18.00.
- 5) Zinsser, William. [On Writing Well: The Classic Guide to Writing Nonfiction \(30th Anniversary Edition\)](#), Collins, © 2006, 336 pp., ISBN: 978-0060891541, \$17.00.

Also, starting with the class for Wednesday, February 5, students will begin discussion of the print version of the Tuesday Science Times section of the New York Times. On the assigned dates, please bring the Science Times section to class. Consult the course schedule below for the exact dates for which the section should be read. Please note that the online version of the New York Times is not an acceptable substitute since the online and print versions do not necessarily have the same content. The New York Times is available in the UNC Student Store.

Participation

A working science journalist typically talks and discusses relevant issues with colleagues and others before preparing his or her report. This class will be no different. I'll expect you to share your thoughts with your peers and with me. Classroom discussion will help clarify your ideas and sharpen your focus. You'll also be posting all written assignments on [Sakai](#) where your classmates will critique your work before you submit it to Dr. Linden for a grade.

Grading Rubric

As critical thinking and discussion with peers are integral to the work of journalists, classroom participation will count for 20 percent of your final grade. Your classroom participation grade will be based on the quality (not necessarily the quantity) of your discussion and will be based on the following criteria:

- 1) Whether it's clear that you've read and thought about the readings.
- 2) Your ability to integrate ideas gleaned from the readings into the larger context of environmental and science reporting.

To sharpen your writing skills, you'll write two original stories and revisions of each of those two stories. The four writing assignments will count for 80 percent of your final grade. Each story's grade will be determined as follows (with 100 points possible for each assignment):

- 1) A maximum of 40 possible points for reporting. Key considerations in grading reporting include the following:
 - a) Did you interview a variety of sources, each of whom was knowledgeable about the focus of your story and/or able to present a unique scientific or human interest perspective?
 - b) Did you consult primary sources (like journal articles or government publications, e.g.)?
 - c) Have you attributed information (other than common knowledge) to named and reliable sources?
- 2) A maximum of 40 possible points for writing. Consideration will be given to the following:
 - a) Did you write clearly?
 - b) Was your writing tight?
 - c) Did you follow the writing guidelines enumerated by William Zinsser in his book, "On Writing Well"? If not, can you justify why not?
 - d) Does your story flow well?
 - e) Did you stick to your six-word message (as discussed in class)?
 - f) Did you follow style rules enumerated in the AP Stylebook?
- 3) A maximum of 20 possible points will be given for the following:
 - a) Is this story publishable with only minor edits?

Grading Scale (for undergraduates)

94 - 100 A
 91 - 93 A
 88 - 90 B+
 84 - 87 B
 81 - 83 B-
 78 - 80 C+
 74 - 77 C
 71 - 73 C-
 68 - 70 D+
 64 - 67 D
 63 and below F

Grading Scale (for graduate students)

93 - 100 Honors
 74 - 92 Pass
 63 - 73 Low Pass
 63 and below F

After one unexcused absence, each absence will result in a drop of one letter grade in the course. This is an upper division/graduate-level seminar, and your presence and contribution are essential. You cannot pass the course with more than two unexcused absences.

Assignments

To succeed in environmental and science journalism, you must write well. Good writing requires an understanding of the material and the ability to communicate ideas simply and clearly.

All assignments must be posted on the Sakai -> Forums site at least two days before they're due in class. Late assignments will not be accepted without prior permission. Even with prior permission, submission of late assignments will result in a 10-point deduction per day. Not turning in an assignment within two days of the due date will result in a zero grade. Misspelling of proper names will result in a 10-point deduction per misspelling. Misspelling of other words will result in a two-point deduction for each word misspelled. We'll follow the print style guidelines of the [AP Stylebook](#). Each AP Stylebook error will result in a two-point deduction. If you intend to pursue journalism as a career, I strongly encourage you to purchase a copy of the AP Stylebook. As per the usual practice in the School of Journalism & Media, a major factual error will result in a failing grade for that particular assignment. Fabricating sources or quotations or engaging in plagiarism will constitute a violation of the Honor Code (for more information about the UNC Honor Code, go to <http://instrument.unc.edu>).

