

**Physics 496: Communicating in Physics—Writing
Papers and Giving Talks
Fall 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 [Jessica Raley](#).**

August 29—first day of class

Course introduction (TH)

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

The importance of a title (JLR)

How to read a physics paper (TH)

No homework due today

September 5

Literature search

group activity
(JLR)

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

How to write an abstract (TH)

Writing an abstract (TH)

HW #1—“Active Reading for Physics Papers”

September 12

Introduction to Writing Workshop—rationale and goals
(JLR)

WW #1—“Finding the Right Word” (JLR)

How to evaluate a scientific talk or colloquium (TH)

Tips for giving a good talk (JLR)

Assign “Explaining Physics Concepts” teams

HW #2—“Title and Abstract”

September 19

WW #2—"Using the Right Word" (JLR)

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

September 26

WW #3: "Four-Letter Words in Science Writing" (JLR)

Collaborative writing (TH)

HW #4—Explaining Physics—Draft

Colloquium Report #1 Due

October 3

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 (TH)

HW #5—"Explaining Physics"—FINAL VERSION

October 10

How to write

instructions (JLR)

Writing Instructions—group activity (JLR)

Revising and editing your work (TH)

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

HW #6—"Peer Review"

October 17

WW #5: "*Them Thar* Indirect Openings" (JLR)

Tips for making better scientific talks (TH)

Effective figures and figure captions (JLR)

HW #7—Short Science Talk—Draft

October 24

Scientific posters (TH)

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

HW #8—Short Science Talk—In Class Presentation (Parallel Sessions, rooms TBA)

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

October 31

WW #6: "The Three-Preposition Rule (3PR)" (JLR)

Making verbs work

(JLR)

A framework for ethical decisions (JLR)

Hard problems—ethical case studies team activity

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

HW #9 “Evaluating Figures and Captions”

November 7

WW #7: “Making Verbs Work” (JLR)

Reference rules and styles in scientific writing (JLR)

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

How to survive graduate school (TH)

HW #11—“Scientific Poster”—DRAFT

Colloquium Report #2 Due

November 14

Writing a statement of purpose (JLR)

WW #8: “Parallel Construction” (JLR)

Fermi problems (TH)

HW #10—Making Figures and Captions

November 21

WW #9: “Shooting for ‘Shorth’” (JLR)

Guest Speakers—“Physics Careers in Industry”

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

HW #12 “Scientific Poster”—FINAL (send to printer and submit assignment)

November 28—NO CLASS—THANKSGIVING BREAK

December 5—last day of class

WW Bonus (optional—complete on your own)—“Editing Practice”—submit by Dec 10 for extra credit

HW #13 “Live Poster Presentation” (presented in class)