revised 25 August 2003

PHY 111
Introduction to Engineering Physics I

Dillard University - Fall 2003

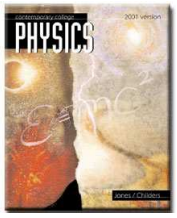
Meeting Times:

STERN 123 001 **M** **1:00p- 2:50p**
STERN 123 901 **W** **1:00p- 2:50p**

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

Catalog Description:

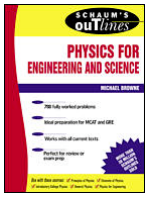
PHY 111 Introduction to Engineering Physics I. (3 credits)
An introduction to engineering and physics to freshman students covering elementary physics (Mechanics and principles of problem solving physics), an introduction to engineering disciplines and their roles in society, and training in library and literature search. Class meets two hours per week for lectures and two hours per week for laboratory.

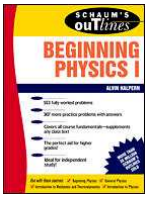


Required Textbook:

"Contemporary College Physics" (3rd edition, 2001 update) by Edwin Jones and Richard Childers
(published by McGraw-Hill: 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/111/`**) that lists the assigned problems and solutions. I will also try to make available the whiteboard/PowerPoint notes and any computer source code (e.g., Python, Maple) that I use for simulations or computations.
The textbook has an online supplement at **`http://www.mhhe.com/physsci/physical/jones/`**

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 can 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:

Come to class **ON TIME**. ***(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 grade sheets.

"Academic dishonesty will not be tolerated." (2003-2005 University Catalog, page 15)
Come to class PREPARED and EQUIPPED, having read or written any assignments.
Limit all discussions 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% FINAL EXAM (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 exams show an upward trend, your grade may be nudged upwards.
There may be penalties (described above) for being tardy, absent, disruptive, or unprepared.

Exams and Quizzes: QUIZZES are generally given at 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** makeup exams 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 111 topics:

Ch 1 Measurement, Models, and Analysis

Ch 2 Motion in One Dimension

Ch 3 Motion in Two Dimensions

Ch 4 Force and Motion

Ch 5 …Gravitation [5.4 – 5.6 The Law of Universal Gravitation, The Universal Gravitational Constant, Gravitational Field Strength]

***Ch 22 Geometrical Optics**

***Ch 18 Electric Current and Resistance** [electric circuits]

(* time permitting)

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       August              Rough Schedule
Su Mo Tu We Th Fr Sa
   25    27               Ch 1
      September
    []    3               Ch 2
    8     10
   15     17
   22     24               Ch 3
   29
       October
          1
    6     8
   13----15----           Ch 4
   20    22
   27    []               Ch 5
      November
    3     5               Ch 22
   10     12
   17     19               Ch 18
   24     26[    ]
      December
    1     3    [5
    8  9 10]
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Highly-recommended texts you may wish to consult:
"Conceptual Physics" by Paul Hewitt
"Physics for Scientists and Engineers" (5th edition) by Raymond A. Serway and Robert J. Beichner