Physics 214 – Syllabus
Spring 2009

General Information

Professor: Dr. Josh Gladden
email: jgladden@olemiss.edu; Phone: 915-7428
Office: Lewis Hall 211 and NCPA 1062
Office Hours (also by appointment at the NCPA):
Tues. (11:00 – 12:00) in Lewis Hall
Thurs. (1:00 – 2:00) at the NCPA
Website: www.phy.olemiss.edu/~jgladden/phys214/ (check regularly!)
Lecture: T Th 9:30 – 10:45 AM (Section 2) in Lewis 101
Required Text: Giancoli, *Physics*, 6th Edition (Pearson 2005)
Required Homework Package: Mastering Physics (see below)
Required Equipment: Scientific calculator and RF Clicker

Course Description

This is the second course of a two-course sequence on general physics, mainly for pre-med majors. (The companion course, offered in the Fall, is PHYS 213.) Students who enroll must also take, or have previously passed, the PHYS 224 lab course.

We cover roughly the second half of the textbook. The main themes are: thermodynamics, electricity and magnetism, circuits, optics (light), and modern (or 20th century) topics such as relativity, quantum mechanics, and atomic and nuclear physics if time allows.

Significant goals of this course are for students to improve their analytical reasoning and problem solving skills. Part of this consists of "applying equations" and "getting the right result", but students will be evaluated on a broader set of skills, including the way they analyze a problem and place it in context, and the way they write about it and about general concepts.

Evaluation

Weights
Homework .. 10%
Test 1 ..... 20%
Test 2 ..... 20%
Test 3 ..... 20%
PHET 5%
Final Exam .. 25%

Homework: Homework will be assigned for each chapter we cover; announcements will be made in class and posted on the course website. Most homework will be done through the on-line companion to the course known as "Mastering Physics" offered through the publisher (www.masteringphysics.com). Details on how to access the system are posted on my website. The lowest homework grade will be dropped. (See note under **Group Work** below.)

Tests: There will be three midterm tests and a final exam, consisting of problems to be worked out, and multiple choice questions to test concepts. Students will be allowed to use a calculator, but no books or notes during the tests.

Letter Grades

Typical letter grade break points are as follows:

A: 85% - 100%
B: 75% - 84%
C: 65% - 74%
D: 55% - 64%
F: < 55%
(subject to change)

PhET: Students who complete a session with the on-line physics computer tutoring system, as explained in the class announcements page later in the semester, will get full credit (100%) for 5% of the total grade of the course.

Final Exam: A cumulative final exam will be given on Thurs. May 7 at 8:00 in Lewis 101. Details on the topics stressed and exam policies will be given later in the semester.

Course Policies

Absences

There is no attendance policy for the course, but keep in mind that you will be responsible for knowing what is said in class, and absences from tests count as zeros, unless they are justified. If you must be absent during a test for a University sponsored event, you MUST discuss this me before the test date. In the case of an unexpected emergency, you must make contact with me as soon as possible and have documentation.

Academic Integrity (Cheating)

Academic integrity is essential to all the values upon which the University is founded. Students must therefore embody academic honesty in all aspects of their work. A student with a documented case of plagiarism or academic cheating in a course will receive the grade of F for the course and may face disciplinary action by the University, including expulsion. You should know that I take this SERIOUSLY.

Group Work

Physics is very rarely done alone. I encourage you to form study groups in preparation for homework assignments and tests. HOWEVER, the homework assignments should be the work of the individual student. If you can not do the homework, you will not do well on the tests!

Changes

Any changes will be brought to your attention and posted on the web site.