Additional Assignments for Graduate Students

All graduate students in the class will have additional assignments not required for undergraduate students in the class.

How To Succeed in This Course

- Attend classes consistently.
- Complete readings before the appropriate classroom discussions.
- Participate actively in class discussions.
- Ask Dr. Linden questions either during class or during office hours if you're unclear about any aspect of the course.
- Turn in stories on time, both on Sakai and in class
- Check online syllabus frequently throughout the semester (preferably before each class) as assignments and topics may change without e-mail notice.

WEEK 1:

JAN. 8: INTRODUCTION TO ENVIRONMENTAL AND SCIENCE JOURNALISM

* Turn in Student Data Sheet that was emailed to you.

* Review syllabus.

Reading for this class session:

Davenport, Coral and Lisa Friedman, "[Science Panel Staffed With Trump Appointees Says E.P.A. Rollbacks Lack Scientific Rigor](#)," New York Times, Dec. 31, 2019.

Linden, Thomas, "[Learning To Be a Medical Journalist](#)," Nieman Reports, Vol. 57, No. 2, Summer 2003, pp. 66-67. (in Sakai->Resources)
Plumer, Brad and Coral Davenport, "[Science Under Attack: How Trump is Sidelineing Researchers and Their Work](#)," New York Times, Dec. 28, 2019.

WEEK 2:

JAN. 13: A GUIDE TO WRITING NONFICTION

* Learn the basics of writing nonfiction.

Reading for this class session:

Zinsser, William, On Writing Well, Chapters 1, 2, 3, 4, 5, 6, 7, 8, 9 10, 11, 12.

JAN. 15: ETHICS OF ENVIRONMENTAL, SCIENCE AND MEDICAL JOURNALISM

Reading for this class session:

"Aiding Those in Distress," Association of Health Care Journalists, <http://www.healthjournalism.org/secondarypage-details.php?id=898>.
Code of Ethics for Science Writers, www.nasw.org/code-ethics-science-writers.

Holtz, Andrew, "[Update: Conflict of interest/funding disclosure missing from half of news releases we've reviewed -- a case study on why that's important](#)," Health News Review, August 18, 2016.

Reporters Committee for Freedom of the Press, "A Reporter's Guide to Medical Privacy Law," <http://www.rcfp.org/reporters-guide-medical-privacy-law>.

Scanlan, Chip, "[The First Peril: Fabrication](#)," Poynter.org, (Adapted from Reporting and Writing: Basics for the 21st Century, Oxford University Press, 2000). Updated Nov. 13, 2002.

SPJ Code of Ethics: <http://www.spj.org/ethicscode.asp?>

Statement of Principles of the Association of Health Care Journalists: <http://healthjournalism.org/secondarypage-details.php?id=56>
"Understanding HIPAA: A Brief Overview," Association of Health Care Journalists, http://healthjournalism.org/resources-tips-details.php?id=12#_VcomqQW2gso

Zietman, Anthony L., "[Falsification, Fabrication, and Plagiarism: The Unholy Trinity of Scientific Writing](#)," International Journal of Radiation Oncology, Vol. 87, No. 2, 1 October 2013, pp. 225-227.

WEEK 3:

JAN. 20: Martin Luther King Jr. Holiday (no class)

JAN. 22: INTERPRETATION OF SCIENCE STATISTICS

Reading for this class session:

Browse [Retraction Watch](#).

Cohn & Cope, News & Numbers: A Writer's Guide to Statistics, Part I, Learning the Basics, pp. 1-68. (available through Sakai->Course Reserves)

Labos, Christopher, "It Ain't Necessarily So: Why Much of the Medical Literature Is Wrong," Medscape.com, Sept. 9, 2014. (posted in Sakai -> Resources).

Russell, Cristine, "Risk Reporting," in Blum et al., editors, A Field Guide for Science Writers, Chapter 36, pp. 251-256.

