

Writing about Global Science for International Media

Sustainability Management PS5180 section 001

Tuesdays, 6:10-8:00 p.m.

Room: LEWISOHN HALL, ROOM 308A

Below: members of the class with the late E.O. Wilson.



Instructor: Prof. Claudia Dreifus, Instructor of Practice, SUMA

Office hours: Tuesday 4:00-6:00 p.m. or by special appointment

Email: cd2106@columbia.edu

Teaching Assistant: Ryan Lee

Email: ryan.lee2@columbia.edu

Office hours: Thursday 11:00 a.m. - 1:00 p.m., by appointment

BRIEF COURSE 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. We seek to encourage students to publish their classwork. During the Fall 2022 course that Professor Dreifus and Mr. Lee taught on opinion writing, more than 18 class-produced pieces were published.

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 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.

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 South 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, it will be so 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 on their manuscripts and to 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 the class 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 nonfiction 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, to this moment, trained to do. They should also be willing to find their stories through first-hand original interviews, investigation, and observations. That means fieldwork and producing narratives based on information that was observed or collected, if the pandemic permits it.

We consciously work to write in popular story-telling forms and ask course participants to temporarily put away conventions that they might have learned through academic writing, policy papers, or strategic communications. Those forms are valid in their own environments, but they sometimes conflict with compelling story-telling.

CRITERIA FOR GRADING: It's not easy to quantify a creative endeavor, and the instructor reserves the right in determining final grades, to make some subjective judgments on progress, effort. What we look for is talent, skill, originality, resourcefulness, promptness in meeting deadlines, a cooperative attitude in terms of class participation—and of course, improvement of skills over a semester.

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 one session 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 once said 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: In this course, we write 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 those who go the extra mile to do creative research for their pieces.

Whenever 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 online 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). *Scientific*

American's blog has an open-to-readers opinion section that may be the perfect place for what students in this class produce.

The Earth Institute has a web 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.

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 our time together. An improved writer can be assured of a fine grade.

Repeat: handing in assignments on deadline is critical. The deadline is always the Saturday evening before class. When you file, put your story up on CourseWorks, but also email a copy as an attachment to both Claudia Dreifus and Ryan Lee.

Professor Dreifus and Ryan usually spend as much as an hour reading and analyzing every submission to class. We will provide our experienced advice on how to improve submissions. The professor will grade, in part, based on the willingness of students to use the information provided in these editorial notes and to follow them. Think of us as editors. Think of the classroom as a kind of newsroom.

Your instructor is available during office hours for one-on-one coaching and will also mentor students through their larger projects. The TA has experience working one-on-one with students and he will also have two hours weekly available for coaching.

COURSE OVERVIEW: Students will be asked, depending on the pace of the class, to produce roughly three different types of graded feature articles and two short assignments. That means writing almost every week and filing promptly. Throughout the semester, we will also be discussing how to apply traditional print storytelling techniques to new types of media—e.g., video, podcasts, listicles, and Internet features.

Final grades are based on attitude, writing skills, improvement of those skills, reporting enterprise, following editorial advice, active classroom participation, and meeting 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 potential 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 the course. Lateness in filing assignments impedes the entire class' progress, and unfortunately, must

be penalized in grading. Students can obtain extensions on their deadlines by consulting with Professor Dreifus or Ryan.

MORE ABOUT THIS COURSE:

This is a hands-on course where you will get guidance in producing three pieces of professional-level journalism. We'll be doing two drafts of an opinion essay, an interview, and a long-form narrative piece of reporting. If there is time, students will be asked to cover an event.

Between writing these stories, you'll get to meet and interact with leading journalists. In the fall semester, Laura Helmuth, Editor in Chief of *Scientific American* and former science and health editor of the *Washington Post*, visited Columbia and spoke with the class about coverage of the COVID-19 pandemic. After class, Ms. Helmuth joined the students for an informal supper at V and T.

