

Spring 2019 Sustainability Management PS5180 section 001

TUESDAYS, 6:10PM-08:00PM

ROOM TBA

Instructor: Prof. Claudia Dreifus

Adjunct Professor of International Affairs and Media

Instructor of Practice, SUMA

Office hours: 4-6pm, Tuesday.

Or by special appointment.

Office hours to be held in at venue TBD.

Email: cd2106@columbia.edu

Teaching Assistant:

Heather Radke

her2111@columbia.edu

Office hours:

Location:

Brief Description: This is an interdisciplinary workshop for scientists, sustainability professionals, conservation biologists, future NGO workers and journalists seeking skills in communicating 21st century global science to the public.

Scientists will be given journalism skills; journalists will learn how to use science as the basis of their storytelling.

Students currently working in the business world or the public sector will, by doing actual journalism, see what the news looks like from the other side of the desk.

Our standards and methods will, at all times, be those of mainstream journalism.

Course Objectives: The course is designed to give students exercises and real-world experiences in producing feature stories on global science topics.

While most scientists and sustainability professionals have been trained to write in the style of peer-reviewed journals or business publications, we will focus on science journalism, learning how to translate global science into accessible true stories that reach wide audiences.

Science is performed by passionate individuals who use their intelligence and determination to seek answers from nature. By telling their stories and uncovering the drama of discovery, we believe that there are ways for science to be successfully communicated to readers who might otherwise fear it.

Rationale: Currently, there are few comparable courses offered. Traditional science journalism classes have been mostly pegged to future science journalists; but we hope to turn non-journalists into published writers. Our target markets are mainstream media, Internet journals and community publications. Our approach blends science, policy, international affairs and journalism. We will discuss advocacy, too.

With mass media more open than ever to freelance contributions, with new forms of media proliferating in cyberspace and with Internet journalism increasingly open to beginning journalists, we see new opportunities for the scientifically-interested to tell their stories, *if* they have the proper skills. With these opportunities in mind, we will consider the demands of new media and the Internet.

Ultimately, we hope to show a climatologist how to get their op-ed into the Washington Post and to help an aid worker from Southern Sudan place her first-hand report on desert environments into the Atlantic or Medium.

We hope that when a sustainability student or manager sets up their own blog, that it will be so literate and interesting that it will draw a substantial readership.

Prerequisites:

The main prerequisite is a willingness to experiment with popular forms and a desire to reach your readers with stories that they will understand.

Because both the TA and the Instructor do individual critiques of students' writing, we ask that participants in this class be willing to follow the edited instructions offered and be open to our notes. This is the way one improves as a writer.

Students who feel uncomfortable with that style of instruction will probably not profit from it and should consider enrolling in a different type of course. Willingness to accept critiques and guidance will be part of the grade.

A fluid knowledge of written English is important, but students who've trained as journalists, scientists or NGO professionals in non-English speaking countries are very welcome. Students in need of additional help should work with tutors at the Writing Center:

writingcenter@columbia.edu and <http://www.college.columbia.edu/core/uwp/writing-center>.

Because we are looking to create interesting non-fiction literature with science at its heart, we seek students with enthusiasm for both science and mass communications.

Students registering for this course should be willing to try to write in a style different from what they may have been trained for; they should also be willing to find their stories through interviews, investigation, and observation.

One gauge for your capacity to do this work: can you write as fast as you think?

Criteria for Grading: It's not easy to quantify a creative endeavor and the instructor reserves the right to make subjective judgments on progress, effort and attitude in determining final grades.

What we look for is talent, skill, originality, resourcefulness, promptness in meeting deadlines, a collegial attitude in terms of class participation—and of course, improvement of skills over a semester. The student who writes well, but who doesn't respond to instructor edits and fails to actively engage with class discussions will be penalized.

Because we are talking about subjective matters, I prefer not to give a firm numeric weight to each assignment. Again, what I seek is improvement of skills—and a game attitude. The final term project is very important, but it's not the whole package.