WEEK 4:

JAN. 27: WRITING ABOUT SCIENCE AND THE ENVIRONMENT

Reading for this class session:

Carson, Silent Spring, Introduction and pp. 1 - 100.

JAN. 29: WRITING ABOUT SCIENCE AND THE ENVIRONMENT (cont.)

Reading for this class session:

Carson, Silent Spring, pp. 103 - 198.

Assignment #1: 900-word news story due Monday, Feb. 17. Please upload the draft of your story to Sakai -> Forums -> Assignment #1 by Saturday, Feb. 15, at 6 p.m.

WEEK 5:

FEB. 3: SCIENCE NEWS STORIES

Reading for this class session:

Blum et al., editors. A Field Guide for Science Writers, Chapters 1, 2, 4, 5, 6. (All chapters found in Sakai -> Course Reserves)

Linden, "The Role of Journalists in Reporting on Emerging Infectious Diseases," North Carolina Medical Journal, Vol. 77, No. 5, pp. 331-332. (download from Sakai -> Resources).

FEB. 5: SCIENCE NEWS STORIES (cont.) (Minali)

Reading for this class session:

"Science Times" section from Tuesday, Feb. 4, New York Times.

Lomangino, Kevin. "[NY Times hails discovery of new genetic heart disease risk factor, but what about researchers' industry ties?](#)" Health News Review, posted Jan. 31, 2018.

Oransky, Ivan, "[How Publish or Perish Promotes Inaccuracy in Science--and Journalism](#)," AMA Journal of Ethics, December 2015, Vol. 17, Number 12: 1172-1175.

Assignment #1: 900-word news story due Monday, Feb. 17. Please upload the draft of your story to Sakai -> Forums -> Assignment #1 by Saturday, Feb. 15, at 6 p.m.

WEEK 6:

FEB. 10: ENVIRONMENTAL REPORTING

Reading for this class session:

Kolbert, The Sixth Extinction, pp. 2 - 110.

FEB. 12: ENVIRONMENTAL REPORTING (cont.)

Reading for this class session:

Blum et al., editor, [A Field Guide for Science Writers \(Second Edition\)](#), Chapters 32 & 33, pp. 222-235. (All chapters found in Sakai -> Course Reserves)

Kolbert, The Sixth Extinction, pp. 2 - 110.

Assignment #1: 900-word news story due Monday, Feb. 17. Please upload the draft of your story to Sakai -> Forums -> Assignment #1 by Saturday, Feb. 15, at 6 p.m.

WEEK 7:

FEB.17: CRITIQUE of ASSIGNMENT #1

Assignment #1 due today.

Assignment #2: Rewrite of assignment #1 (news story) due Saturday, Feb. 29, at 6 p.m. on Sakai -> Forums -> Assignment #2 (DRAFT). Final rewrite to be turned in to class on Monday, March 2 and uploaded to Assignment #2 FINAL.

FEB. 19: ENVIRONMENTAL REPORTING (cont.)

Reading for this class session:

Kolbert, *The Sixth Extinction*, pp. 111 - 172.

Blum et al., editors. *A Field Guide for Science Writers*, Chapters 30, 31, 34, 35.

WEEK 8:

FEB. 24: ENVIRONMENTAL REPORTING (cont.)

Reading for this class session:

Kolbert, *The Sixth Extinction*, pp. 173 - 275.

Assignment #2:

Rewrite of assignment #1 (news story) due Saturday, Feb. 29, at 6 p.m. on Sakai -> Forums -> Assignment #2 (DRAFT). Final rewrite to be turned in to class on Monday, March 2 and uploaded to Assignment #2 FINAL.

FEB. 26: COMMENTARY: ESSAYS (cont.) -- guest talk with Alasdair Wilkins, science journalist (unconfirmed)

Reading for this class session:

Barish, David, "[God, Darwin and My College Biology Class](#)," *New York Times*, Sept. 27, 2014.

Sacks, Oliver, "[Sabbath](#)," *The New York Times*, August 14, 2015.

