

Ask early! Ask often!

**Physics 496: Communicating in Physics—Writing Papers and Giving Talks
Spring 2023**

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

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

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

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

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

January 20—first day of class

Course introduction and web tour (Class questions and discussion—read the syllabus and come prepared)

Technical communications for physicists (cme)

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

Effective titles (cme)

No homework due today

January 27

Introduction to Writing Workshop—rationale and goals (JLR)

WW #1—“Finding the Right Word” (JLR)

How to read a physics paper (cme)

Standards and values for physicists (group activity)

Ethics overview (cme)

HW #1—“Evaluating Titles”

February 3

WW #2—Literature search group activity (JLR)

How to evaluate a scientific talk or colloquium (cme)

How to write an abstract (cme)

Writing an abstract—collaborative activity + group presentations

HW #2—“Understanding a Paper”

February 10

WW #3—“Using the Right Word” (JLR)

How to get started if you hate to write, Part I (Outlines) (cme)

Guest speaker—Professor [Charles Gammie](#), Computational Astrophysics, 3:30 p.m.

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

HW #3—“Title and Abstract”

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

February 17

WW #4: “Four-Letter Words in Science Writing” (JLR)

How to get started if you hate to write, Part II (Paragraphs) (cme)

Guest speaker—Professor [Lance Cooper](#), “How to Pick a Graduate School” 3:00 p.m.

HW #4—“Explaining Physics” Draft

Colloquium Report #1 Due

February 24

Reference rules and styles in scientific writing (cme)

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

The scientific publication process and peer review (cme)

HW #5—“Explaining Physics Concepts” Final Version

March 3

Revising and editing your work (cme)

Guest speaker—Professor [Anne Sickles](#), Experimental Nuclear Physics, 3:00 p.m.

How to write instructions (JLR)

Writing Instructions—group activity (JLR)

Giving good science talks (cme)

HW #6—Peer Reviews

March 10

Rules for capitalization and acronyms (Review the handout prior to class)

Acknowledgments in papers, talks, and posters (cme)

First meeting of journal-club teams—group activity

HW #7—Best Practices for Technical Presentations

March 17—Spring Break—No Class

March 24

WW #5: “Ambiguous Pronouns” (JLR)

WW #6: “Them That Indirect Openings” (JLR)

Voice and tense—Making verbs work (cme)

Effective figure captions (cme)

Have team scribe submit your paper selection for your journal-club talk

HW #8—Short Science Talk Draft Slides

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

March 31

WW #7: “The Three-Preposition Rule (3PR)” (JLR)

WW #8—“Making Verbs Work” (JLR)

Class activity: Rules for expressing numbers (Review the handout prior to class)

HW #10 Evaluating Figures and Captions

Colloquium Report #2 Due

**Arrange for your JC team to meet
with Minhui Zhu by April 15!**

April 7

WW #9—“Parallel Construction”

How to present a journal-club talk (cme)

A framework for ethical decisions (cme)

Hard problems—ethical case studies team activity

HW #9—Short Science Talk (presented during class)



**NOTE: Homework #10 is now
due the week before HW #9.**

April 14

WW #10: “Shooting for ‘Shorth’” (JLR)

Writing a statement of purpose for grad school admissions (cme)

Guest speaker—Professor Taylor Hughes, “Surviving Graduate School”

HW #11—Making Your Own Figures and Captions

April 21

Scientific posters (JLR)

Intellectual property and copyright (cme)

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

Guest speaker—Professor Fahad Mahmood, Condensed Matter Experiment, 3:00 p.m.

HW #12 Resume and Statement of Purpose or Cover Letter

MONDAY, April 24—Email your nearly final journal club slides to phys496@physics.illinois.edu by **NOON!**

April 28—last day of class

WW Bonus (optional—complete on your own)—“Editing Practice”

The Last Word on “Due To” (Ms Particular)

HW #13 Journal Club Talk (presented during class)