Violations of either journalistic or academic standards will obviate all other considerations. And of course, all assignments must be filed and filed on deadline. Anyone missing more than two classes will be asked to drop the course. Your participation and interaction with your classmates is part of what happens and if you can't be present, no matter how valid the reason, you have denied your colleagues part of what they need to succeed.

Trying hard factors-in too. Woody Allen says that half of success is showing up. We'll amend that: the other half involves trying harder than the next person.

Course Format and Requirements:

We do a mixture of writing different types of popular science articles of varying lengths, researching them from top to bottom, and then reading some of the students' work aloud, in class. Students are asked to offer helpful criticism to each other and work together on solving reporting problems. We ask you to post your critiques both online (through Canvas), and also to bring them to class.

The Canvas website will be the medium of communication for all members of this workshop.

Great writing skills and improvement of those skills is what we're looking for—but we also appreciate students who are willing to support their classmates, participate in constructive critiques and who are willing to go the extra mile to do creative research for their pieces.

Whenever it is realistic, students are asked to submit their classroom work for publication. That can mean anything from mass circulation magazines to the in-house

publications at Columbia University and SIPA. Students are encouraged to find Internet publishers for their work. For example, the website undark.org is often open to new writers if the work is good (this website is also a good resource for examples of solid science writing).

The Earth Institute has a website/magazine, "State of the Planet." Students are encouraged to submit appropriate class work there.

Though all work produced for class must be original, we believe in your "recycling" it into real world print publications. Why not have your friends and colleagues see the product of your hard work?

Writing is key to success in this class. We believe that writing is like gymnastics: the more you do, the better you get. So you will be doing a lot of writing. Plan on it. We're looking for enthusiastic writers and curious reporters, but also students who will improve their skills over the semester. An improved/dedicated writer can be assured of a fine grade.

Handing in assignments on deadline is critical.

Heather Radke and Professor Dreifus will be spending as much as an hour reading and analyzing every submission to class. They will provide our experienced advice on how to improve the stories. Grades will be impacted by the willingness of students to use the information provided in these editorial notes and to follow them.

Your instructor is available during office hours for one-on-one coaching and will also mentor students through their larger projects. The grading and curriculum assistant will also have two hours available for that purpose on different days TBD..

COURSE OVERVIEW: Students will be asked, depending on the class' pace, to produce roughly four types of feature articles and two short ungraded assignments.

That probably means writing almost every week and filing promptly.

Throughout the semester, we will also be discussing how to apply traditional print story-telling techniques to new types of media--e.g., video, podcasts, listicles, internet features. Katharine Sullivan, who produces podcasts for WNYC's Trump Watch and ProPublica, will be joining the class for two sessions to offer basics. Heather Radke, an alumni of NPR's Radio Lab, will assist.

Final grades are based on attitude, writing skills, improvement of those skills, reporting enterprise, following of editorial advice, classroom participation, and the meeting of deadlines.

Publication of class work will win extra consideration at grading time and we will do much to encourage it. In this era of Internet magazines, newcomers can find markets with comparative ease.

Because this class is formatted as a workshop, students will be asked to produce stories, but also to read and critique each other's writings. Both are key elements of this workshop.

Lateness in filing assignments impedes the entire class' progress, and unfortunately, must be penalized in grading.

EMAIL: Students are asked to e-mail their completed writing assignments to Prof. Dreifus at cd2106@columbia.edu as a "paste" communication on the Saturday before every class. Please do not send stories in .docx format.

Please also cc the teaching assistant, Heather Radke, her2111@columbia.edu.

Completed pieces should also be posted on Canvas at that time (in the "Discussion" section) so that classmates can have access to them for comparison and critique. This should be the regular protocol for all filings.

SESSION ONE, Tuesday, January 22: Introduction

The Difference: How science journalism contrasts with academic writing, everyday business writing or public relations and how it differs from standard feature writing.

In this introductory session, we will identify current scientific topics that lend themselves to features for newspapers, magazines and the Internet.

We'll discuss the story structure of the science feature. What are the elements of a compelling science feature? How does one transform numbers and findings into a literary narrative? How does one create a simple story without 'dumbing down' the content?

Why does the work of successful science communicators, such as the Neil deGrasse Tyson and Brian Greene, have wide appeal? What are they actually doing?