Thomas, Lewis, *The Medusa and the Snail*, chapters entitled "The Medusa and the Snail," "The Wonderful Mistake," "To Err Is Human" and "On Cloning A Human Being" (all chapters found in Sakai -> Course Reserves)

Wilkins, Alasdair, "[I lost 100 pounds in a year. My 'weight loss secret' is really dumb.](#)" *Vox*, July 7, 2015.

Optional reading The atlantic.com piece below started as Alasdair's submission for the essay assignment for this class back in 2014.

<https://www.theatlantic.com/health/archive/2015/07/why-childhood-memories-disappear/397502/>

Assignment #2:

Rewrite of assignment #1 (news story) due Saturday, Feb. 29, at 6 p.m. on Sakai -> Forums -> Assignment #2 (DRAFT). Final rewrite to be turned in to class on Monday, March 2 and uploaded to Assignment #2 FINAL.

WEEK 9:

MARCH 2: CRITIQUE OF ASSIGNMENT #2

Assignment #2 (rewrite of Assignment #1) due today.

MARCH 4: HISTORICAL STORIES

Reading for this class session:

"Science Times" section from Tuesday, March 5, *New York Times*.

Altman, Larry, "[For 3 Nobel Winners, a Molecular Mystery Solved](#)," *New York Times*, Oct. 7, 2013.

Linden, *New York Times Reader*, Chapter 9, pp. 183-197.

McNeil Jr., Donald G., "[In Reaction to Zika Outbreak, Echoes of Polio](#)," *New York Times*, Aug. 29, 2016.

Snyder, Timothy, "[The Next Genocide](#)," *New York Times*, Sept. 12, 2015.

SPRING BREAK (March 5-14)

WEEK 10:

MARCH 16: PROFILES, OBITUARIES & EXPLANATORY STORIES

Reading for this class session:

Butler, Katy, "[What Broke My Father's Heart](#)," *New York Times*, June 18, 2010.

Carey, Benedict, "[Decoding the Brain's Cacophony](#)," *New York Times*, Oct. 31, 2011.

Linden, *New York Times Reader*, Chapter 5, pp. 92-98, Chapter 6, 103-119, Chapter 7, pp. 132-136, 138-143.

Linden, New York Times Reader, "A conversation with Benedict Carey," pp. 99-101 and 152-155.

Assignment #3: Essay due Wednesday, March 25. Please upload the draft of your essay to Sakai -> Forums -> Assignment #3 DRAFT by 6 p.m., Monday, March 23.

MARCH 18: PERSPECTIVE STORIES & EXPLANATORY WRITING

Reading for this class session:

Blum et al., editors. A Field Guide for Science Writers, Chapters 17 & 20.

Harmon, Amy, "[A Dying Young Woman's Hope in Cryonics and a Future](#)," New York Times, Sept. 12, 2015.

Linden, New York Times Reader, Chapter 8, pp. 156-182 (available in Sakai -> Course Reserves).

Assignment #3: Essay due Wednesday, March 25. Please upload the draft of your essay to Sakai -> Forums -> Assignment #3 DRAFT by 6 p.m., Monday, March 23.

WEEK 11:

MARCH 23: RACE AND MEDICINE -- guest speaker, [Damon Tweedy, M.D.](#), author of Black Man in a White Coat -- unconfirmed

Reading for this class session:

Tweedy, M.D, Damon, [Black Man in a White Coat: A Doctor's Reflections on Race and Medicine](#), entire book.

Assignment #3: Essay due Wednesday, March 25.

MARCH 25: CRITIQUE OF ASSIGNMENT #3

Assignment #3 (essay) due today.

WEEK 12:

MARCH 30: REPORTING HEALTH NEWS - Guest speaker, Rose Hoban, publisher of [NC Health News](#) -- unconfirmed

Reading for this class session:

Branswell, Helen, "[When towns lose their newspapers, disease detectives are left flying blind](#)," STAT, March 20, 2018.

