

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 gradescope by the posted deadline ¹

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)

Revising and editing your work (TH)

HW #4—Explaining Physics—Draft

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)

Making verbs work (JLR)

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

HW #6—“Peer Review”

Colloquium Report #1 Due

October 17

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

Writing a statement of purpose (TH)

Effective figures and figure captions (TH)

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 in Room 158 & Room 236)

October 31

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

Fermi problems (TH)

HW #10—“Scientific Poster”—DRAFT

Colloquium Report #2 Due

November 14

Class activity: Eliminating fluff in scientific writing

WW #8: “Parallel Construction” (JLR)

Guest Speakers—“Toward a spectrum of GenAI use for writing”

Poster Workshop

HW #11—Making Figures and captions

November 21

WW #9: “Shooting for ‘Shorth’” (JLR)

Guest Speaker—Professor Taylor Hughes, “How to Survive Graduate School”

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

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

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)