Physics 211 Section 1
Syllabus Fall 2010

General Information

Professor: Dr. Josh Gladden
email: jgladden@olemiss.edu; Phone: 915-7428
Offices: NCPA 1062 & Lewis Hall 211
Office Hours: Mon (3:00 – 4:30) & Fri. (12:30 – 1:45)
in Lewis 211 or by appointment at NCPA
Website: www.phy.olemiss.edu/~jgladden/phys211/ (check regularly!)
Lecture: MWF 2:00 – 2:50 in Lewis 101
Required Text: *Physics for Scientists and Engineers 8th ed.,*
Serway & Jewett (electronic version is OK!)
Web Based HW (required): WebAssign (see instructions)

Course Description

This is the first course of a two-course sequence on general calculus based physics, mainly for science and engineering majors. (The companion course is PHYS 212.) Students who enroll must also take, or have previously passed, the PHYS 221 lab course.

We cover roughly Volume 1 (Chap. 1 - 22) of the textbook. The main themes are: motion, forces and energy for objects in one and two dimensions; analogous topics for larger objects that can rotate; gravity; properties of solids and fluids; oscillatory and wave motion; and thermodynamics.

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, as well they write about it. We will be using calculus (differentiation and integration) throughout the course with a heavier use of integrals in the second semester.

Evaluation

Weights
Homework ... 10%
Test 1 .....15%
Test 2 .....15%
Test 3 ..... 15%
Test 4 ..... 15%
Extra Credit.... 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 "WebAssign" offered through the publisher (www.webassign.com). Details on how to access the system will be posted on my website by the end of the first week. The lowest homework grade will be dropped.
(See note under **Group Work** below.)

Tests: There will be four midterm tests and a final exam, consisting of essay style questions, problems to be worked out, and multiple choice questions. 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: 88% - 100%
B: 75% - 87%
C: 65% - 74%
D: 55% - 64%
F: < 55%
(subject to change)

Extra Credit (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 Friday, Dec. 10 from Noon - 3 PM. Details on the topics stressed and exam policies will be given later in the semester.

Course Policies

Absences

Students are expected to attend each lecture unless you have justification. If you must miss a lecture, make contact with me as soon as possible. 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 this 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!

Clickers

You are NOT required to have a clicker for this course. However, if you already have a clicker for another course, please let me know. If enough people have them, I will use them. The clickers should be the University standard clicker (PRS-RF), available in the bookstore.

Changes

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