

PHY220(lecture) General Physics I Dillard University - Fall 2003

Meeting Times:

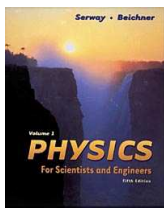
STERN219 MWF 11:00a-11:50a

In addition, you must be registered for the laboratory section PHY220901L (**STERN123-R2:30p-5:15p**).

Instructor: Rob Salgado Office: Stern 307A Voice: (504)-816-4510	E-mail: rsalgado@dillard.edu Instant-Messengers: AOL, MSN, Yahoo: dillardphysics (do <i>not</i> email here)	Office hours: -to be announced
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Catalog Description:

PHY220 General Physics I: Particle dynamics in solids. (3 credits for Lecture + 1 credit for Lab)
 Open to all science, engineering and mathematics majors. Fundamental physical laws of mechanics; kinematics and dynamics; work and energy; rigid body rotational dynamics; waves and oscillatory motions; and gravitation.
 Class meets three hours per week for lecture. [Prerequisite: PHY111/112 (Introduction to Engineering Physics I and II), MAT201 (Analytic Geometry and Calculus I) or concurrent enrollment.]



Required Textbook:

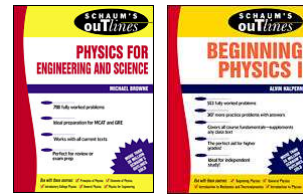
“Physics for Scientists and Engineers” (5th edition) by Raymond A. Serway and Robert J. Beichner
 (published by Brooks/Cole: ISBN: 0-03-031716-9)

This textbook is required. **(For each announced show-me-your-textbook day, not having the textbook will earn a penalty of 2%.)**

Highly-recommended supplement: for example, one of the following...

“Schaum's Outline of Physics for Engineering and Science” by Michael Browne
 (published by McGraw-Hill: ISBN 0-07-008498-X)

“Schaum's Outline of Beginning Physics I: Mechanics and Heat” by Alvin Halpern
 (published by McGraw-Hill: ISBN 0-07-025653-5)



Electronic Materials:

I will maintain a website (for now: <http://physics.syr.edu/~salgado/220/>) that lists the assigned problems and solutions. I will also try to make available a whiteboard/PowerPoint notes and any computer source code (e.g., Python, Maple) that I use for simulations or computations.

Homework:

Homework will be assigned but will not be collected. We will discuss the homework in class. Exam and quiz problems are generally based on homework problems, textbook problems, and textbook examples.

Most of the learning you do in this course is done by doing homework problems outside of class!

You are encouraged to work on the homework with other students.

However, be sure that you do the problems *by yourself* since you'll be working on quizzes and exams *by yourself*.

If you need help with your homework, please visit me (with your textbook and your notebook and with proof that you have tried the problems) during Office Hours... the sooner the better.

Classroom Rules:

Comet to class **ONTIME**. **(Unexcused tardiness will earn a penalty of 1%.)**

Attendance is **REQUIRED**.

“The University recognizes that a student may miss a class for legitimate reasons. In such cases these absences are excusable; however, the student must complete the Student Absence Form.”...

“A professor may drop a student with 3 or more unexcused absences from a course.” (2003-2005 University Catalog, page 15)
 Note that your attendance is recorded on the official midterm and final gradesheets.

“Academic dishonesty will not be tolerated.” (2003-2005 University Catalog, page 15)

Comet to class **PREPARED** and **EQUIPPED**, having read or written any assignments.

Limit all discussion to the **PHYSICS** topic under discussion.

Turn OFF all phones, pagers, radios, and other disruptive devices. **(Disruptiveness will earn a penalty of 1%.)**

Treat each other with **RESPECT**.

Grades (for the lecture portion):

10% **ATTENDANCE** **(Each unexcused absence will earn a penalty of 3%.)**

Absences must be excused within one week with a note from Academic Affairs.)

20% **END-OF-CHAPTER QUIZZES** (FORMAT: multiple-choice questions, a short problem, and vocabulary definitions for the next chapter)

20% **REGULAR EXAMS** (FORMAT: many conceptual and computational multiple-choice questions, two or three short problems)

20% **MIDTERM EXAM** (FORMAT: like a regular exam but cumulative)

30% **FINALEXAM** (FORMAT: like two regular exams but cumulative)

A ≥ 88%, B ≥ 76%, C ≥ 64%, D ≥ 50%, F < 50%. This class is not graded on a curve.

Borderline cases (between two letter grades): If your exam shows an upward trend, your grade may be upgraded upwards.

There may be penalties (described above) for being tardy, absent, disruptive, or unprepared.

Exams and Quizzes: QUIZZES are generally given at the end of each chapter. They will begin at the start of the class period and will end promptly after ten minutes of that period. [No makeups or extensions. This will be strictly enforced. Be on time.] After every two or three chapters, we will have an EXAM on these chapters. There is a cumulative one-hour MIDTERM and a cumulative two-hour FINAL.

Missed exams and quizzes: There are **no** makeups or quizzes. There are **no** exceptions. If you are absent for an exam or quiz, within one week, you must present to me a written excuse from Academic Affairs. Only if that excuse is valid, **your final exam will carry the weight of your missed exam or quiz**. Otherwise, you will get no credit for the missed exam or quiz.

Dates you should be aware of:

- Labor Day (Mon, Sept 1 ****no class****)
- Midterm Period (Oct 13-17)
- Founder's Day (Sun, Oct 19)
- Academic Advising Day (Wed, Oct 29 ****no class****)
- Last Day to Withdraw (Fri, Nov 21)
- Thanksgiving Break (Thu-Fri, Nov 27-28 ****no class****)
- Last Day of Classes: (Wed, Dec 3)
- Exam Period: Friday, (Fri-Thu, Dec 5-10) [the final is only given on the date and time assigned by the University --- do not make early travel plans]

Sequence of PHY 220 topics:

- Ch 1 Physics and Measurement**
- Ch 2 Motion in One Dimension**
- Ch 3 Vectors**
- Ch 4 Motion in Two Dimensions**
- Ch 5 The Laws of Motion**
- Ch 6 Circular Motion and Other Applications of Newton's Laws**
- Ch 7 Work and Kinetic Energy**
- Ch 8 Potential Energy and Conservation of Energy**
- Ch 9 Linear Momentum and Collisions**
- *Ch 13 Oscillatory Motion**
- *Ch 14 The Law of Gravity**
- (*time permitting)**

August							Rough Schedule
Su	Mo	Tu	We	Th	Fr	Sa	
	25		27		29		Ch 1
September							
	[]		3		5		Ch 2
	8		10		12		
	15		17		19		Ch 3
	22		24		26		Ch 4
	29						
October							
			1		3		Ch 5
	6		8		10		
	13		15		17		Ch 6
	20		22		24		Ch 7
	27		[]		31		Ch 8
November							
	3		5		7		Ch 9
	10		12		14		Ch 13
	17		19		21		Ch 14
	24		26		[]		
December							
	1		3		[5		
	8		9		10		