

SUNY Geneseo, Department of Physics and Astronomy

PHYS 341: Seminar in Physics

Syllabus, Spring 2009, Section 1

Prof. James McLean

Office: Bailey 126

Phone: 245-5897

Website: <http://www.geneseo.edu/~mclean/>

E-mail: mclean@geneseo.edu

Course Website: in myCourses.geneseo

Learning Outcomes:

This course is designed to train students in oral presentations. Presenting your work needs almost as much care and preparation as the work itself. Oral presentation skills can be fine-tuned with practice. We will also discuss best techniques when presenting to different audiences. At the end of this course, you should be more confident when speaking in front of your peers, you should have developed prioritization and time management skills for presentations, you should be more aware of the strengths and weaknesses of technological aids used in presentations (PowerPoint, video, etc.) and you should be more capable of critiquing and assisting your peers with these same skills.

Times and places:

Lectures: in Bailey 10C, Mon. 3:00–3:50pm

Office hours: Mon. & Tue. 1:00–2:30pm, Thu. 1:00–2:00pm

I am also available at other times. See my schedule on my web site. Stop by my office, or to ensure that I'll be there contact me by phone or email.

Required materials:

Access to a laptop

Required coursework (with fraction of final course grade):

15% First presentations: 10 minutes, about a Nobel prize

35% Second presentations: 12 minutes, about a journal article

50% Third presentations: 15 minutes, about your experiment

For each presentation cycle, your grade will be based on:

35% Instructors evaluation of your presentation

35% Your peers' evaluation of your presentation

10% Your self evaluation (both written, and in a post-interview)

20% Your critique of others' presentations

Your presentations will be graded on clarity and scientific content, appropriateness of visual aids, time management, ability to answer questions, and poise. Your critiques of others will be graded on helpfulness and professionalism. Extra credit for the critique score can be earned by asking quality questions immediately following the presentations.

Presentation Descriptions:

- (1) First presentations will be about a recent (1980-present) experiment that won a Nobel Prize in Physics. The focus is on the experiment, not the Nobel Prize winner themselves. (10 minutes plus 2 minutes for questions)
- (2) Second presentations will be about a journal article from *Scientific American*, *Physics Today*, or *The Physics Teacher*. This talk must focus on the information in the article

itself, rather than from another source on the same subject. (12 minutes plus 2 minutes for questions)

- (3) Third presentations will be about a successful experiment that you did, for example during Intermediate Lab or a summer REU. (15 minutes plus 3 minutes for questions)

All presentations should be targeted for an audience having the same knowledge as competent junior physics majors. The first and third presentations should include visual aids such as PowerPoint presentations — each student is responsible for providing their own technology and making it function. The second presentation may not use such visual aids, but may utilize the chalkboard.

Procedures:

During class, critique sheets will be available for all listeners to take notes for themselves. These sheets will not be collected. Except in special circumstances, laptops will not be allowed for this purpose.

After class, everyone will enter critiques of the presentations from that day via a survey on myCourses.geneseo. This includes the presenters, who will be submitting self-evaluations. These are due by midnight on the day of the presentation.

During the following week, presenters will meet one-on-one with the instructor to review the feedback. Videos will be taken of the presentations, and will be available for download by the presenters only immediately after class. Presenters are expected to have reviewed this video before the meeting.

Expected Schedule

Jan. 26	Orientation
Feb. 2	First presentations
9	First presentations
16	First presentations
23	Discussion: What makes a good talk?
Mar. 2	Second presentations
9	Second presentations
16	SPRING BREAK
23	Second presentations
30	Discussion: Things learned
Apr. 6	Third presentations
13	Third presentations
20	Third presentations
27	Third presentations
May 4	Third presentations

SUNY Geneseo will make reasonable accommodations for persons with documented physical, emotional or learning disabilities. Students should consult with the Office of Disability Services (Tabitha Buggie-Hunt, 105D Erwin, tbuggieh@geneseo.edu) and their individual faculty regarding any needed accommodations as early as possible in the semester. Further information available at <<http://disability.geneseo.edu/>>.