

CLASS INFORMATION

The course will consist of 27 lectures (MWF 11 am - 12:10 pm in Thimann 3), weekly problem sets, two Midterms, and a Final Exam. The Physics 5N lab is listed separately, but it is integral to the course and required.

Basics:

Lectures are designed to be a supplement to the reading, not a substitute. It is expected that you will have read the appropriate textbook chapter before each lecture (but don't skip lecture just because you have not had a chance to read the text). The lecture and exam schedule is listed below. A more detailed syllabus will be available on the course website.

Problem sets: These will be handed out each week on Wednesday, collected one week later (generally on a Wednesday), and returned the week after that. They are not optional, and comprise a significant component of your grade for the quarter. Late problem sets *will not be accepted* unless arrangement is made prior to their due date, but the lowest problem set grade will be dropped in evaluating your course grade. Students are welcome to collaborate on problem sets, but the solutions you hand in *must be your own work*. Your problem set will be graded not only on your answers but also on the *clarity* of your solutions.

Discussion sections are voluntary, but strongly encouraged. Their times will be listed on the course website <http://physics.ucsc.edu/~joel/ph5c.htm>, along with a schedule of TA office hours.

Laboratory sections: Physics 5N is a separately listed course but an essential part of 5C. Work for laboratory sessions is completed during the three hour session. Laboratory notebooks do not leave the laboratory. Be sure to study the experiment in advance of the lab session. **Missed lab policy:** if you cannot make a lab, try to go to an alternative lab, by first informing the TA for that lab, then coming (the TA may tell you that the session is full, in which case find another). If you have some emergency and cannot go to any lab during a week, and inform your regular lab TA before the end of the week *and supply* documentary evidence that you cannot make the lab, the lab grade will be dropped from your final score (but this can only happen once during the quarter; the second time the absence becomes unexcused). If you miss one lab altogether without any valid excuse, you will receive the lowest passing grade for that lab. If you *miss more than one lab* in this manner, you will not pass 5N.

IF YOU ARE NOT YET REGISTERED FOR 5C: If you have all prerequisites, you can get a permission code from the Physics Department office. For special situations consult me. *IF YOU ARE NOT YET REGISTERED FOR 5N:* Please check with the Physics Department office to let them know that you are not yet enrolled. Then, get *admitted* to a lab by going to that lab and getting a permission code from the lab TA.

Grading: Your grade will consist of 5% class participation (clickers), 20% weekly homework, 20% first midterm exam, 20% second midterm exam, and 35% final exam. The Midterm Exams are scheduled on April 23 and May 19, and the Final Exam will be on June 12, 12 3 pm.

Text: The required textbook is Giancoli, *Physics for Scientists and Engineers*, Fourth Edition, Volume II. If you don't have it from Phys 5B, but if not it is available at Bay Tree bookstore, as is the *Laboratory Manual*.

Instructor: Prof. Joel Primack joel@physics.ucsc.edu , 459-2580, ISB 318

Instructor Office Hours: Wed 2-3 and Thurs 2-3 (most weeks), or by appointment

Course website: <http://physics.ucsc.edu/~joel/ph5c.htm>

Lab Instructor and Undergraduate Lab Manager: Prof. George Brown

TA Information: TA office/discussion hours will be available on the course website

Head TA: Mike Griffo

Course Support & Lab TA: Heath Holguin

Lab TAs: Hal Cambier, Jonathan Kozaczuk, Derek Larson

Lab Section times (starting the week of April 7) and TAs:

5N-01 Tues 8:30AM - 11:30AM Jon Kozaczuk

5N-02 Tues 7:00PM - 10:00PM Hal Cambier

5N-03 Wed 3:30PM - 6:30PM Derek Larson

5N-04 Wed 7:00PM - 10:00PM Jon Kozaczuk

5N-05 Thurs 8:30AM - 11:30AM Hal Cambier

5N-06 Thurs 7:00PM - 10:00PM Heath Holguin

LECTURE AND EXAM SCHEDULE

3/31 - 4/4: (3 classes) Ch. 21: Electric Charge and Electric Field

4/7: (1 class) Ch. 22: Gauss's Law

4/9 - 4/11: (2 classes) Ch. 23: Electric Potential

4/14 - 4/16: (2 classes) Ch. 24: Capacitance, Dielectrics, Electric Energy Storage

4/18 - 4/21: (2 classes) Ch. 25: Electric Currents and Resistance

4/23: MIDTERM 1

4/25 - 4/28: (2 classes) Ch. 26: DC Circuits

4/30 - 5/2: (2 classes) Ch. 27: Magnetism

5/5 - 5/9: (3 classes) Ch. 28: Sources of Magnetic Field

5/12 - 5/14: (2 classes) Ch 29: Electromagnetic Induction and Faraday's law

5/16: (1 class) Ch. 30 (beginning): Inductance

5/19: MIDTERM 2

5/21 - 5/23: (2 classes) Ch. 30 (remainder): Electromagnetic Oscillations and AC Circuits

5/26: (no class: Memorial Day)

5/28 - 6/4: (4 classes) Ch. 32: Maxwell's Equations & Electromagnetic Waves

6/6: (1 class) Review

6/12: (Thursday) FINAL EXAM (Thimann 3, 12 noon – 3 pm)