Department of Physics
Physics 133/219 Class Syllabus — Spring 2009

Instructor: M. Brian Maple
1230 Mayer Hall Addition

Instructor Office Hours: By appointment

TAs:

Kevin Huang	MHA1214	khuang@physics.ucsd.edu
Eileen Gonzales	MHA1206	egonzalez@physics.ucsd.edu

TA Contact Number: 858.534.2487

TA Office Hours: By appointment.

Lab Hours: To Be Announced.

Weekly Meetings: Friday, Time TBA

Grading Policy: Grades will be determined from a final research paper, an oral presentation, lab notebooks, weekly progress reports, and overall performance in the lab.

Final Research Paper: A final paper detailing the experimental work performed during the quarter will be turned in at the end of the quarter. This paper must be written in the format of a professional research letter.

Oral Presentation: At the end of the quarter, each research group will give an oral presentation on research performed during the quarter. Presentations should be approximately 20 minutes.

Lab Notebooks: Each student should keep a neat and well-maintained lab notebook. Notebooks should be bound and preferably be ruled or quad-ruled. Loose-leaf paper or 3-ring binders will not be accepted. Computer-generated graphs or other computer printouts should be cut and glued or stapled into your lab notebook. All writing in notebooks should be done in pen; work in pencil will not be accepted. Lab notebooks should be readable, but remember the purpose of a notebook is to thoroughly document your research and experiments; therefore sketches, drawings, and mistakes are acceptable and expected. If proper documentation requires that you scratch something out of the notebook that is incorrect, then do so by striking out the word(s) with one horizontal line. Even words that are stricken out should still be legible. Notebooks will be collected every other week.

Weekly Progress Reports: In lieu of a midterm/written progress report, informal verbal progress reports will occur weekly with the whole class present. Although informal, students should be prepared to present their progress from the last week; TAs should not have to elicit the information. This will allow for the progress report as well as the discussion of any hindrances you and your group may be experiencing. This discussion of problems should result in expedited solutions and simulate a real research environment.

Overall Lab Performance: Lab performance will consist of time spent in the lab (expect to spend 10-12 hours a week) and your proficiency at both research and group work.

Calendar

Week #	Dates	Objectives/Material Due Dates
1	3/30 – 4/3	Introduction Project examples Divide into groups Begin formulating group projects ***Informational Meeting Tu. 3/31 4:00 p.m Warren Lecture Hall 2133***
2	4/6 – 4/10	Continue formulating projects Research projects (growth techniques, measurements, theories) Begin sample synthesis. Weekly Meeting Last day to add class: 4/11
3	4/13 – 4/17	Sample synthesis X-ray samples Weekly Meeting Notebooks due
4	4/20 – 4/24	Sample Synthesis X-ray samples Weekly Meeting Last day to drop a class w/o a W and change grade option: 4/24
5	4/27 – 5/1	X-ray samples Measurements/Analysis Weekly Meeting
6	5/4 – 5/8	Measurements/Analysis Weekly Meeting
7	5/11 – 5/15	Measurements/Analysis Weekly Meeting Notebooks due
8	5/18 – 5/22	Measurements/Analysis Rough Draft Weekly Meeting
9	5/25 – 5/29	Measurement/Analysis Notebooks due Rough Draft of paper due Last day to drop a class w/o an F: 5/29
10	6/1 – 6/5	Final Draft Presentations/Final Draft of paper due 6/6 (Saturday)

Note: Exact date and time of weekly meetings and due dates to be determined.