Physics 496—Introduction to Physics Research
Spring 2017
Semester at a Glance
Meets 2:00–4:50 p.m. Fridays, 158 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.

January 20—first day of class
Introduction to Writing Workshop—rationale and goals
WW #1—“Finding the Right Word”
Course introduction and web tour
Icebreaker: Standards and values for physicists group activity
Technical communications in physics
Effective titles
No homework due today

January 27
WW #2—Literature search group activity
Evaluating a science talk or colloquium
How to read a physics paper
How to get started if you hate to write, Part I—Outlining
HW #1—“Evaluating Titles”

February 3
WW #3—“Using the Right Word”
How to get started if you hate to write, Part II—Building coherent paragraphs
Voice and tense—Making verbs work
Guest speaker—Professor Joaquin Vieira, Department of Astronomy
HW #2—Understanding a Paper

February 10
NO WW today—come to class promptly at 2:00 p.m.
How to write an abstract
Writing an abstract—collaborative activity + group presentations
Rules for capitalization and acronyms (bring your clicker!)
Colloquium Report #1
Submit the name of the professor you are going to interview for HW #5 and a list of your interview questions

Questions? Ask early—ask often!
phys496@illinois.edu
February 17
WW #4: “Four-Letter Words in Science Writing”
Avoiding plagiarism
Clicker activity: Plagiarism case studies
Reference rules and styles in scientific writing
Guest speaker
HW #3—Abstract and Title

February 24
WW #5: “Ambiguous Pronouns”
How to build a logical scientific argument
Revising and editing your work
Clicker activity: Rules for expressing numbers
HW #4—Proper Referencing
Colloquium Report #2
N.B. deadline for registering for April GRE is next week—March 3!
“Acing the Physics GRE,” an APS webinar

March 3
WW #6: “Them Thar Indirect Openings”
Creating good figures
Tips for figure captions
Peer reviewing
HW #5—Writing for a General Audience
Last day to submit rewrites for Colloquium Report #1

March 10
WW #7: Evaluating figures team activity and team presentations
Effective science talks
PPT Tips for science talks
Using PPT to outline a short science talk
First meeting of journal-club teams
HW #6—Peer Reviews
Colloquium Report #3

March 17
NO WW today—come to class promptly at 2:00 p.m.
HW #7—Short Science Talk (presented during class; slides emailed to instructors)

March 24—spring break—no class
Last day to submit rewrites for Colloquium Report #2

Questions? Ask early—ask often!
phys496@illinois.edu
March 31
WW #8: “Writing Instructions” team activity and team presentations
Applications—CVs and statements of purpose
Clicker activity: Rules for mass, count, and collective nouns
Guest speaker—Professor Verena Martinez Outschoorn, Department of Physics
HW #8 Telling Your Story in Figures and Captions
Submit your paper selection for your journal-club talk

April 7
NO WW today—come to class promptly at 2:00 p.m.
A framework for ethical decisions
Clicker activity: Ethical or not? You decide
Hard problems—ethical case studies team activity
Team presentations of their cases and class discussion
No homework due today—Physics GRE tomorrow
Make arrangements for your JC team to meet with Professor DeMarco next week
Last day to submit rewrites for Colloquium Report #3

April 14
WW #9—“The Three-Preposition Rule (3PR)”
Template for a journal-club presentation
Scientific posters
Clicker activity: Eliminating fluff in scientific writing
Guest speaker
HW #9 CV and Statement of Purpose
Colloquium Report #4

April 21
WW #10—“Shooting for Shorth”
HW #10 Journal Club Talks (presented during class and slides emailed to instructors)

April 28—last day of class
WW #11—“Putting it All Together—Ms. P-style Editing”
Intellectual property and copyright
Guest speaker
Class Wrap-Up
Last day to submit rewrites for Colloquium Report #4

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