


## Physics 499—Senior Thesis—Fall 2014

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**Homework assignments are to be emailed to the instructors by the due date and time noted on the instructions.**

Date	Writing Workshop (257 LLP) (Usually 2:00–2:45 p.m., unless noted otherwise)	In Class Activities (322 LLP) (Usually 2:50–4:50 p.m. unless noted otherwise)	Homework Due Today
Aug 29	“Four-letter Words (FLWs)”	Course Introduction and Expectations (SME) 2-min. student presentations on their projects Grad-School Timeline (cme) Outlining for Scientific Papers and Your Thesis (SME)	“What I did this Summer”
Sept 5	“Questionable Qualifiers”	Writing a “Project Outcomes” Report (cme) Writing a Statement of Purpose & Diversity Statement (cme) Evaluating project outcomes reports (team activity)	Preliminary outline of your thesis/tech report
Sept 12	“Introductory Commas”	Effective Posters (cme) Crafting a 2-min Poster “Talk” (SME) Evaluating papers for logical organization (team activity)	Statement of purpose AND Project outcomes report
Sept 19	<b>No WW—Go directly to 322 LLP at 2:00 p.m.</b>	Evaluating Figures—and Making Better Ones (SME) Review/evaluate poster drafts Writing & Asking For Letters of Recommendation (cme) <b>Physics Frontiers Talks—Basil Tripsas (CNA)</b>	Draft of poster
Sept 26	“Evaluating Figures”	What Graduate Admissions Committees Look For (SLC) Constructing a Logical Argument (SME) Evaluating figures (team presentations)	No homework assignment— Physics GRE tomorrow
Oct 3	<b>No WW—Go directly to 322 LLP at 2:00 p.m.</b>	Practice Poster Session	Scientific poster talks & nearly final poster
 Oct 6	<b>Printing Deadline—Final Version of Poster</b>	<b>Email to Celia by 8:00 a.m.—No Extensions, No Kidding!</b>	Final version of poster
Oct 10	“3PR”	The “Methods” Section (SME) Latin Terms in Scientific Writing (cme) <b>Physics Frontiers Talks—Peter Adshead (Astro); Varena Martinez Outshoorn (HEP experiment)</b>	No homework assignment— relax for your poster presentation on Monday
<b>MON</b> Oct 13	PHYS 499 Poster Session; 5:00 p.m. to ??, Loomis Laboratory of Physics	Come to the classroom hallway of Loomis by 4:30 to hang your poster—refreshments will be served	Poster presentation

Oct 17	“Shooting for Shorth”	Poster Debriefing & “Best Poster” Award (SME) Revising Technical Manuscripts (cme) The “Results” Section (SME) <b>Physics Frontiers Talk—Anne Sickles (Nuclear experiment)</b> <b>Bryce Gadway (AMO)</b>	Methods section
Oct 24	<b>No WW—Go directly to 322 LLP at 2:00 p.m.</b>	Ethics II: Class discussion of case studies (cme) Citing Sources (SME) <b>Physics Frontiers Talk—Dr. Dustin Wooten (Med physics)</b>	No homework assignment— Physics GRE tomorrow
Oct 31	“Revising”	The “Discussion” Section (SME) Caps & Acronyms (cme) <b>Physics Frontiers Talk—Greg MacDougall (Cond matt expt)</b>	Results section with figures
Nov 7	<b>No WW—Go directly to 322 LLP at 2:00 p.m.</b>	<b>Guest Speaker, Dr. Mark Zediker, FORO Energy</b> <b>Guest Speaker, Dr. Richard Ahrenkiel, NREL</b> The “Conclusions/Summary/Future Work” Section (SME)	Discussion section
Nov 14	“Parallel Construction”	The “Background/Introduction” and “References” Sections (SME) The “Acknowledgments” Section (cme) Abstract Review (cme) <b>Physics Frontiers Talk—Lucas Wagner (Computational)</b>	Conclusions/summary & future work sections
Nov 21	“Putting It All Together”	Presenting a 12-min APS-style Talk (SME) <b>Physics Frontiers Talk—Seppe Kuehn (Bio)</b> <b>Tom Faulkner (String theory intersection w/cond matt)</b>	Background/introduction, references, acknowledgments, abstract
<b>Nov 28</b>	<b>THANKSGIVING BREAK—NO CLASS</b>		
Dec 5	<b>No WW; go directly to 322 LLP at 2:00 p.m.</b>	Final Research Talks, 10-min APS-style	Final research talk
 Dec 12	<b>Senior Thesis Due—5:00 p.m.—No extensions will be granted—don’t even <i>think</i> about asking</b>		<b>Senior Thesis</b>

In addition to the homework assignments listed in the table, students are required to submit four “colloquium reviews” during the semester. Written instructions for each homework assignment are provided on the course website.

General course information and a grading rubric are also provided on the course website.