In the last few semesters, students from my classes were able to have informal meetings with Donald McNeil, Jr. then of the *New York Times*, Margaret Sullivan of the *Washington Post*, Naomi Oreskes of Harvard, and Elizabeth Kolbert of the *New Yorker*.

Our general format is a workshop, which means that you'll be researching and writing stories, posting them on CourseWorks, and providing helpful comments to your colleagues online and during our weekly classes. Your participation and feedback are key to your success. As in a newsroom, collaboration and collegiality are what make for a successful enterprise.

I'll be available for coaching and office hours meetings for at least two hours weekly. Special appointments are possible, when necessary. The TA, Ryan Lee, is also available during his office hours or by special arrangement.

BIOGRAPHICAL NOTES ON THE PROFESSOR: For two decades, Professor Dreifus produced and wrote the "Conversation with..." feature in the Tuesday science section of the *New York Times*. As a freelance journalist, she now contributes to the *New York Review of Books*, CNN, *Smithsonian*, *Scientific American*, *the Chronicle of Higher Education*, *Nation*, *Quanta*, *Ms.*, *New York Review of Books*, *Wired*, *Mother Jones*, *Undark*, *the Nation*, and various sections of the *New York Times* including Sunday Business and Museums. Professor Dreifus is also an occasional contributor to Columbia's own *State of the Planet*.

In a former life, she was one of the fabled *Playboy* Interviewers, where she helped pioneer the long-form interview. Among her *Playboy* Interviews: Gabriel Garcia-Marquez, the Sandinista junta, Susan Sarandon, William Safire, Donald Sutherland, Arthur Schlesinger, Jr., Gregory Hines.

In 1992, she came to the *New York Times* as a contributing writer for the Sunday Magazine. Her specific mandate at the time was to bring the long-form interview to the newspaper. Till then, Q&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. The American Society of Journalists and Authors has honored Professor Dreifus 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.

BIOGRAPHICAL NOTES ON THE TEACHING ASSISTANT:

Ryan Lee is a Master's candidate studying media, technology, and security at Columbia's School of International and Public Affairs (SIPA), where he served as Editor in Chief of *The Morningside Post*. Previously, he was a speechwriter and communications advisor at USAID, including for Ambassador Samantha Power. He has also written public statements and speeches for U.S. Ambassador to the United Nations Linda Thomas-Greenfield. He has a Bachelor's in international relations from Brown University and speaks French, Spanish, and Mandarin Chinese.

IF WE HAVE TO DO DISTANCE LEARNING BECAUSE OF THE PANDEMIC, THIS IS HOW WE WILL MAKE ZOOM INSTRUCTION WORK FOR YOU:

While Zoom instruction is not ideal, this professor was astonished to find how well it could work well in a writing and journalism course. Professor Dreifus has taught Zoom editions of this class in the Spring and Summer at the School of Professional Students and the students there reported high satisfaction rates. Because of the pandemic, they could not go out and do the kind of in-person reporting that would have been usual. Instead, they had to do what journalists always do: compromise, make do, make lemonade from life's lemons.

In this instance, many of them ended up producing personal writing about their experiences with what may be the biggest science story of their lifetime. Here's an essay I wrote for *State of the Planet* on my experience with my first distant learning class: <https://blogs.ei.columbia.edu/2020/05/21/professing-pandemic-reflections/>

And here is a report that one student did for her term project. It too appeared on *State of the Planet*: <https://blogs.ei.columbia.edu/2020/06/04/covid-19-age-31-versus-67/>

So here we are—in the midst of the biggest science story of our lifetime, the pandemic. We made it work for us by covering it. Zoom or in-person, we will use the pandemic and the human response to it, as one take-off point for our work.

And finally, here's a video of how we did Editor's Night, a regular feature of my writing classes via Zoom this past summer: <https://sps.columbia.edu/events/reporter-nights-science-journalism-time-covid-19>.

