

Physics 496: Communicating in Physics—Writing Papers and Giving Talks Spring 2025

Semester at a Glance

Meets 2:00–4:50 p.m. Fridays, 158 Loomis Laboratory of Physics

Class attendance is mandatory unless excused; [Zoom link](#)

Writing Workshop is held weekly, unless otherwise noted; be sure to bring your laptop to class!

In-Class Activities require your presence and *active* participation

Homework Assignments are uploaded to the course portal on [my.physics](#) by the posted deadline¹

Schedule is subject to change; changes will be posted to [course website](#)

Questions about the schedule should be directed to [Celia Elliott](#)

January 24—first day of class

Course introduction (cme)

Communicating in science—“The Up Goer Five” (JLR)

The importance of a title (cme)

How to read a physics paper (BH)

No homework due today

January 31

Literature search group activity (JLR)

How to get started if you hate to write (cme)

How to write an abstract (cme)

Writing an abstract (BH)

HW #1—“Active Reading for Physics Papers”

February 7

Introduction to Writing Workshop—rationale and goals (JLR)

WW #1—“Finding the Right Word” (JLR)

How to evaluate a scientific talk or colloquium (BH)

Tips for giving a good talk (cme)

Assign “Explaining Physics Concepts” teams

HW #2—“Title and Abstract”

February 14

WW #2—“Using the Right Word” (JLR)

HW #3—“Best Practices for Oral Presentations” (short talk presented in class)

February 21

WW #3: “Four-Letter Words in Science Writing” (cme)

Collaborative writing (BH)

HW #4—Explaining Physics—Draft

Colloquium Report #1 Due

¹ Deadline dates and times are listed on each written homework assignment.

February 28

WW #4: “Ambiguous Pronouns” (JLR)

Guest speaker—Professor [Lance Cooper](#), “How to Pick a Graduate School” 2:00 p.m.

The scientific publication process and peer review (BH)

HW #5—“Explaining Physics”—FINAL VERSION

March 7

How to write instructions (JLR)

Writing Instructions—group activity (JLR)

Revising and editing your work (cme)

Technical Writing 101 (Review the handout prior to class!) (cme)

HW #6—“Peer Review”

March 14

WW #5: “*Them Thar* Indirect Openings” (JRL)

Tips for making better scientific talks (BH)

Reference rules and styles in scientific writing (JRL)

What to reference, why, and how—group activity (JRL)

HW #7—Short Science Talk—Draft

March 21—NO CLASS—SPRING BREAK

March 28

Effective figures and figure captions (cme)

Rules for writing numbers (Review the handout prior to class)

HW #8—Short Science Talk—In Class Presentation (Parallel Sessions in Room 158 & Room 236)

Last Day to Submit Re-writes for Colloquium Report #1

April 4

WW #6: “The Three-Preposition Rule (3PR)” (cme)

Making verbs work (cme)

A framework for ethical decisions (cme)

Hard problems—ethical case studies team activity

Read before class “[Ethics in Physics: The Need for Culture Change](#)”

HW #9 “Evaluating Figures and Captions”

April 11

WW #7: “Making Verbs Work” (JLR)

Scientific posters (JLR)

Guest Speaker—Professor [Taylor Hughes](#), “How to Survive Graduate School”

HW #10—Making Figures and Captions

Colloquium Report #2 Due

April 18

Guest Speakers—"Physics Careers in Industry"

WW #8: "Parallel Construction" (JLR)

Fermi problems (BH)

HW #11—"Scientific Poster"—DRAFT

April 25

WW #9: "Shooting for 'Shorth'" (JLR)

Intellectual property and copyright (cme)

Class activity: Eliminating fluff in scientific writing (Review the handout prior to class)

HW #12 "Scientific Poster"—FINAL

May 2—last day of class

WW Bonus (optional—complete on your own)—"Editing Practice"—submit by May 9 for credit

The Last Word on "Due To" (Ms Particular)

HW #13 "Live Poster Presentation" (presented in class)