Why did the late Rockefeller University Nobelist Gunter Blobel tell his post-docs, "If you can't explain it to your grandmother, don't bring it to me?"

Before next session: Please read the op-ed pieces provided in the course pack or with these links:

Abraham Verghese's *Close Encounters of the Human*

Kindred: http://www.nytimes.com/2005/09/18/magazine/18lives.html?_r=0 (Links to an external site.)Links to an external site. (Links to an external site.)Links to an external site.

Some other opinion pieces:

- *Why Can't We Protect Elephants?* An op-ed from the New York Times <https://www.nytimes.com/2017/11/18/opinion/sunday/protecting-elephants.htm> (Links to an external site.)Links to an external site.
- “Edward Humes on How Transportation Overkill Is Killing Us” : <https://www.nytimes.com/2016/09/13/science/edward-humes-transportation.html>(Links to an external site.)Links to an external site. (Links to an external site.)Links to an external site.
- And this from *the Guardian* about science journalism: <http://www.theguardian.com/media/2015/dec/30/problem-with-science-journalism-2015-reality-kevin-folta> (Links to an external site.)Links to an external site.

SESSION TWO, January 29: The Science Based Op-Ed, Part One

What exactly is an op-ed piece? Are science op-eds different from other sorts of opinion pieces? Which markets will print a science-based op-ed?

What are the mechanics of submission? What are the differences between a short personal essay and an op-ed? Can one do a personal essay about a scientific topic—how?

We will run through Anya Schiffrin's power point on story structure (included in your course packet).

Assignment: Write a 750 word science-based op-ed that is targeted to a market like the **New York Times**, the **Washington Post**, or the blogs of an NGO like State of the Planet, the National Resources Defense Council.

Short filing date: Please file by Saturday, February 2nd.and please do file on Canvas (in the Discussion section for your fellow classmates to read) and by sending a copy via email to Professor Dreifus and Ms. Radke.

SESSION THREE, February 5: The Science Based Op-Ed piece or Short Personal Essay, Part Two

We will be discussing selected op-eds in class, as well as everyone's experience in writing them. Any student with a grade under A-minus will be asked to produce a second draft.

Finishing Op-Eds and Interviews/Profiles

First hour: We will discuss your experiences with op-ed re-writing.

Second hour: Class discussion: Profile or Interview? What's the difference?

Hand-out in class: Claudia Dreifus' tips for interviewing.

Assignment for next week:

2nd Draft of Op-Ed—Due February 9th

Those students who have successfully completed their op-eds and received a grade of A minus or better, do not need to produce a second draft. They should begin their interview assignment now.

Here are some sample Qs and A's from Professor Dreifus:

<https://www.nytimes.com/2018/08/10/science/maria-konnikova-poker.html>

<https://www.nytimes.com/2016/06/14/science/samuel-wasser-dna-elephants-ivory.html>

<https://www.nytimes.com/2017/07/31/health/raj-panjabi-last-mile-health-liberia.html>

Professor Dreifus will provide a tip-sheet on interviewing techniques.

Writing assignment: Create a 1500-2000 word Question and Answer style interview with a science or sustainability or with a fascinating New Yorker who's work has a science or sustainability peg to it.

Your subject can be one of the interesting speakers who visit Columbia and the Earth Institute, a professor, another student, staffer at an NGO, or perhaps an international civil servant at the United Nations. Students preferring a narrative form can do this interview as a profile,

First draft due: Saturday, February 16th.

SESSION FIVE, February 19: Scientific Conversations—Interviews/Profiles.

First hour: Reading in class of students' profiles/interviews and the remaining opinion pieces..

Second hour: Class discussion: how does a writer shape the raw material of an interview into a successful article?

Here are two science profiles:

<https://www.audubon.org/magazine/september-october-2015/eo-wilsons-wants-us-leave-half-earth> (Links to an external site.)Links to an external site. (Links to an external site.)Links to an external site.