WHAT STUDENTS CAN EXPECT FROM THIS COURSE:

- Even if they don't intend to become professional writers, their writing will improve.
- Students will create professional-level journalism that can be published and added to a personal portfolio.
- Participants in the workshop will learn the techniques of journalism, useful skills even for non-journalists.
- Class members will be shown how to submit their work for publication.

The workshop is always fun. It's also interesting. Alumni tell me that they gain skills they can use for the rest of their professional careers.

IN PREPARATION FOR THE FIRST SESSION:

Please leave a biographic post on CourseWorks for your classmates. You can leave a video clip if you like. And photographs.

Out of the possible registrants, please choose an "affinity study partner," someone in your neighborhood you can bounce ideas off of, check in with and read your drafts to. Writing almost always looks better on paper when it has been read.

Science Writing Handbook, Please download here: <https://ksjhandbook.org/authors/>

SESSION ONE—Tuesday, January 17: Introduction.

The difference: How science journalism contrasts with academic writing, everyday business writing, or public relations, as well as 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 Katharine Hayhoe, Dennis Overbye, Brian Greene, and Elizabeth Kolbert have wide appeal? What are they actually doing?

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

Assignment: Write a 750-word opinion essay.

DUE DATE: Saturday, January 21

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

PERSONAL ESSAYS:

Abraham Verghese's "[Close Encounters of the Human Kind](#)"

["The Holocaust Stole My Youth. Covid-19 Is Stealing My Last Years."](#)

POLICY PROPOSALS:

[Alexandria Ocasio-Cortez Knows How to Fix Housing](#)

[Commentary: New York must do more to address growing diabetes crisis](#)

POLICY/REPORTING OP-EDS:

["Australia Is Committing Climate Suicide,"](#) Richard Flannigan, *New York Times*

["Want to Do Something About Climate Change? Follow the Money"](#), Bill McKibben and Lennox Yearwood, *New York Times*

The best way to learn this form or any form: read good examples of it and ask yourself, "how did he/she/they do it? Take it apart. Use only the best sources. With op-eds, that means in most instances, *The New York Times*, *The Washington Post*, *the Atlantic*, *Politico*.

For a look at how newspaper columnists from under-represented communities present their views, see "Thinking Black: Some of the Nation's Best Columnists Speak Their Mind," edited by DeWayne Wickham and "Black Voices in Commentary," edited by the Trotter Group. Both books are out of print, but can be obtained from the library, Amazon, or on loan from Professor Dreifus.

SESSION TWO—January 24: Story Structure. The Science-Based Op-Ed, Part One

First Hour: PowerPoint reading and analysis in class—Anya Schiffrin’s PP on story structure. A hard copy of it will be provided to you in your coursepack.

Second Hour: The Zen of Op-Eds. 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?

Assignment: Rewrite your op-ed based on tips offered in classroom discussion and the notes that were sent to you on your first drafts.

Due: Saturday, January 28

Note on procedure: 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 examples of longer op-eds that blend forms. These are opinion pieces and personal essays that include reportage. They are 1,500 words, which is double the usual requirement.

[Opinion: I almost died trying to get an abortion. I’m terrified my students could face a similar fate](#)

[“A Group of Mexican Immigrant Women Were Sterilized Without Their Consent. Can a New Film Bring Justice Where the Courts Failed?”](#) by Claudia Dreifus, *The Nation*.

SESSION THREE— January 31: Argument and Opinion Writing/Interviews and Profiles.

February is Black History Month. Please consider writing one of your assignments on some aspect of environmental justice.

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

Second hour: Making an Argument—what are the basics. Please read Trish Hall and Cornelia Dean’s books for background.

Assignment for next week:

Create a 1,500-2,000 word question-and-answer-style interview with a fascinating New Yorker whose work has a science or sustainability peg to it.

