Physics 211 – Physics for Science and Engineering I

Section 3, 109 Lewis Hall, MWF 11:00 – 11:50 AM (some Friday classes will be in 101)

Prof. Joel Mobley

Email: jmobley@olemiss.edu

Phone: 915-6937

Office Hours

Tuesday 1:00-2:30, Lewis 203 (up the main stairs, turn right, last door on left)

By appointment on Wed/Thurs/Fri after 2:30 at my office in Room 1034, NCPA (National Center for Physical Acoustics), or before 10:00 in 203 Lewis.

> To find NCPA, search for Jamie L. Whitten National Center for Physical Acoustics on the campus map (map.olemiss.edu)

I am glad to work with you over the phone or by email (although I can't ensure a timely response to email queries sent after hours).

Textbook

Physics for Scientists and Engineers, 9th Ed., Serway and Jewett

Grades

The grades are based on the following:

25 %	Final Exam	
20 % each	2 Midterm Exams	
20 % total	Quizzes (10)	These are given each Friday except on exam weeks and the first and last weeks of class.
15 % total	Homework Assignments	

The lowest two homework and quiz scores are not counted.

(See the last page for extra credit opportunities)

Grading Scale

A: 100.0 – 92.0	**B+**: 87.4 – 82.5	**C+**: 74.9 – 70.0	**D**: 62.4 – 50.0
A-: 91.9 – 87.5	**B**: 82.4 – 78.5	**C**: 69.9 – 66.0	
	B-: 78.4 – 75.0	**C-**: 65.9 – 62.5	**F:** <50.0

Note that the total Quiz score is the same as a midterm exam. I expect each student to stay on top of the material throughout the course of the semester. **Think of the QUIZZES like a midterm exam given in small installments.** There may also be pop quizzes on occasion.

Homework

The homework assignments will have a Web based section and a written part. The online section will be completed through the Web Assign web site at the following URL:

http://www.webassign.net/

Class code: **olemiss 4390 9672**

Go to this web site and register. You are required to do this as the majority of our homework assignments will be web-based.

The deadline for homework is the beginning of class.

> **Take the HW seriously – you can't learn Physics without working and understanding problems.**

Rules

Attendance is expected. Only three absences are allowed without penalty. Upon the fourth absence, the student will no longer be allowed to drop their lowest two quiz grades. Each additional absence will result in the loss of points on their overall grade. The Honors College policy on absences is below.

> *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 two absences in Tuesday/Thursday classes and 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.*

The Honor Code

The Sally McDonnell Barksdale Honors College employs an Honor Code centered on honesty, sincerity, and justice. The purpose of this Honor Code is to strengthen the sense of community in which the Honors College takes great pride. Its strength depends on the personal honor and integrity of each Honors College member. Honors students are required to write the statement below on any assignment submitted for grading in Honors classes, thereby reinforcing the atmosphere of trust within the Honors College community.

"*On my honor, I pledge that I have neither given, received, nor witnessed any unauthorized help on this* _____."
Signed _____

In addition, the Honors College instituted the following policy in 1999, which is in effect in all honors classes:

> *Academic integrity is essential to all the values upon which the university is founded. Honors students must therefore embody academic honesty in all aspects of their work. A student with a documented case of plagiarism or academic cheating in an honors course will face the possibility of receiving the grade of F for the course and being dismissed from the Honors College. Specific consequences of such behavior will be determined by the administration and individual faculty member.*

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.

Extra Credit Opportunities (2)

1. I use powerpoint slides throughout my lectures and these are made available after the class. The previous year's slides are available on Blackboard. Still I strongly encourage you to take notes. I will give extra credit periodically to students who can show me their well-kept, organized handwritten notes. (For those taking notes digitally, we will figure out how to accommodate you).
2. Much of the HW is online. I encourage you to keep a bound notebook with handwritten solutions as a companion. Extra credit will be given for a well-kept, complete solutions notebook.

Schedule, subject to change

Week 1	Aug 26-30	Ch 1, 2, 3
Week 2	Sept 4-6	Ch 3, 4
Week 3	Sept 9-13	Ch 4, 5
Week 4	Sept 16-20	Ch 5, 6
Week 5	**Sept 23-27**	Ch 6, 7 **Exam 1, Fri. the 27th**
Week 6	Sept 30 – Oct 4	Ch 7, 8, 9
Week 7	Oct 7-11	Ch 9, 10, 11
Week 8	Oct 14-18	Ch 11, 13
Week 9	Oct 21-25	Ch 14, 15
Week 10	Oct 28 – Nov 1	Ch 15, 16
Week 11	**Nov 4-8**	Ch 16, 18 **Exam 2, Fri. the 8th**
Week 12	Nov 11-15	Ch 19, 20
Week 13	Nov 18-22	Ch 20, 21
Fall Break	***Nov 25-29***	
Week 14	Dec 2-6	Ch 21, 22

Final exam is Monday, December 9th at 12:00 pm

Exam 1 includes material covered up through Sept. 23rd
Exam 2 includes material covered from Sept. 25th through Nov. 4th
Final is comprehensive