

Ask early! Ask often!

**Physics 496: Communicating in Physics—Writing Papers and Giving Talks
Spring 2022**

Semester at a Glance

**Meets 2:00–4:50 p.m. Fridays, 136 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 21—first day of class—class will be held [online](#)

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 28

Introduction to Writing Workshop—rationale and goals (JLR)

WW #1—“Finding the Right Word” (JLR)

How to read a physics paper (TLH)

Standards and values for physicists (group activity)

Ethics overview (cme)

HW #1—“Evaluating Titles”

February 4

WW #2—Literature search group activity (JLR)

How to evaluate a scientific talk or colloquium (TLH)

How to write an abstract (cme)

Writing an abstract—collaborative activity + group presentations

HW #2—“Understanding a Paper”

February 11

WW #3—“Using the Right Word” (JLR)

Reference rules and styles in scientific writing (cme)

Guest speakers—Dr. Laura Biedermann and Dr. Shannon Murray, Sandia National Laboratories

Guest speaker—Professor Joaquin Vieira, Depts of Physics and Astronomy and NCSA

HW #3—“Title and Abstract”

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

February 18

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

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

How to write instructions (cme)

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

Writing Instructions

HW #4—“Proper Referencing”

Colloquium Report #1 Due

February 25

WW #5: “Ambiguous Pronouns” (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 #5—“Explaining Physics” Draft

March 4

Revising and editing your work (cme)

The scientific publication process (TLH)

Peer reviewing (TLH)

Guest speaker—Professor Sangjin Kim, Department of Physics

HW #6—“Explaining Physics Concepts” Final Version

March 11

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

Giving good science talks (TLH)

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

Effective figure captions (cme)

First meeting of journal-club teams

HW #7—Peer Reviews

March 18—Spring Break—No Class

March 25

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

Voice and tense—Making verbs work (cme)

How to present a journal-club talk (cme)

Fermi problems (TLH)

Making estimates in research (group activity)

Guest speaker—Professor Jacquelyn M. Noronha-Hostler

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

April 1

WW #8—“Making Verbs Work” (JLR)

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

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

Colloquium Report #2 Due

Arrange for your JC team to meet with Professor Hughes by April 15!

April 8

WW #9—“Parallel Construction”

A framework for ethical decisions (cme)

Hard problems—ethical case studies team activity

Acknowledgments in papers, talks, and posters (cme)

Guest speaker—Professor Jacob Covey

HW #10 Evaluating Figures and Captions

April 15

WW #10: “Shooting for ‘Shorth’” (JLR)

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

Surviving graduate school (TLH)

Guest speaker—Physics Undergraduate Alexander Romanov

HW #11—Making Your Own Figures and Captions

April 22

Scientific posters (TLH)

Intellectual property and copyright (cme)

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

HW #12 Resume and Statement of Purpose or Cover Letter

MONDAY, April 25—Email your nearly final journal club slides to phys496@physics.illinois.edu by **NOON!**

April 29—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)