

Storytelling for Scientists

11:374:310 Storytelling for Scientists, 3 Credits

When: Wednesdays, 9:15 am-12:15 pm

Where: Cook Office Building 226

CONTACT INFORMATION:

Noreen McAuliffe

Office Location: Cook Office Building 227

Phone: 571-242-9110 Email: noreen.mcauliffe@rutgers.edu

Office Hours: By appointment

COURSE WEBSITE, RESOURCES AND MATERIALS:

- Course website: Sakai: sakai.rutgers.edu
 - Required Text:
 - The Best American Science and Nature Writing, 2018*, Sam Kean, editor (ISBN: 9781328987808)
- Resources & Materials posted on Sakai:
- Selected essays and papers from peer-reviewed science journals
 - Selected science talks
 - Selected podcasts
- Student-discovered research sources for final project (minimum 8)
- Please always have a writing notebook and pen with you in class.

LEARNING GOALS:

Core Curriculum Goals

Writing in a Discipline (Wcd)

- Communicate effectively in modes appropriate to a discipline or area of inquiry
- Evaluate and critically assess sources and use the conventions of attribution and citation correctly
- Analyze and synthesize information and ideas from multiple sources to generate new insights

Writing with Revision (Wcr)

- Communicate complex ideas effectively, in standard written English, to a general audience
- Respond effectively to editorial feedback from peers, instructors, &/or supervisors through successive drafts and revision

Course Specific learning goals include:

- A) Read both academic and popular science prose with an understanding of structure and the ability to identify key ideas and questions.
- B) Communicate complex scientific ideas, in grammatically correct English, to both an academic and public audience with eloquence, precision, and creativity.
- C) Incorporate conceptual and editorial feedback from peers and instructor by engaging in the drafting and revision process.

D) Understand and practice the different rhetorical strategies unique to an academic discipline or the public sphere.

E) Discover and appraise sources through the research process and use the conventions of academic attribution and citation correctly.

F) Analyze and synthesize information from multiple sources to generate new ideas, and present those ideas with energy and creativity.

Science Communication Minor Learning Goals:

Demonstrate the ability to effectively communicate science issues to audiences who have limited backgrounds in science.

Understand how scientific information and evidence is perceived and used by different audiences in particular contexts, demonstrating how appropriate communication strategy integrates social science evidence about learning and framing.

Be able to argue claims in writing and through oral presentation based on causal links and multiple evidentiary sources.

Be able to promote the public understanding of science and scientists.

Demonstrate the ability to develop and use visuals, construct narrative in public presentations of science.

COURSE DESCRIPTION:

Understanding and addressing the most complex and urgent challenges of our time—climate change, biodiversity loss, genetic engineering—requires innovative thinkers who can critically assess and communicate scientific ideas. From conference papers to podcasts, the ability to translate scientific research to all audiences is an invaluable skill for science majors in every discipline, and the narrative techniques of nonfiction can help students present ideas with compelling energy, clarity, and creativity.

In this course, students will have the opportunity to develop their writing and communication for both the academic and public context, and hone their critical reading skills. The course will culminate in a student-driven final research project that will consist of both a paper and a presentation, which may take the form of a conference-style talk or a multimedia project, such as a short video or podcast.

Course topics will include: knowing your audience, reading like a writer, unpacking structure, staging uncertainty, delivering a pitch, research techniques, and working responsibly with sources. Students will develop techniques for conveying the story of their research work to peers, granting agencies, and the public.

Course prerequisite: All students must have completed Expository Writing 01:355:101 or its equivalent.

ASSIGNMENTS/RESPONSIBILITIES & GRADING:

- Short Essay on Assigned Readings (4-5 pages)
- Research Proposal (2-3 pages)
- Abstract

- Annotated Bibliography
- Final Presentation on Research Project
- Research Project (8-10 pages) that draws from both academic and popular sources
- Participation (includes submitting drafts, completing peer reviews, taking an active role in class discussion and activities, and completing miscellaneous assignments, including ***attending one science talk or seminar on campus this semester and submitting a one-page analysis of the speaker's storytelling methods**). **Links to the seminar schedules of SEBS majors will be posted on the Sakai site.**

Science Café Spring Schedule:

Tuesday, January 29: Lena Struwe

Title: Hidden in plain sight: Science collections and wild species on Cook Campus

IFNH 205, 9:30 am

Tuesday, February 19:

Jean Marie Hartman

Title: Water + land = watershed: Connecting ecosystems in the Raritan watershed

IFNH 101, 9:30 am

Tuesday, March 26:

Topic: Microbiome and health

IFNH 101, 9:30 am

Date to be Determined: Happy Hour Science Café

Mark Robson

Title: Tell me what you eat and I will tell you what you are

CSC, 4:30 pm

Grading:

Grading Scale	
93-100	A
89-92	B+
81-88	B
77-80	C+
70-76	C
69 and below	F

Components of the Final Grade	
Participation	10%

Short Essay	10%
Abstract and Annotated Bibliography	15%
Research Presentation	20%
Research Proposal	Pass/Non-Pass
Research Project	45%

- You risk losing a grade for each class that your assignment is late.
- You must earn a passing grade on your final project to pass the class.

