Physics 211 – Physics for Science and Engineering I

Section 1 (Fall 2008), 101 Lewis Hall, Tuesday Thursday, 11:00 – 12:15PM
Prof. Mihai Bondarescu
Email: mihai@phy.olemiss.edu

NOTE: PHYS 221 (Lab Physics for Science & Engineering I) is a co-requisite for PHYS 211. If you are not enrolled in PHYS 221, you must register for it or you will be dropped from PHYS 211. If you have already successfully completed PHYS 221, let me know.

Office Hours:

Tuesday 12:15-1:00 PM, 126 Lewis Hall
Thursday 12:15-1:00 PM, 126 Lewis Hall

My main office is Room 5, Kennon
If you need to see me outside of office hours, please make an appointment. I am glad to work with you by email (although I can't ensure a timely response to email queries).

Textbook:

Fundamentals of Physics, 8th Ed., Halliday, Resnick, and Walker
We will cover selected material from Chapters 1-16, and 18.
Thinking Physics, Lewis Carroll Epstein

Grading:

The grades are based on the following:

30 %	Final Exam
18 % each	2 Midterm Exams
20 % total	Quizzes
12 % total	Homework Assignments
2 %	Class Participation
	Students will be called on in class. You should be ready answer questions.

The homework assignments will have a Web based section and a written part. The web based part will be completed through the WileyPLUS web site at the following URL:
http://edugen.wiley.com/edugen/class/cls94097

Go to this web site and register. You are required to do this as the majority of our homework assignments will be web-based. When you purchased your textbook, you should have also gotten information on logging into the WileyPLUS system. (Wiley is the publisher of the textbook) Homework assignments will be posted on the Blackboard site in the afternoon on Tuesdays and Thursdays, and on the Wiley web site for the course. *Check both BLACKBOARD and WileyPLUS for assignments by 11pm day of class*.

Homework is due one week from the day it is assigned. The deadline for homework is the end of class for hand written problems and noon (12 PM) for web-based problems.

Note that **the total Quiz score is about the same as a midterm exam**. I want to reward those students who work hard over the course of the semester and stay on top of the material. Think of the QUIZZES like a midterm exam given in week-by-week installments.

Grading Scale:

A: 100 – 80, B: 80 – 70, C: 70 – 60, D: 60 – 50.0 F<50.0

Rules:

Attendance is expected.
Be prepared to show your student ID or Driver's License on Exam days.
You may use the Student's Solutions Manual, HOWEVER *use of the Instructor's Solutions Manual is considered cheating. Students who use it will be subject to formal academic discipline charges.*

Learning Objectives:

After completing this course, the student should understand the physical principles of classical mechanics (such as forces, energy, and momentum) and have developed the necessary skills to solve problems by applying these principles. They should also have a grasp of the law of universal gravitation, and the essential role of oscillations and wave motion in physics.

Goals:

The central goal is for you to learn how to think about and apply physical concepts. This class will primarily focus on the laws of mechanics (how and why things move, and how to predict those movements). The main challenge you will face is in developing problem solving skills. Physics problems often involve several steps and usually they require more than just a simple application of formulas in the book. ***The problems may seem very difficult early on. It may take some time for you develop your skills and doing the homework is an essential part of the process.*** I am available to help you. I want you to do well. Come to my office hours, and/or use the Physics Tutoring Room. I am also willing to work with you over the phone. E-mail is another option (although I can't guarantee that you will always receive a timely response to e-mail inquiries).

Physics is inherently mathematical. A strong grasp of algebra and trigonometry are essential. You will also be expected to make use of differential calculus. Read ahead of the lectures. Get enough sleep, relax and get ready to stretch your brain.

We will try to hold study sessions for the two midterm exams. These will be held in Lewis Hall (usually 101 or 109) and we'll agree on a time/date that is best for the majority of the students.

Physics is a challenging subject. You will be exposed to problems you can't solve and, in some cases, you are not expected to. The grades will be rescaled appropriately to compensate for this.

You are free to choose any problems from any source and turn them in for additional credit.