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

August 26—first day of class
Course introduction and web tour (TLH) (Q&A—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

September 2
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”

September 9
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—“Deconstructing a Paper for Active Reading”

September 16
WW #3—“Using the Right Word” (JLR)
Reference rules and styles in scientific writing (cme)
Latin terms in scientific writing (cme)
Guest speaker—Professor S. Lance Cooper
HW #3—“Title and Abstract”

* Deadline dates and times are listed on each written homework assignment.
September 23
WW #4: “The Use of 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

September 30
WW #5: “Ambiguous Pronouns” (JLR)
How to get started if you hate to write, Part II (Paragraphs) (cme)
Guest Speaker—Elizabeth Goldschmidt, Dept of Physics
Initial Meeting of Journal Club Teams
HW #5—“Explaining Physics” Draft

October 7
Revising and editing your work (cme)
The scientific publication process (TLH)
Peer reviewing (TLH)
Guest speaker—Jeff Filippini, Dept of Physics
HW #6—“Explaining Physics Concepts” Final Version

October 14
WW #6: “Them Thar 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)
Guest speaker—Wolfgang Pfaff, Dept of Physics
HW #7—Peer Reviews

October 21
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)
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

October 28
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 Nov 11!

rev. 9/29/2022
November 4
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—Anne Sickles, Dept of Physics
HW #10 Evaluating Figures and Captions

November 11
WW #10: “Shooting for ‘Shorth’” (JLR)
Writing a statement of purpose for grad school admissions (cme)
Surviving graduate school (TLH)
HW #11—Making Your Own Figures and Captions

November 18
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, November 28—Email your nearly final journal club slides to phys496@physics.illinois.edu by NOON!

December 2
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)