Due Date: Saturday, February 4

Your subject can be one of the many interesting speakers who visit Columbia and the Climate School, a professor, another student, a staffer at an NGO, an activist for environmental justice, a community leader, or perhaps an international civil servant at the United Nations. Students preferring a narrative form can do this interview as a profile.

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

Here are some sample Q&A's from Professor Dreifus at *The New York Times*, 1,200 words:

[Carl Safina Is Certain Your Dog Loves You](#)

[Toby Walsh, A.I. Expert, Is Racing to Stop the Killer Robots](#)

Here are some longform Q&As: 3,000 words plus, from the *New York Review of Books*.

['I Can't Just Stand on the Sidelines': An Interview with Naomi Oreskes](#)

['The Joy of the Discovery': An Interview with Jennifer Doudna](#)

[Public Thinker: Ainissa Ramirez on Putting the Story Back in Science](#)

SESSION FOUR—February 7: 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:

[E.O. Wilson Wants Us to Leave Half of the Earth Alone—Here's Why](#)

["Brenda Milner, Eminent Brain Scientist, Is 'Still Nosy' at 98,"](#) by Benedict Carey

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

And here's a non-science profile that is considered to be the best magazine profile ever written, "[Frank Sinatra has a Cold.](#)"

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

Assignment 1: Do interview/profile rewrite. Due Date: Saturday. February 11

Assignment 2: Before Tuesday's class, please view the Netflix movie, "Don't Look Up."

BONUS CLASS SESSION: Monday, Feb 13th. 2:00 PM Field Trip to the New York Times' Offices. (Optional, not required.) Members of the class are invited to tour the New York Times headquarters on Eighth Avenue and West 41st Street to visit the newly opened New York Times Museum.

David Dunlap, director of the museum, will personally lead the tour. Advance registration required.

SESSION FIVE—February 14: Argument/Science Communication, Letters to the Editor

First hour: Discussion of second draft experiences.

Second hour: Science Communication

What are the special problems of science communication? How does one make an effective argument that reaches people and changes opinion?

In "Don't Look Up," can you spot the science communication mistakes that Leonardo DiCaprio's and Jennifer Lawrence's characters make right away? How would you do it differently?

Assignment for next week: pick a sustainability or climate issue and meet with three of your classmates, either on campus or via Zoom, to debate them. We want pros and cons. Pick a side you might not agree with and argue it as strongly as you know how. We will have an in-class debate next week.

Assignment Two: Write a Letter to the Editor at either the New York Times, the Washington Post or the Wall Street Journal on a climate or sustainability question that you feel passionate about. Mail it off. In the Fall Semester, three members of the class had their letters to the editor published in the New York Times within one week.

SESSION SIX, FEBRUARY 21—FIELD TRIP, Professor Dreifus will be moderating a discussion at the Brooklyn Public Library with Professor Naomi Oreskes of Harvard University and Columbia’s Nobel Prize winning economist Joseph Stiglitz about Dr. Oreskes’ newly published book, “The Big Myth.” 7:00 PM, Brooklyn Public Library, Grand Army Plaza.

<https://www.bklynlibrary.org/calendar/naomi-oreskes-big-myth-central-library-dweek-20230221>

SESSION SEVEN February 28: Classroom debate.

First hour: debating.

Discussion: What works and what doesn’t in science communication.

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

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

Assignment for next week: Write a query letter/pitch targeted to the appropriate editor about your projected term project.

Due date: Saturday, March 4

By March 4, you should have your term projects set and ready to go. You should get a green light from either Prof. Dreifus or Ryan about your topic before you move forward.

Here’s an interview with the Oscar winner Alan Alda on how he became a science interviewer. <https://www.youtube.com/watch?v=moY5QxybbRk>

SESSION EIGHT—MARCH 7: Query Letters

First Hour: Query letters—what worked, what didn’t.

Second Hour: Catching up on old business.

Assignment: Do an outline of your long-form/term project.

Due: Saturday, March 11

March is Women’s History Month.