APRIL 1: SCIENCE WRITING FOR MAGAZINES

Reading for this class session:

TBA

WEEK 13:

APRIL 6: RADIO REPORTING -- Guest lecturer, Adam Hochberg, former NPR correspondent and Lecturer, Hussman School of Journalism and Media -- unconfirmed

Reading for this class session:

Listen to the current, award-winning "Carolina Connection" radio program at <https://carolinaconnection.org>

Assignment #4: Rewrite of Assignment #3 due Monday, April 13. Please upload the draft of your essay to Sakai -> Forums -> Assignment #4 DRAFT by 6 p.m., Saturday, April 11.

APRIL 8: REPORTING FOR THE ELECTRONIC MEDIA -- Guest speaker, [Helen Chickering](#), anchor/reporter/producer [Blue Ridge Public Radio](#)

Reading for this class session:

Linden, Tom, "Medical Reporting for the Electronic Media," in Barbara Gastel's Health Writer's Handbook (Second Edition), chapter in Sakai -> Resources.

Assignment #4: Please upload the draft of your essay to Sakai->Forums->Assignment #4 DRAFT by 6 p.m., Saturday, April 11. Rewrite of Assignment #3 due Monday, April 13.

WEEK 14:

APRIL 13: CRITIQUE OF ASSIGNMENT #4

Assignment #4 (essay rewrite) due today.

April 15: CRITIQUE OF ASSIGNMENT #4 (cont.)

WEEK 15:

APRIL 20: RADIO REPORTING

Listen to "[My Lobotomy](#)," "[Mastodons in Manhattan: A Botanical Puzzle](#)," and "[An Ill Newborn, A Loving Family and A Litany of Wrenching Choices](#)."

APRIL 22: WRAP-UP SESSION

FINAL EXAM - Tuesday, May 5, 8 a.m., Carroll Hall 21.

The Honor Code

I expect that each student will conduct himself or herself within the guidelines of the University honor system (<http://honor.unc.edu>). All academic work should be done with the high levels of honesty and integrity that this University demands. You are expected to produce your own work in this class. If you have any questions about your responsibility or your instructor's responsibility as a faculty member under the Honor Code, please see the course instructor or Senior Associate Dean Charlie Tuggle, or you may speak with a representative of the Student Attorney Office or the Office of the Dean of Students.

Seeking Help

If you need individual assistance, it's your responsibility to meet with the instructor. If you are serious about wanting to improve your performance in the course, the time to seek help is as soon as you are aware of the problem -- whether the problem is difficulty with course material, a disability, or an illness.

Diversity

The University's policy on Prohibited Harassment and Discrimination is available here: <https://hr.unc.edu/files/2017/07/Policy-on-Prohibited-Discrimination-Harassment-and-Related-Misconduct.pdf>. UNC is committed to providing an inclusive and welcoming environment for all members of our community and does not discriminate in offering access to its educational programs and activities on the basis of age, gender, race, color, national origin, religion, creed, disability, veteran's status, sexual orientation, gender identity, or gender expression.

Professional Values and Competencies

Among the many skills students will learn in this course, it's expected they will be able to fulfill the following values and competencies as enumerated by the Association for Education in Journalism and Mass Communication:

- understand concepts and apply theories in the use and presentation of images and information;
- demonstrate an understanding of professional ethical principles and work ethically in pursuit of truth, accuracy, fairness and diversity;
- think critically, creatively and independently;
- conduct research and evaluate information by methods appropriate to the communications professions in which they work;
- write correctly and clearly in forms and styles appropriate for the communications professions, audiences and purposes they serve;
- critically evaluate their own work and that of others for accuracy and fairness, clarity, appropriate style and grammatical correctness;
- apply basic numerical and statistical concepts;
- apply tools and technologies appropriate for the communications professions in which they work.

Special Accommodations

If you require special accommodations to attend or participate in this course, please let the instructor know as soon as possible. If you need information about disabilities visit the Accessibility Services website at <https://accessibility.unc.edu/>

-- syllabus revised Jan. 2, 2020