Contact Information

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Office Hour:	1 pm days 356 (or by appointment or just stop by)

Course Information

Lab:	1:00–5:00 Day 1, 1:00–5:00 Day 2
Room:	173/110/112/146/319 Peter Engel Science Center
Web Site:	http://www.physics.csbsju.edu/370/

Experiments

A lab assignment and three experiments will be completed by each lab group during the semester. All groups will be doing the Rocket and Magnetopause experiments, and either the coupled pendulum, speed of sound, or torsion pendulum experiment. The experiments will be graded based on your lab notebooks. As well as recording your data and doing the necessary calculations, be sure to answer all of the questions from the lab in your notebook. The final project for this course is a poster presentation about one of your labs.

Course Schedule

Roughly half of the time there will be a lecture at 1:00 pm introducing the concepts behind a lab and tools needed for a lab. For completing the experiments, you are free to work when you like as long turn the assignments in on time, though I recommend that you do at least some of your work during the scheduled lab periods. Note that points will be deducted for late assignments. Also, note the due dates for labs in the schedule below.

Lab Reports

Keeping a clear, complete lab notebook is an important scientific skill and much of your grade for this class will be based on your notebooks. You will not have to write any formal lab reports for this class, but your lab notebooks must be complete. Refer back to your Physics 191 and 200 lab manuals for a list of what must be included in your lab manual. Note in particular, that you must include a Procedure section which fleshes out what you actually did. Also, note that though your partners and you are expected to work on the lab together, each partner must hand in a lab notebook for each experiment. Finally, though you should discuss your answers to the lab questions with you partner, each partner should answer the questions in their own words.

Grading

The grade for this class will be based 20 % on the poster presentation and 80 % on the lab notebooks.

Schedule

Cycle		Date	Lecture	Due
1	w–R	8/25–26	Introduction / Unix Tutorial	—
2	R–F	9/02–03	Rocket Lab / Mathematica Tutorial	Unix Tutorial
3	M–T	9/13–14	Magnetopause Lab	Mathematica Tutorial
4	T–W	9/21–22	Torsion Pendulum & Speed of Sound labs	—
5	W–R	9/29–30	—	—
6	M–T	10/11–12	—	—
7	T–W	10/19–20	—	1st of 3 labs
8	W–R	10/27–28	—	—
9	R–F	11/04–05	—	2nd of 3 labs
10	F–M	11/12–15	Introduction to Posters	—
11	M–T	11/22–23	Poster Presentations	—
12	F–M	12/03–12/07	–	–
FW	M	12/13	–	3rd of 3 labs