Physics 214 – Syllabus Spring 2007

General Information

Professor: Dr. Josh Gladden

email: jgladden@olemiss.edu; Phone: 915-7428

Office: Observatory#1 and NCPA 1062

Office Hours: Mon. 10-11:30 & Tues. 1:00 – 2:30 in Observatory (or appt.) Website: www.phy.olemiss.edu/~jgladden/phys214/ (check regularly!)

Lecture: MW F 9:00 – 9:50 PM in Lewis 109

Text: J. Touger, *Introductory Physics*, 1st Ed. (Wiley 2006)

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.

Course Description

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

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%
Physlet 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 (Wiley PLUS at www.wileyplus.com), however there will also be questions which require written answers. These questions will be turned in during class on the due date. Homework must be easy to read; pages must be stapled together, and have smooth (not torn) edges. The grade will reflect content, presentation, and English. The lowest grade will be dropped. (See note under **Group Work** below.)

Tests: There will be three midterm tests consisting of essay style questions, problems to be worked out. 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)

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

Final Exam: A cumulative final exam will be given on Mon. May 7 from 8 – 11 AM. Details on the topics stressed and exampolicies will be given later in the semester.

Attendance Policy (Honors College)

Honors courses are small classes, usually taught in seminar style with no more than fifteen students. They are reading, writing and discussion intensive. Student participation is therefore essential. In addition, the university commits extensive resources, especially in terms of faculty time, to these small classes. For these reasons, the Honors College has an attendance policy for all honors courses, both required and departmental. Students are entitled to three absences in Monday/Wednesday/Friday classes. Consequences of additional absences will be determined by the individual faculty member, but additional absences will lower your grade.

Course Policies

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, as well as expulsion from the Honors College.

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.