Physics 496—Introduction to Physics Research—Fall 2017
Semester at a Glance
Meets 2:00–4:50 p.m. Fridays, 222 Loomis

Writing Workshop is usually held 2:00–2:45 p.m., unless otherwise noted; laptops required. In-Class Activities sometimes require the use of i>clickers, as noted.
Homework Assignments must be emailed to phys496@physics.illinois.edu by the deadline.*

September 1—first day of class
Introduction to Writing Workshop—rationale and goals
WW #1—“Finding the Right Word”
Course introduction and web tour (MGP) + clicker questions (bring your i>clicker!)
Evaluating a science talk or colloquium (MGP)
Icebreaker: Standards and values for physicists—group activity
Effective titles (cme)
No homework due today

September 8
WW #2—Literature search group activity
Technical Writing 101 (bring your i>clicker!)
How to read a physics paper (MGP)
How to get started if you hate to write, Part I—Outlining (cme)
HW #1—“Evaluating Titles”

September 15
WW #3—“Using the Right Word”
How to get started if you hate to write, Part II—Building coherent paragraphs (cme)
Voice and tense—Making verbs work (cme)
Guest speaker—Professor Lance Cooper, “How to Pick a Graduate School”
No homework due today—GRE Physics test tomorrow!
N.B. deadline for registering for October GRE is next week—September 22!

* Deadline dates and times are listed on each written homework assignment.
September 22
NO WW today—come to class promptly at 2:00 p.m.
How to write an abstract (cme)
Rules for capitalization and acronyms (bring your clicker!)
Colloquium Report #1
HW #2—Understanding a Paper
Submit the name of the professor you are going to interview for HW #5 and a list of your interview questions

September 29
WW #4: “Four-Letter Words in Science Writing”
Avoiding plagiarism (MGP and cme)
Clicker activity: Plagiarism case studies
Reference rules and styles in scientific writing (MGP)
Guest speaker—Professor Taylor Hughes, “Life as a Theorist”
HW #3—Abstract and Title

October 6
WW #5: “Ambiguous Pronouns”
How to build a logical scientific argument (MGP)
Revising and editing your work (cme)
Clicker activity: Rules for expressing numbers
HW #4—Proper Referencing
Last day to submit rewrites for Colloquium Report #1

October 13
WW #6: “Them Thar Indirect Openings”
Creating good figures (MGP)
Tips for figure captions (cme)
Peer reviewing (MGP)
HW #5—Writing for a General Audience
Colloquium Report #2

October 20
WW #7: Evaluating figures team activity and team presentations
Effective science talks (MGP)
Using PPT to outline a short science talk (cme)
First meeting of journal-club teams
HW #6—Peer Reviews
October 27 (GRE Physics is tomorrow)
WW #8—“The Three-Preposition Rule (3PR)”
PPT Tips for science talks (cme)
Template for a journal-club presentation (cme)
HW #7—Evaluating Figures and Captions
Last day to submit rewrites for Colloquium Report #2

November 3
WW #9—“Making Verbs Work”
HW #8—Short Science Talk (presented during class; slides emailed to instructors)
Have team scribe submit your paper selection for your journal-club talk

November 10
WW #10: “Writing Instructions” team activity and team presentations
Applications—CVs and statements of purpose (cme)
Clicker activity: Rules for mass, count, and collective nouns
Guest speaker—Professor Joaquin Vieira, Department of Astronomy
HW #9 Telling Your Story in Figures and Captions
Last day to submit rewrites for Colloquium Report #3
Make arrangements for your JC team to meet with Professor Grosse Perdekamp next week

November 17
WW #11—“Shooting for Shorth”
A framework for ethical decisions (cme)
Clicker activity: Ethical or not? You decide (use Vijay example from NAS book)
Hard problems—ethical case studies team activity
Team presentations of their cases and class discussion
HW #10 Resume and Statement of Purpose

November 24—No Class, Fall Break

Monday, November 27
Mail your draft journal club presentation to phys496@physics.illinois.edu by NOON!
Last day to submit rewrites for Colloquium Report #3

December 1
WW #12—“Putting it All Together—Ms. P-style Editing”
Scientific posters (MGP)
Clicker activity: Eliminating fluff in scientific writing
Guest speaker—Professor Jessie Shelton
HW #11 Journal Club Talk (presented during class)
Colloquium Report #4
December 8—last day of class
Intellectual property and copyright (cme)
No homework this week