

PHYSICS 117B, GENERAL PHYSICS — SUMMER 2006

Dr. René López

Department of Physics and Astronomy

<http://sitemason.vanderbilt.edu/site/fj5h2o/class>

Course format and philosophy. This course is a calculus-based introduction to general physics and its applications. The topics in the second semester include electricity, magnetism, optics, and quantum physics. The course has as a co-requisite introductory calculus. Given the summer schedule of lectures, you should expect to work 2 to 3 hours daily outside of the class studying the reading assignments and working problems. Lectures will provide illustrative, but not exhaustive, coverage of the reading assignments. (Plain text: Study the book carefully!)

Course objectives. This course is designed to survey electricity, magnetism, optics and quantum physics at an introductory level. At the end, you should finish with a basic and clear understanding of these physical phenomena.

Textbook. The text for Physics 117B is Principles of Physics 4th edition by Serway and Jewett. It is expected that you will have read the relevant sections before class!

Class Schedule. Our lecture meets MTWRF, 10:10 a.m.-12:00 p.m., in SC 4327. The mid-term examinations will be given on specific days according to the schedule.

Contact Information. My office is in SC 6416 Stevenson; my office phone is 322-4908 and my e-mail address is rene.lopez@vanderbilt.edu.

Office hours. I will hold regular office hours on MTWR 4:10-6:00 p.m. You are also welcome to walk-in if I happen to be in my office during the evening. The easiest way to arrange a meeting at times other than office hours is through e-mail.

Homework. Several problems will be assigned for each lecture via Webassign system. A reasonable time will be given to complete them, but you must keep up with them working constantly. You are encouraged to consult with other students if you find the homework difficult.

Course requirements and grading. There will be two written examinations during the class (see the course schedule), and a final examination covering the last third of the course. Each of these segments will count a total of 25% toward your final grade. Grades on assigned homework will count 25% toward the final grade. Class participation and preparation will be used as a “tie-breaker” if the letter grade is “on the edge” after all written work is graded. All examinations will be carried out in strict accordance with the Vanderbilt Honor Code.