"Brenda Milner, Eminent Brain Scientist, Is 'Still Nosy' at 98," by Benedict Carey: <https://www.nytimes.com/2017/05/15/science/brenda-milner-brain-cognitive-neuroscience.html> (Links to an external site.)Links to an external site. (Links to an external site.)Links to an external site.

Here is a link to something the professor published with Harvard's Neiman Reports and that may be helpful in developing your interviewing skills.

<https://niemanreports.org/articles/scientific-conversations/> (Links to an external site.)Links to an external site. (Links to an external site.)Links to an external site.

And here's a non-science profile that's a classic:

Reading: *Am I Making Myself Clear?* Chapters 7-10.

OPTIONAL BONUS I: Professor Dreifus will be leading a "skills seminar" on blogging and opinion writing for Earth Institute staff, students and SUMA alumni on Saturday, February 23. Location TBA. Members of the class are welcome.

SESSION SIX, February 26: Multi-tasking session.

We'll be finishing up the rewrites of interviews/profiles and starting on query letters.

How does one write effective query letters that get you an assignment. We'll tell all the insider secrets.

Handout: Claudia Dreifus' tip sheet on writing effective query letters.

Assignment for next week: Write a query letter/pitch targeted to the appropriate editor on your projected term project. Due date: March 2nd.

SESSION SEVEN—March 5--QUERY LETTERS/PODCASTS

Hour One: Query letters—what worked, what didn't.

Handout: Claudia Dreifus' tip sheet on writing effective query letters.

Hour Two: Pod-casting: An Introduction

GUEST LECTURER: Katherine Sullivan will introduce us to audio story-telling

Session Eight, March 12: EDITOR'S NIGHT

Producers and editors from scientific media will be visiting with us, talking about what they do and how they do it. After, there will be a Dutch-treat informal supper with our guests at V&T restaurant with our speakers.

Guests—list in formation:

- Yaffa Frederick- Producer at CNN on line.
- Susan Matthews- Science editor at Slate
- TJ Kelleher: science/nonfiction editor at Basic Books
- Rene Ebersole, Senior Editor, Yale E360, former articles editor, Audubon.

- Eric Roston, Climate editor, Bloomberg News

6:00-6:30-catch up on classwork

6:30-8:00-guest speakers

8:00-9:30-Dutch treat supper with guest speakers.

This session will be held in a room TBA. Class members are welcome to bring friends and colleagues to the lecture section of the evening,

OPTIONAL BONUS II: As part of her “Science Talks” series, Professor Dreifus will be conducting a live interview on stage with E.O. Wilson at the 92nd Street Y at 7:00 PM on March 19th. Registered students can receive two complimentary house seats,

MARCH 19--SPRING BREAK, NO CLASS.

Please use this solid block of time away from class to begin work on your term project assignments.

By now, you should have chosen the topic you are going to pick for your final class assignment. Use the holiday to begin researching it. It's the best opportunity you'll have to get this work done. Your query letters will be read over the holiday. But writing them will help you focus on what you want to do.

To prepare for your own long form piece, you should *read* some such pieces over the break. Though you will not be asked to produce stories at this length or with this complexity, here are some examples of the form.

"The Siege of Miami" by Elizabeth

Kolbert <https://www.newyorker.com/magazine/2015/12/21/the-siege-of-miami> (Links to an external site.)Links to an external site. (Links to an external site.)Links to an external site.

More from Elizabeth Kolbert on

sequestration. <https://www.newyorker.com/magazine/2017/11/20/can-carbon-dioxide-removal-save-the-world> (Links to an external site.)Links to an external site. (Links to an external site.)Links to an external site.

Traditional investigative news reporting on a science issue: “Asia’s Fattest Nation.” A team of New York Times reporters tell how food producers have influenced science in Malaysia and helped create an obesity problem in that South Asian nation. One of the authors is ace New York Times science writer, Anahad O’Connor.

<https://www.nytimes.com/2017/12/23/health/obesity-malaysia-nestle.html> (Links to an external site.)Links to an external site. (Links to an external site.)Links to an external site.

