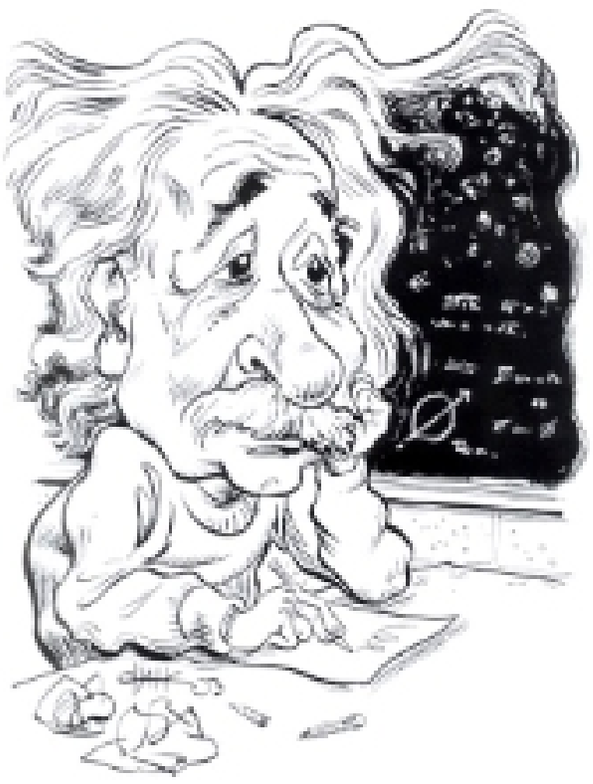
Physics 113
General Physics I: Mechanics
Summer Term 2007

"If one studies too zealously, one easily loses his pants." – Albert Einstein

CRN: 16014
B&L 269
Monday – Thursday, 9:30-11:45
May 21 – June 29



Instructor Contact Info
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Office hours: Tues. and Thurs.12:30 – 2:00
Also by appointment

Course Website
www.pas.rochester.edu/~julie/PHY113_07/home

Textbook
Giancoli, *Physics for Scientists & Engineers, Volume 1, 3rd Edition* (2000)
(Note: If you plan on taking 114 as well and want to get the double volume Giancoli, be sure to get the one that includes modern physics. It should have 45 chapters.)

Attendance

Your final grade does not depend (at least not directly) on your attendance. However, since we are packing a full 15-week course into an intensive 6-week session, if you miss a day's lecture you will have a lot of catching up to do. My presentation of the material will deviate from the textbook significantly on some topics, and I will often present information that you cannot find in your textbook, so missing lecture means you miss potentially helpful stuff.

Please make it a point to show up to class on time. Consistent lateness is distracting and disrespectful to me and your fellow students.

Lecture

I'll spend most of each class day lecturing, but there will be some times when I'll ask you to participate or take periodic pop quizzes. This is partly to keep your neurons firing and your eyes open, and partly because physics is learned best with a combination of passive learning (like listening to lecture or reading the text) and active learning (like asking questions, talking to peers about the concepts, or actual writing). Another reason is that your participation and the quizzes will let me see where the class as a whole is, which will help me keep everyone on the same page and up to speed. The quizzes will not ask you to work through problems (that's the job of the

homeworks), but will check to see how well you have been paying attention and understanding the recent concepts. I'll treat them as extra credit.

The material we'll cover each day will build on everything covered before, so I suggest that you revisit each lecture sometime after class of the same day to help cement what you learned (and while you're doing that, you might as well begin the applicable homework problems). This sounds like a lot to ask, but it will keep you on top of the material instead of behind it, and when you see new material you'll have a better foundation for it. This will also lead to easier studying when it comes time for exams.

Workshops (not "recitations," but they are called that on the registrar's course schedule)

Workshops are simply one more way for you to increase your understanding and familiarity with the material. They are basically just problem sessions in which you work with your peers to solve the problems (I'll be there to help out, too). The benefit of this group work is that you get to see different approaches to solving a problem, and, by experience, you can learn to exercise controlled creativity in your physics work. The problems themselves are separate from the homework and exam problems, but will cover the same material. The workshop is an optional part of the course and will be held in B&L 208 on Mondays, from 12:00 to 2:00.

Since many of you will be taking the MCAT eventually, the workshops will incorporate many MCAT-like problems, but they will contain conceptual questions as well, in order to give you a deeper understanding of the material.

Homework

There will be eleven assignments throughout the course, each graded for completion and method. (I will explicitly grade only a few problems from each set, but you will not know which ones ahead of time.) I will drop one of these grades when calculating your final grade (to your benefit). Homeworks will be due at the beginning of class, and I'll post solutions on the website after class. It is your responsibility to go over them to make sure you understand the material covered (especially for those problems I do not grade). If you do this consistently throughout the course, you will find studying for exams much easier. Since solutions will be available immediately after class, there will be NO extensions. We do not have time to fall behind.

I highly encourage group work. It is very beneficial to hear how your peers approach problems differently than you do; however, make each of your assignments your OWN work. Academic dishonesty, the attempt to pass of the work of another as your own, will not only hurt you when the exams come around, but it will unpleasantly introduce you to the Dean. I have every intention of following the rules of the College regarding academic dishonesty. Please see the College's policy on Academic Honesty (http://www.rochester.edu/College/honesty/) for more information.

Exams

There will be three exams, the final being cumulative. I will provide you with an equation sheet for each exam, and I'll make sure you see it in advance.

Exam I (covering weeks 1 and 2): Thursday, June 7
Exam II (covering weeks 3 and 4): Thursday, June 21
Final Exam (covering weeks 1-6 but stressing 5 and 6): Thursday, June 28

My exams are intended to test your understanding of the material, *not* to test your ability to pick an equation that has the right symbols in it and plug and chug the numbers. The exam

problems, much like the homework, will focus on conceptual understanding as well as problem solving method. I am very picky about *how* you solve the problems, but not so about whether you get the right answer. The important thing is that you show me that you understand the material. Picking equations or repeating example problems that seem to fit will show me that you're shooting in the dark. Showing explicit steps and justifying the equations you use will show me that you understand the concepts, even if you don't get the right answer.

Learning Assistance

LAS (Learning Assistance Services) offers support for students with learning disabilities such as attention deficit disorder, as well as testing-induced stress (and things like that). In order to receive special accommodations, students must go through LAS in order to document their needs. If this applies to you, please see me or the LAS website for more information as soon as possible so we can make arrangements.
(http://www.rochester.edu/College/LAS/index.php)

Lab

There are five labs for this course (one each week for the first five weeks), held in B&L 266 & 267 (one or the other, or both, depending on the lab). You **must** complete all the labs to pass this course. You will complete a pre-lab before you attend, to be turned in at the start of lab. The rest of the work will be done in lab, and the report will be turned in at the end. Lab days/times are:
Wednesdays 12:30 - 3:10 PM
Fridays 1:00 -3:40 PM
Summer Laboratory website: www.pas.rochester.edu/~physlabs/summer.html
NOTE: Do not email "physlabs" as it says to do on the regular semester lab website. Aimee Slaughter is in charge of summer labs. You can contact her regarding the labs at aimee@pas.rochester.edu.

Grading

Your grade in this course will be determined by the following:

Exam I	20%
Exam II	20%
Final Exam	30%
Homework	20%
Lab	10%

Grading Scale:

90%-100%	A
80%-89%	B
70%-79%	C
60%-69%	D
0-59%	F

(with appropriate gradations for pluses and minuses)

If there are any questions regarding grading (i.e. I added incorrectly, I misunderstood what you did, or you just disagree with my assessment), please address them to me as soon as they arise.