

## AST 199: Research Presentation in Astronomy Course Syllabus, Fall 2006

### DESCRIPTION

This class is designed to improve students research writing and presentation skills. Topics include organizing a research paper, elements of good writing style, making figures, using LaTeX and BibTeX, working with PowerPoint, and public speaking. Each student will write a paper describing their research and submit it to an undergraduate or professional scientific journal, as well as give a 20 minute presentation about their research. Because it strengthens research communication skills, this class will prepare students for graduate school and future scientific writing and speaking.

**PREREQUISITE:** At least one semester or one summer of research in astronomy or physics

**INSTRUCTOR:** Julie Comerford

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**Office:** 649 Campbell Hall

**Phone:** 642-5369

**Office hours:** Stop in, or by appointment

**CLASS:** Thursday 12:30-2:00, 501 Campbell Hall

**COURSE WEBSITE:** <http://astro.berkeley.edu/~julie/astro199/>

**GRADING:** Pass/Not Pass, based upon the paper, presentation, and class participation

WEEK	DATE	TOPIC	ASSIGNMENT
Week 1	August 31	Introduction, scientific journals	Research explanations
Week 2	September 7	PowerPoint tutorial, effective use of color	Terrible PPT slide
Week 3	September 14	Giving a talk: the art of public speaking, PowerPoint organization	Go to a talk
Week 4	September 21	Giving a talk: controlling nervousness Writing a paper: the title	Write title, read a paper
Week 5	September 28	Writing a paper: abstract, introduction, methods, results, discussion	Prepare 5 minute PPT
Week 6	October 5	Writing a paper: references, BibTeX	Read sample essays, create outline
Week 7	October 12	Writing the research experience essay for graduate school applications	
Week 8	October 19	Student talk, writing style	
Week 9	October 26	Student talk, common grammar mistakes	
Week 10	November 2	Student talk, using plots	
Week 11	November 9	Student talk, using tables	First draft due by email <b>Monday, November 13</b>
Week 12	November 16	Student talk, discuss first draft	
Week 13	November 23	Thanksgiving, no class	
Week 14	November 30	Student talk, how to edit your paper	
Week 15	December 7	Wrap-up, course evaluations	Final paper due