"Maria's Bodies," by

M.Schwartz. <http://nymag.com/daily/intelligencer/2017/12/hurricane-maria-man-made-disaster.html> (Links to an external site.)Links to an external site. (Links to an external site.)Links to an external site. New York Magazine investigated the accuracy of the death toll statistics in Puerto Rico in the aftermath of Hurricane Maria. The Earth Institute's John Mutter was a primary source for this story.

Killing Animals at the Zoo", by Ian Parker in the New

Yorker: <https://www.newyorker.com/magazine/2017/01/16/killing-animals-at-the-zoo> (Links to an external site.)Links to an external site. (Links to an external site.)Links to an external site.

SESSION NINE MARCH 26 – PODCASTING II

For the rest of the semester, we will be functioning, as many journalists do, on multiple tracks in each class.

With the holiday over, we will begin work at this time on the culminating event of the semester—the long form narrative non-fiction science based story.

First Hour: Let's begin by revisiting Anya Schiffrin's excellent power point on story structure. Everything you need to write a long form narrative story is right there.

Second Hour: *Katharine Sullivan will offer the second in her podcasting lectures.*

Assignment: Begin work on a 2000 word feature article on a global science/international sustainability issue. Start off by outlining a plan of action—including sources to interview, events to cover, books to read, information to uncover. Write a lede for this piece.

Post both outline and lede on Canvas by March 30th.

SESSION TEN April 2 Shaz-zam!!! Turning Academic Journal Papers Into Compelling Journalistic Stories.

First hour: Heather Radke will discuss how to translate an academic paper from a science journal into a narrative story. Ms. Radke will be bringing us some interesting examples. How would you reframe Article X (TBA) to a lay-person?

Second hour: Workshop Session on Term Project. We'll discuss ideas, outlines, and ledes.

SESSION ELEVEN, April 9: Double duty session—The long form story, social media

First hour: Round robin on term project progress.

Second hour: A discussion on how to do the term project in other forms of media and multi-platform story telling.

Assignment for next week: Write a 300-word blog post or listicle on a topic of interest, preferably one related to your term project (maybe about an aspect of it). Post it on an appropriate site, if you can.

Due Date: Saturday, April 13th.

SESSION TWELVE, April 16: Communicating Science

First hour: Discussion of blog postings/listicles.

Second hour: Updates on term projects and any challenges.

Assignment: first draft of final project due on April 20th. That's 2000 words on some aspect of global science.

Target your story to a specific market you hope to sell it to.

Think about mixed media and new media supplements to your written story—i.e. podcasts, videos, slideshows, blogs that you might create to enhance your story.

The story should not be longer or shorter than the word count. Part of the exercise involves learning to write for space requirements.

SESSION THIRTEEN, April 23: Putting It All Together-

Updates on term projects, solving final last minute problems. How does one end a story?

SESSION FOURTEEN: April 30. FINAL SESSION.

This final session will be held at the home of Professor Dreifus. We'll be celebrating together the progress this class has made over the semester.. Every student is asked to bring a home cooked dish as part of a class communal Dutch Treat supper.

Your final term project is due this evening.

ASSIGNED BOOKS:

These two books are works that we'd like you to keep in your personal library. We think that over the years, you will find them useful and will refer to them often. Both are available in paperback.

"Am I Making Myself Clear—A Scientist's Guide to Talking to the Public?" Cornelia Dean, Harvard University Press

"The Writer's Market," (Writer's Digest Books) Everything you need to know to navigate your way around the publishing world. Invaluable.

NOT REQUIRED, BUT HELPFUL RESOURCES:

"The New York Times Book of Science," Edited by David Corcoran, Sterling Publishers.

"Global Muckraking: 100 Years of Investigative Journalism From Around The World," Edited by Anya Schiffrin, The New Press.

"Explaining Research," Dennis Meredith. (Available on Amazon.)

"A Survival Guide to the Misinformation Age, Scientific Habits of Mind" David J. Helfand

"Ignorance," Stuart Firestein

"Letters to a Young Scientist," Edward O. Wilson

"Making Sense of Science: Separating Substance from Spin." Cornelia Dean, Harvard University Press.

POPULAR SCIENCE BOOKS:.