For the rest of the semester, we will be functioning, as many journalists do, on multiple tracks in each class. We will begin work on the culminating event of the semester—the long-form narrative non-fiction science-based story.

Assignment Part I: Begin work on a 2,000-word feature article on a global science/international sustainability issue.

Assignment Part II: Read interesting long-forms

What sort of research does a long-form piece require? To answer that question, please read [Roni Caryn Rabin's long-form news story](#) in *The New York Times*. Then go through it and, based on what you read, make a list of all the sources you believe she spoke to (or tried to) and why.

And here's another long-form from [Undark](#).

Take a look at the structure of [this long-form](#) from the New York Times. How much does it match Anya Schiffrin's PowerPoint?

And [this long-form by Gina Kolata](#) on the history of the COVID vaccine.

Here's an example of excellent climate communication from CBS Sunday Morning:

<https://www.cbsnews.com/video/climate-change-impacts-on-us-coastlines/>

March 14: SPRING BREAK: NO CLASS.

Please use this solid block of time away from class to begin work on your term project assignments. This is the perfect time to do field interviews, to visit sites that are important to your story (Covid permitting, of course).

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. The professor and TA will read your query letters over the holiday.

To prepare to write 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

More from Elizabeth Kolbert on [sequestration](#).

Here's the 2021 Editors' Night on video. Take a look:
<https://www.youtube.com/watch?v=aqpWGo5VJy4>

SESSION NINE—March 21: Editors Night.

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

SESSION NINE—March 28, Turning Academic Journal Papers into Compelling Journalistic Stories and Turning Tips and Hunches into Serious Investigative Pieces.

First hour: We will discuss how to translate an academic paper from a science journal into a narrative story. 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.

And we'll discuss what will be involved—as per Roni Rabin's story on an abusive pediatrician.

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

SESSION TEN—April 4: 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 storytelling.

[Here is an example](#) of a new-media way *The New York Times* dealt with a news issue. Do you think it is the most effective way to tell this particular story? Why or why not?

SESSION ELEVEN—April 11: Communicating Science on Internet Media

First hour: Discussion of blog posts/listicles.

Second hour: Updates on term projects and any challenges.

Assignment: First draft of final project due on **April 15**. 2,000 words on some aspect of global science. Target your story to the specific market where you hope to sell it.

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

Please stick to the word count. Part of the exercise involves learning to write for space requirements. More long-forms to consider:

["The Social Life of Forests,"](#) by Ferris Jahr, *New York Times Sunday Magazine*

["Catastrophe's Harvest,"](#) by Abraham Lustgarten. *New York Times Sunday Magazine*.

SESSION TWELVE—April 18: Putting It All Together

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

Review Anya Schiffrin's PowerPoint.

SESSION THIRTEEN—April 25: CELEBRATION.

It's time to celebrate all your hard work this semester. Professor Dreifus will welcome you for a Dutch Treat Supper to either her home in the Lincoln Center district or to her building's green roof, depending on pandemic conditions. Bring a dish from your home county or country for the communal table. After feasting, we'll be accessing the term and your experiences.

FINAL TERM PROJECT DUE--FIRM. Your final term project submission should be the equivalent of a story submission to a newspaper or magazine. That means it should be as finished and as perfect as possible. You should be completely satisfied with it. And, in theory, it should be publishable as is. You will not be receiving edits and critiques; instead, you'll receive your final grade.

ASSIGNED BOOKS: The books here 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 long after you have attained your degree.

A Tactical Guide to Science Journalism: Lessons from the Field, Deborah Blum, Ashley Smart, Tom Zeller, Jr.

The Craft of Science Writing: Selections from the Open Notebook, Siri Carpenter, Editor. Please order directly [from the publisher](#). This is a paperback.

Writing to Persuade by Trish Hall, Norton/Liveright.

