# The Writing of Science (Graduate Writing Workshop) CSCI 4830/7000 Fall 2023

### Instructor:

Rebecca Morrison ECOT 820 rebeccam@colorado.edu

#### **Class details:**

Class meetings: Wednesday 11:15 - 12:05, ECCR 1B51, in person Office hours: By appointment

#### Materials:

Clear and Simple as the Truth: Writing Class Prose (required) Other various book chapters, articles, and blog posts will be provided on Canvas/Slack. Students are encouraged to find hard copies of texts.

## References

- [1] A. Alda. If I Understood You, Would I Have this Look on my Face?: My Adventures in the Art and Science of Relating and Communicating. Random House Trade Paperbacks, 2018.
- [2] W. Germano. On revision: The only writing that counts. University of Chicago Press, 2021.
- [3] B. Greene. Welcome to the multiverse. Newsweek, May, 21:2012, 2012.
- [4] A. Lamott. Shitty first drafts. Writing about writing: A college reader, pages 527–531, 1994.
- [5] R. Olson. Houston, We Have a Narrative. University of Chicago Press, 2021.
- [6] S. Pinker. Why academics stink at writing. The chronicle of higher education, 61(5), 2014.
- [7] V. Savage and P. Yeh. Novelist Cormac McCarthy's tips on how to write a great science paper. *Nature*, 574(7777):441–443, 2019.
- [8] H. Sword. Stylish academic writing. Harvard University Press, 2011.
- [9] F.-N. Thomas and M. Turner. Clear and Simple as the Truth: Writing Classic Prose. Princeton University Press, 2011.

## Course description

This is a course about writing, editing, revising, and presenting. Too often, in creating scientific papers, we scientists place all value on technical results, and very little on the writing itself. But this leads to scientific papers and proposals that are dry at best and boring, repetitive, and unintelligible at worst. At the same time, the payoffs for writing well are immensely consequential: they are the job positions, the grant money, and the time to do the research we really want to do, and on top

of all, the longstanding impact of our work. In this class, students will be encouraged to embrace the writing and editing processes as means not only to lively and impactful papers, but even better science. Over the course of the semester, students will participate in several writing, reading, and peer-editing exercises, short presentations, and class discussions. In particular, by the middle of the semester, students will have completed the NSF GRFP proposal, or something similar.

# **Course objectives**

In this course, students will learn to:

- Draft and revise a scientific proposal or paper
- Peer-edit (multiple times) these works
- Polish existing CVs
- Apply the And-But-Therefore (ABT) technique to write paper abstracts
- Increase the signal and decrease the noise in paper figures
- Perform short and memorable research talks
- Tailor different works for the audience at hand
- Read about good, clear, strong technical writing, and also read lots of such examples

# Course work and grading

Grades will be determined based on participation (50%) and completion (50%) of the various writing and editing exercises. Participation includes attendance, contributing to discussions, and of course participating in classroom exercises.