"The Best Science Writing of 2018"

"Merchants of Doubt, Naomi Oreskes

"The Sixth Extinction: An Unnatural History: Elizabeth Kolbert

"The Sustainable City," Steven Cohen, Columbia University Press

"Half-Earth: Our Planet's Fight for Life," Edward O' Wilson

“Are We Smart Enough to Know How Smart Animals Are,” Frans deWaal

ETC.

LIBRARY RESERVES: Some feature writing source works used in my magazine writing class will be posted within the "library reserves" feature of Canvas. Though these are not science stories per se, they may be of use to you in looking at story structure and detail

A NOTE ON TIMELY FILING: In order for students' writing to be graded and considered in time for Tuesday's class, it is vital that assignments be filed on Canvas by Saturday night. Firm.

ANOTHER NOTE ON FORM: As in journalism, all filings must be clean, grammatical and as far as possible, in “ready to print” form. That means, of course, with a headline and a by-line.

MIDWEEK E-MAIL INQUIRIES: Though available in emergency situations, your instructor and grading assistant wish to stress that this is not an e-course. It is a lecture-based workshop. Therefore email inquiries about small matters are inappropriate. We would prefer that you use office hour appointments for your questions about assignments and to take careful notes during lectures, where key pointers will be covered.

A SEPARATE NOTE ON PACE: We will move as quickly or as slowly as the class' progress requires. That, of course, means the schedule below is not set in stone. As that late 20th century philosopher John Lennon had it: "Life is what happens when you're making other plans."

KEEP IN MIND: Be aware that this course is rigorous and involves a serious commitment from registrants. We don't want to kid you about that.

On the plus side, registration is capped at about fifteen or maximum, sixteen, so that students can make the best progress in a short period of time.

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BIOGRAPHIC NOTES ON THE PROFESSOR: For the past two decades, Professor Dreifus has produced and written the “Conversation with...” feature in the Tuesday science section of the New York Times.

As a free-lance journalist, she also contributes to *Smithsonian*, *Scientific American*, *the Chronicle of Higher Education*, *the Nation*, *Quanta*, *Ms.*, *the New York Review of Books*, *Undark* and the various sections of the *New York Times*.

In a former life, for the closing years of the 20th century, she was one of the fabled Playboy Interviewers where she helped pioneer the long form interview. Among

her Playboy Interviews; Gabriel Garcia-Marquez, Daniel Ortega, Susan Sarandon, William Safire, Donald Sutherland, Arthur Schlesinger, Jr., Gregory Hines.

In 1992, she came to the New York Times as contributing writer for the Sunday Magazine. Her specific mandate was to bring the long form interview to the newspaper. Till then, Q. and A interviews were generally eschewed by the editors and were not featured. Today, they are a mainstay in almost every section of the newspaper.

She is the author or co-author of six books and her work is collected in numerous anthologies.

Additionally, she moderates the "Science Talks" lecture series at New York's famed 92nd Street Y.

The American Society of Journalists and Authors has honored her with a "career achievement award," and Sigma Xi, the national honorary society of research scientists has installed her as an honorary member for "transforming" how science journalism.

BIOGRAPHIC NOTES ON THE TEACHING ASSISTANT: Heather Radke writes essays, criticism, and reported pieces and her work has appeared or is forthcoming in *The Paris Review Daily*, *The Believer*, *Guernica*, *Topic*, *Longreads*, *Museum*, and *The White Review*.

She is finishing an MFA in Nonfiction at Columbia University, where she has also taught undergraduate academic and creative writing. She lived in Chicago for almost a decade, where she worked as a museum curator, audio producer, and public historian. Her audio work has been featured on Radiolab, Chicago Public Media, and at the Field Museum, and she was the curator of the Jane Addams Hull-House Museum for four years.

COLUMBIA INTEGRITY:

Please familiarize yourself with the proper methods of citation and attribution. The School provides some useful resources online; we strongly encourage you to familiarize yourself with these various styles before conducting your research and writing.

As stated in your Sustainability Management registration packet, Columbia University functions at the highest levels of integrity and demands the same from its students. It goes without saying that plagiarism, "recycling" of previously produced works, the employment of intellectual products created by others will not be tolerated.

