Introductory Physics I – Physics 090

Syllabus Fall 2006

Instructor: Professor Ivan Biaggio

Office: 415 Lewis Lab.
Office Hours are after class on Tuesday and Thursday morning.
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Textbook

"*Physics for Scientists and Engineers, Volume 1,"* P. A. Tipler and G. Mosca, Fifth Edition, W. H. Freeman and Company, 2004.

General Course Requirements

(i) Read all assigned materials; (ii) Attend all lectures and recitations; (iii) Work on all assigned homework problems and hand them in in time; (iv) Take all exams; (v) See the instructor if you are having any trouble! (See the accompanying schedule for readings, homeworks, and exams.)

Homeworks:

You should hand in your homework according to the accompanying schedule. Most homework assignments are due on Mondays and Wednesdays. Hand them in at the beginning of class.

Homework grading is on a scale from 0 to 3 for every problem: 0 if you don't do anything, 2 if you do a good effort to solve it (no matter if you get the right solution or not), and 3 if everything is perfect.

These assignments will be graded primarily on effort rather than numerical accuracy since they represent an important and essential component of the learning process. Therefore, it is in your best interest to really work on these problems rather than copy someone else's solutions. it is the same as athletics: you must train yourself to improve and achieve the desired performance).

Quizzes:

Quizzes are simple, 5-minute questions that you will answer in writing in class, from time to time. Quizzes will be graded from 0 (if you are not there or do not write anything) to 4 (if everything is perfect). Only the top 70% will contribute to the final grades.

The quizzes will be different form the homework problems in the sense that they will be mostly qualitative questions focusing on understanding, not requiring any long calculations.

Hour Exams and Final Examination:

Two hour exams will be given during the "4 o'clock quiz" periods. Attendance to these exams is required.

Grading

Hour Exams, Homeworks, Quizzes, and Performace in class will give the final grade as follows:

Exams:	55%
Homeworks:	15%
Quizzes:	15%
Class performance/attendance	15%

The two Hour Exams (*HE*1 and *HE*2) will be averaged together with the Final Exam to determine the total "Exams Grade" only if including them improves the final grade. In such a case the total grade for exams would be calculated according to the following formula:

$$\text{Total Exams Grade} = \frac{HE1 + HE2 + 2FE}{4}$$

But if the Final Exam grade is much better than the Hour Exam grade then the total grade for exams will be determined solely by the Final Exam grade. Note that this policy helps you in case you had a bad day on one of the Hour Exams, but it does not mean that it is not worth studying for the Hour Exams and doing well: doing so guarantees that you have a good "insurance policy" for the final exam and helps you a lot in general towards understanding how physics works.

Parallelism with Physics 11

This class runs in parallel and has the same topic as *Physics 11*, taught by Prof. Gary G. DeLeo. To facilitate exchange of information and self-help between students of the same semester, we have coordinated the two classes in such a way that we will be able to assign the same homeworks and that we will teach the same material more or less at the same time. Your advantage compared to the Physics 11 class is that we are only 21 people in the room and that you will have the same instructor both for the lecture and for the recitation sessions. You will thus be able to ask many more questions during lectures (and we can let some material slide between lectures and recitations).

Assignment Sheets

The reading and problem assignments are designed to guide you in your study of the subject matter. Some assigned materials will not be covered in lecture or recitation; however, you are expected to learn this material through your own reading and home work. The assignment pages provide the dates for Hour Exams, and the due dates for reading and homework-problem assignments (designated as "HW"). The homework problems are selected from those of Tipler's book and indicated by their corresponding number and chapter.

Suggestion for Additional Reading

R. P. Feynman, R. B. Leighton, M. Sands, *The Feynam Lectures on Physics*, Volumne I.

Accommodations for Students with Disabilities: If you have a disability for which you are or may be requesting accommodations, please contact both your instructor and the Office of Academic Support Services, University Center 212 (610-758-4152) as early as possible in the semester. You must have documentation from the Academic Support Services office before accommodations can be granted.