

Welcome to Physics I Honors. We will explore Physics in ways that let you develop your own intuition about nature. I believe that we'll all have a lot of fun.

INSTRUCTOR: Jim Napolitano SC 1W07 x8019 email: napolj@rpi.edu
Office Hours: Monday 2-4pm *or by appointment*

GRAD TA: Brian Premerlani HBH Lab email: premerschmidt@gmail.com
Office Hours: Tuesday 1-3pm

UG TA'S: Cory Crean email: creanc@rpi.edu
Kevin Pedro email: pedrok@rpi.edu

WEB PAGE: <http://www.rpi.edu/dept/phys/Courses/PHYS1150/>

MEETINGS: Mon & Thu Sage 5510 10:00-10:50 *and* 11:00-11:50
Sec. 1: Wed SC 2C30 10:00-11:50
Sec. 2: Wed SC 2C30 2:00-3:50

TEXTBOOK: *An Introduction to Mechanics* (Required)
Daniel Kleppner and Robert J. Kolenkow
Quick Calculus: A Self-Teaching Guide (Suggested)
Daniel Kleppner and Norman Ramsey

GRADING POLICY: Grades will be determined as follows:

Homework assignments	20%
Laboratory notebook	20%
Three mid term exams	3×10%
Final exam (<i>not</i> optional)	30%

where the cutoffs for *A*, *B*, *C*, and *D* are 90, 80, 70, and 60 respectively. I may use “grade modifiers” (i.e. + or -) when entering final course grades, if that seems appropriate.

Most homework assignments are taken from the textbook, as indicated on the lecture schedule. Homework is due on the date indicated, at the start of class at 10am. Late homework cannot be accepted without prior approval from the instructor.

You are to keep a laboratory notebook for recording data, analysis, and conclusions of your experiments. We encourage you to bring the notebook to the instructor or TA's periodically for comments, and you are to hand in your notebook part way through the course for a preliminary grade. A final grade is assigned at the conclusion of the course.

Mid term and final exam grades will be scaled up (if necessary) so that the class average is approximately 75. I believe the curve makes it unfair to borderline students if the final is optional, so everyone must take the exam.

I may make adjustments to the overall grading scheme if there are special circumstances.

COURSE FORMAT

The course is taught in two parts, namely lecture/discussions and laboratories. The syllabus for each of these is available at the course web page. The lecture/discussion syllabus includes the topics we will cover, the reading assignment for that class, and the homework which is *due that day*. Homework is due generally on Thursday, except for weeks in which there is a midterm, when a shorter assignment is due on Monday.

The laboratory syllabus includes information on that day's laboratory exercise (with which you should be familiar *before* coming to class) as well as potentially useful links. Some laboratory periods are reserved for review time prior to exams. The due dates for preliminary and final lab books are indicated.

I expect to stick to the course schedule as originally posted, but if for some reason I make some changes, I will change the posting and notify everyone through the email list.

All class periods are 110 minutes long. On lecture/discussion days, we will cover material in the indicated sections of the textbook, or sometimes my own notes. The time will be split up into "lecture", then an exercise, then another "lecture" and exercise. I strongly encourage you to ask questions during class!

Lab classes are run differently. Take all of your data and begin a data analysis, during the laboratory class. We'll encounter the inevitable problems dealing with laboratory equipment, so we may need to do some rescheduling on the fly. *Do not expect* to be "all done" with the laboratory exercise when you leave class. Your lab book should reflect the work you've done on that exercise outside of the classroom. As always, ask questions.

The mid term and final exams are open book. You are welcome to bring your textbook, notes, calculators, or other materials. You may also bring your laptop computers, but I will design the exams so that they will be of little or no use to you. The point is that you don't need to memorize anything, but know your book and study for the exams!

We will be using calculus right off the bat. If you're nervous, don't be. We'll always go over the key points together. I recommend *Quick Calculus* if you want to come up to speed. The Schaum's Outline on Calculus is also very useful.

ACADEMIC INTEGRITY STATEMENT

I want you all to collaborate with each other on homework as much as possible, and to come for help during office hours, help sessions, or at any mutually convenient time. However, it is very important for me to trust that you are handing in your own work. (Just the same, it is important that you trust me to organize and teach a quality course for you.) If you want to look over the *Rensselaer Handbook of Student Rights and Responsibilities* regarding Academic (Dis)Honesty, that might be a good idea. However, to put it simply,...

Don't copy someone else's homework, and don't cheat on exams. If I suspect you of either, I will ask for an explanation. If your explanation is unsatisfactory, you will be given a grade of zero and reported to the Dean of Students. If this happens more than once, you will be given an *F* for the course.