

Physics 211 Section 1

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Class Time: 2:00 - 2:50 P.M. Mon., Wed., Fri.

Office Hours: 10:00 - 10:50 A.M. Mon., Wed., Fri.

Location of my office: Lewis 206

Textbook: *Physics for Scientist and Engineers 9th Edition* Serway and Jewett

Content of the course:

We will cover material from the textbook as follows:

- Chapter 2: Kinematics in 1-D
- Chapter 3: Vectors
- Chapter 4: Motion in 2-D
- Chapter 5: Newton's Laws of Motion
- Chapter 6: Newton's Laws cont. Circular Motion
- Chapter 7: Work & Energy
- Chapter 8: Potential Energy & Conservation of Energy
- Chapter 9: Momentum & Collisions
- Chapter 10: Rigid Rotation
- Chapter 11: Angular Momentum
- Chapter 12: Equilibrium and Elasticity
- Chapter 13: Gravitation
- Chapter 14: Fluid Mechanics
- Chapter 15: Oscillatory Motion
- Chapter 16: Waves
- Chapter 17: Sound
- Chapter 18: Superposition and Standing Waves

Learning Objectives

After completing this course, the student should understand the role of forces and inertia in the solving of problems in mechanics. The student will know how apply these concepts through the analytical tools of calculus, vector algebra, and trigonometry to solve physical problems. These skills will be acquired through the lecture, reading of the assigned textbook, and through working the assigned homework problems. The course should enhance the student's capacity for analytical reasoning and problem solving.

Course Credit and Grading Scale

Nearly all of the course credit will be based on the student's demonstrated ability to solve physical problems in the realm of mechanics through the quizzes, tests and homework. A fraction of the credit will be assigned through conceptual quizzes.

Breakdown of credit for the course:

15% Homework & Quizzes
60% 3 or 4 Tests
25% Final Exam

The +/- grading scale is used, a description is found at:

<http://www.olemiss.edu/info/grading.html>

An overall course average of the following percentages will guarantee the corresponding letter grade:

90%	A-
80%	B-
70%	C
60%	D

Test Policies:

REQUIRED CALCULATOR FOR TESTS: TI-30XIIS

Do Not ask to the final exam at a separate time from the class, except in case you have two other final exams on the same day. **Your final exam will be Monday December 8th at Noon. You must make your travel plans accordingly.**

Do Not ask to take any test at a separate time from the class. If any emergency arises on the day of a test, make sure you have documentation to support your request for a retake (e.g. a letter from the attending physician, newspaper obituary naming you as surviving relative.) In general **I will not drop any test scores. Don't miss a test!**

You **must** also register for **Physics 221** unless you have specific permission to do otherwise, or have previously taken Physics 221.

Homework

There will be both written and online problem sets. **Late homework won't be accepted, but you will have five dropped homework assignments in the course of the term.** These are intended to cover all cases of lost or forgotten homework, brief absences, etc. If you joined the class late or in the case of extended absences (more than a week) we can make some adjustment. **Problem sets must be turned in at the beginning of class on the day they are due.** Please don't slide homework under my office door. Don't turn in homework with ragged edges (spiral paper). Don't use legal size paper or red ink. Please **staple the pages together** and don't fold them. Please **include the problem set number with your homework.**

WebAssign will be accessed through BlackBoard, so you will automatically be enrolled for WebAssign, but will have to pay for the service within a two week period.

Entering information into WebAssign is not difficult, but it may take a little practice. A tutorial assignment is available and it may be worth your time.

Here is a list of policies:

- I have set the system to not be too picky about significant figures, but make reasonable entries (don't type in the 10 digits on your calculator when only 3 are justified).
- You have multiple attempts at each problem. Usually 50.
- The actual numbers in the problems are randomized for each student to prevent students from simply copying solutions (not that you ever would...), but should remain the same for you throughout each assignment. If you run into problems, try to help yourself first using the available help options. If you are still having trouble, see me.

The WebAssign system is very picky about your answers. Read the problem carefully because the small details matter. If there is a problem that asks you to give an equation, you must use exactly the same symbols that are given in the problem. Don't substitute lower case for upper case. Don't substitute zero for O. The system is very rarely wrong about an answer. You will have trouble if you try to access the system from another computer or browser if you did not log out of the previous WebAssign session. Firefox may work better than Safari if you are on a Mac.