

# PHYSICS 103: Introductory Physics I, Fall 2011

## Staff:

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Office Hours: 9-5 Monday through Friday

## Materials:

1. The two textbooks being used are two units from *Six Ideas That Shaped Physics 2<sup>nd</sup> ed.*, by Thomas A. Moore: Unit C and Unit N (McGraw-Hill, 2003).
2. A "scientific" calculator, with trigonometric, logarithmic, and exponential functions, will be needed for problem assignments, in the laboratory, and for examinations. Please label the calculator with your name. You will not be able to use your cell phone (or any networked device) as a calculator during quizzes and exams. Plan accordingly.
3. A laboratory notebook (available at the bookstore).
4. Graph paper will be necessary for some of the problem assignments.
5. As a rule, everything will be posted on Blackboard. If you have limited access to a computer please let us know and I'll make arrangements to provide you with hard copies.

## Readings:

Unlike most physics classes, in 103 your *primary* source of information will be the text. You will need to read *in advance* of class meetings. Class meetings will be spent answering your questions, so if you haven't read, classes will be really dull (and useless). The schedule of readings is posted on Blackboard. It may be updated through the course of the semester, so you should check the on-line version regularly.

## Problem sets:

*Learn physics by doing physics!* Problems are an indispensable part of the course. Assignments will be given roughly 3 times/week and are due *before* the start of each class. Problems should be done on 8.5" x 11" paper. Ragged-edged pages torn from spiral notebooks are not acceptable. Assignments should include your name and the due date in the upper right hand corner.

Completed problem sets should be deposited in the homework "mailbox" *before* class begins. Under no circumstances will late assignments placed in the homework box receive credit. As a rule, late assignments will receive no credit. Exceptions may be made under unusual circumstances, but you will need to consult your instructor about this..

Students are encouraged to work together on understanding the physics of the problems assigned, and to discuss them with one another. The work turned in, however, must be each student's own.

Homework will be evaluated by a student grader or by the instructor. Please explain your problem solving procedure in words; equations alone are not sufficient. How you do a problem is more important than obtaining the correct numerical answer. If you are confused about some aspect of the problem, identify that aspect. If you make any assumptions, state them. Hand in as much as you can accomplish on each problem. Again, the thought process is more important than the final answer, so even unfinished problems are worth handing in.

Graded problems will be returned to the homework slots.

### **Tutoring sessions:**

Help sessions, led by upper-level physics students, will be held Sunday and Tuesday nights on days before homework is due, from 7:00-9:00 pm in Searles Room 313.

### **Laboratory:**

This course includes weekly laboratory work. You will need to purchase lab packets from Dominica Lord-Wood before the first lab. Cost is \$5, cash. Labs will begin the week of September 5 in Room 323 Searles Science, under the direction of Mr. Miers, Mr. Dennison and Ms. Weaver. Students are expected to do *all* laboratory work, and to do it on the regular assigned day unless arrangements are made with the lab instructor *in advance*.

### **Math skills workshops:**

We recognize that for some of you, it may have been a long time since you last saw some of the math that we'll be using in this class. Therefore, if the need arises, we may schedule optional math workshops throughout the semester.

### **Examinations:**

A **midterm** examination covering material up through unit N3 will be held on Wednesday , October 26th at 7 pm. Attendance at this evening exam is required to pass the course.

A **final** examination covering both Unit C and Unit N will be held during the scheduled exam period. **Section A must take the exam at 2 pm on Thursday, December 15th. Section B must take the exam at 9:00am on Friday, December 16<sup>th</sup>.** All exceptions to this schedule must be approved by the Dean's office. Poorly planned travel arrangements are not sufficient reason to grant exceptions.

There will be two scheduled in-class **quizzes** given on Wednesday, September 28<sup>th</sup> and Friday, November 18th. Unannounced quizzes may also occur.

### **Grading Policy:**

The relative weights of course components in the determination of the final grade are:

Problem sets:	15%
Laboratory*:	20%
Quizzes:	20%
Midterm exam:	20%
Final exam:	25%.

\* Note well: **All labs must be completed.** One incomplete lab will result in a full letter-grade penalty for the entire course (e.g. A- becomes B-). Two incomplete labs will result in failure for the semester.