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

Required Weekly Reading: Paper edition of the Tuesday New York *Times*, which contains Science Times. Copies can be purchased at newsstands near Columbia and Starbucks.

NOT REQUIRED, BUT HELPFUL RESOURCES:

Am I Making Myself Clear?: A Scientist's Guide to Talking to the Public by Cornelia Dean, Harvard University Press (Available in paperback.)

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

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

“Writer’s Market: 2022--The Most Trusted Guide to Getting Published, Writer’s Digest

POPULAR SCIENCE BOOKS:

The Best Science Writing of 2022

Why Trust Science, Naomi Oreskes

Merchants of Doubt, Naomi Oreskes

The Big Lie, Naomi Oreskes and Erik Conway.

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

The Alchemy of Us: How Humans and Matter Transformed One Another, Ainissa Ramirez

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.

RESOURCE LIST: A lot of what you'll need for the course and for your future as a science writer can be found here: <https://www.earth.columbia.edu/articles/view/2636>

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 EMAIL INQUIRIES: Though available in emergency situations, your instructor and teaching assistant wish to stress that this is not an e-course, even if we may be forced to meet this semester on-line. It is a lecture-based workshop. 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. Should you have an excused absence from the lecture, it is your obligation to confer with a colleague to obtain that session's notes.

We also urge you to make use of the tip sheets and hand-outs we will be distributing. At the end of the semester, you will have accumulated the equivalent of a textbook; it is something you can reference in the future.

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.

UNIVERSITY WIDE SCIENCE COMMUNICATION: Your professor encourages you to publish with some of Columbia's excellent media outlets--*State of the Planet*, *SIPA News*, *Consilience*, *The Columbia Spectator*, *Columbia News*, *The Public Policy Review*. You are also encouraged to participate in the Earth Institute's new initiative on science and sustainability communication. More information on that effort can be found [here](#).

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.

School Policies and Expectations:

Accessibility Statement – I want you to succeed in this course. Contact disability@columbia.edu for learning accommodations.

Names/Pronouns – You deserve to be addressed in a manner that reflects your identity. You are welcome to tell me your pronoun(s) and/or name (if different from University records) at any time, either in person or via email.

Discrimination – We embrace the diversity of gender, gender identity & expression, sex, sexual orientation, race, ethnicity, national origin, age, religion, disability status, family status, socioeconomic background, and other visible and non-visible identities. Columbia University does not tolerate unlawful discrimination, discriminatory harassment, sexual assault, domestic violence, dating violence, stalking, or sexual exploitation and all such conduct is forbidden by Columbia University Policy.

Duty to Report – You deserve a University community free from discrimination, harassment, and gender-based misconduct including sexual harassment, sexual assault, domestic and dating violence, stalking, and sexual exploitation. It is therefore University policy to require Columbia faculty and staff to report to EOAA any instance or allegation of prohibited conduct involving any undergraduate or any graduate student that is disclosed to, observed by, or otherwise known to that employee. This requirement to report is in place to help ensure that students are provided appropriate resources and to allow the University to mitigate harm to our community.

Confidential Resources - There are confidential resources on campus who do not have a Duty to Report, including:

- Sexual Violence Response & Rape Crisis/Anti-Violence Support Center (SVR)
- Ombuds Office
- Medical Services
- University Counseling and Psychological Services
- University Pastoral Counseling

- Columbia Office of Disability Services

University employees working in a confidential capacity will not report information shared with them.

Inclusion - In the M.S. in Sustainability Management program, faculty and staff are committed to the creation and maintenance of “inclusive learning” spaces – classrooms and other places of learning where you will be treated with respect and dignity, and where all individuals are provided equitable opportunities to participate, contribute, and succeed.

In our classroom, all students are welcome regardless of race, ethnicity, gender identity or expression, sexual orientation, socio-economic status, age, disabilities, religion, regional background, veteran status, citizenship status, nationality—we value the diverse identities and experiences that each of us bring to the collective learning experience.