

**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<sup>1</sup>

**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” (JLR)

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)**