ACCOMODATIONS FOR STUDENTS WITH DISABILITIES

Please follow the procedures outlined at <https://ods.rutgers.edu/students/registration-form>. Full policies and procedures are at <https://ods.rutgers.edu/>

COURSE POLICIES

-No cell phone use in class.

-Unless you are directed otherwise, all writing assignments you submit must be double-spaced, in 12-point font, and include your name and page numbers.

ABSENCE POLICY

-Students are expected to attend all classes; if you expect to miss one or two classes, please use the University absence reporting website <https://sims.rutgers.edu/ssra/> to indicate the date and reason for your absence. An email is automatically sent to me.

- Attendance at all classes is expected. **After two unexcused absences you risk failing the course.** If you will be missing class, please inform me ahead of time and contact a classmate to learn about any required assignments.
- Punctuality is important. Lateness of twenty minutes or more counts as half an absence. After missing thirty minutes of class, you will be marked absent.

ACADEMIC INTEGRITY

The university's policy on Academic Integrity is available at <http://academicintegrity.rutgers.edu/academic-integrity-policy>. The principles of academic integrity require that a student:

- properly acknowledge and cite all use of the ideas, results, or words of others.
- properly acknowledge all contributors to a given piece of work.
- make sure that all work submitted as his or her own in a course or other academic activity is produced without the aid of impermissible materials or impermissible collaboration.
- obtain all data or results by ethical means and report them accurately without suppressing any results inconsistent with his or her interpretation or conclusions.
- treat all other students in an ethical manner, respecting their integrity and right to pursue their educational goals without interference. This requires that a student neither facilitate academic dishonesty by others nor obstruct their academic progress.
- uphold the canons of the ethical or professional code of the profession for which he or she is preparing.

Adherence to these principles is necessary in order to ensure that

- everyone is given proper credit for his or her ideas, words, results, and other scholarly accomplishments.
- all student work is fairly evaluated and no student has an inappropriate advantage over others.
- the academic and ethical development of all students is fostered.
- the reputation of the University for integrity in its teaching, research, and scholarship is maintained and enhanced.

Failure to uphold these principles of academic integrity threatens both the reputation of the University and the value of the degrees awarded to its students. Every member of the University community therefore bears a responsibility for ensuring that the highest standards of academic integrity are upheld.

STUDENT WELLNESS SERVICES

Just In Case Web App <http://codu.co/cee05e>

Access helpful mental health information and resources for yourself or a friend in a mental health crisis on your smartphone or tablet and easily contact CAPS or RUPD.

Counseling, ADAP & Psychiatric Services (CAPS)

(848) 932-7884 / 17 Senior Street, New Brunswick, NJ 08901 / www.rhscaps.rutgers.edu/

CAPS is a University mental health support service that includes counseling, alcohol and other drug assistance, and psychiatric services staffed by a team of professional within Rutgers Health services to support students' efforts to succeed at Rutgers University. CAPS offers a variety of services that include: individual therapy, group therapy and workshops, crisis intervention, referral to specialists in the community and consultation and collaboration with campus partners.

Violence Prevention & Victim Assistance (VPVA)

(848) 932-1181 / 3 Bartlett Street, New Brunswick, NJ 08901 / www.vpva.rutgers.edu/

The Office for Violence Prevention and Victim Assistance provides confidential crisis intervention, counseling and advocacy for victims of sexual and relationship violence and stalking to students, staff and faculty. To reach staff during office hours when the university is open or to reach an advocate after hours, call 848-932-1181.

Disability Services

(848) 445-6800 / Lucy Stone Hall, Suite A145, Livingston Campus, 54 Joyce Kilmer Avenue, Piscataway, NJ 08854 / <https://ods.rutgers.edu/>

Rutgers University welcomes students with disabilities into all of the University's educational programs. In order to receive consideration for reasonable accommodations, a student with a disability must contact the appropriate disability services office at the campus where you are officially enrolled, participate in an intake interview, and provide documentation: <https://ods.rutgers.edu/students/documentation-guidelines>. If the documentation supports your request for reasonable accommodations, your campus's disability services office will provide you with a Letter of Accommodations. Please share this letter with your instructors and discuss the accommodations with them as early in your courses as possible. To begin this process, please complete the Registration form on the ODS web site at: <https://ods.rutgers.edu/students/registration-form>.

Scarlet Listeners

(732) 247-5555 / <https://rutgers.campuslabs.com/engage/organization/scarletlisteners>

Free and confidential peer counseling and referral hotline, providing a comforting and supportive safe space.

