

Physics 4B
General Physics for Physicists and Engineers

Instructor: Dr. A. Abbott

Office Hours: Tues 9-11, Fri 1-2 in Room PS 71 or by appointment. Please do not, however, try to catch me immediately before class!

Text: **Physics for Scientists and Engineers, 4th Edition**, by Raymond A. Serway.

READ THE TEXT! STUDY THE TEXT!

Course Material: Chapters 15 - 28 covered at the rate of about one chapter per week. One or two chapters may be skipped at my discretion; if time permits, additional material may be added in place of any skipped chapters.

Lectures: MWF 10am - 11am in Room PS 70. Students who are quiet, pay attention, and stay focused during lectures are generally much more successful in this class! Most students find this course quite difficult and demanding; why not make lecture time useful, informative and productive ?

Homework:

- (1) Problem sets will generally be assigned every Friday and collected the following Friday; **selected** problems will be graded. Each problem set will consist of about 8 to 10 problems from the text.
- (2) All papers turned in must be **stapled** together and the solutions contained therein must be **step-by-step, neat and complete** so that they may be easily read, understood and graded. You may use the example problems in the text and the problems worked out by me in class as your models of how the homework solutions should be written up. Little patience (or credit) will be afforded to papers in which it is clear the author devoted very little time or effort to his or her work.
- (3) If you don't turn in a problem chosen for grading and scoring, you will receive a score of **zero** for that problem. However, if you at least make an **honest attempt** at the problem, you will receive a minimum score of 50% for your effort even if your solution is incorrect. **I want you to attempt all of the assigned problems and I am giving you an incentive to do so!**

- (4) Since this course is oriented toward developing your problem-solving skills, it is essential to your success that you put a solid effort into the homework each and every week!

Laboratories: Thursdays 8:00 - 10:50 am in PHY 70

Typical schedule:

8:00 - 8:45 Homework discussion
8:45 - 9:00 break
9:00 - 10:50 lab exercise, occasional films

When possible, procedures will be handed out weekly prior to each lab. **It is critical that you read and study the procedure prior to coming to lab to perform the exercise.** Note that you have only about two hours to collect your data and complete each exercise. No sympathy or special dispensation will be extended to students who become "confused" or "stuck" during an exercise because they have failed to properly prepare prior to coming into lab. A written laboratory report will be required following each lab. Typically, you will have one week following each experiment to write and hand in your report.

Late Assignments:

- (1) Homework and lab reports are due and will be collected **AT THE BEGINNING OF CLASS** on the due date.
- (2) Absolutely no late homework or lab reports will be accepted.
- (3) If because of illness or some other unavoidable circumstance you cannot come to class on the day on which a homework assignment or lab report is due, you may mail your work to me at the following address:

Dr. Abbott
Department of Physics
Reedley College
995 N. Reed Ave.
Reedley, CA. 93654

The envelope must show a post mark on or before the due date. Having to mail your work to me should, however, be rare and unusual. The freedom to mail assigned work to me is a **privelege** which may be revoked at any time for any individual or even the entire class if it is abused.

Exams: Two midterms and a comprehensive final. The approximate exam schedule is as follows:

Midterm 1	Chap 15-20	Week 7 of semester.
Midterm 2	Chap 21-26	Week 14 of semester
Final Exam	Chap 15-28	Week 18 (Finals week)

Exact dates for exams will be given at least one week prior to each test. The key to success on the exams is preparation: practice, practice, practice! Specifically, you should make sure, before you walk into the test, that you can do **each and every homework problem assigned, backwards and forwards** in the chapters to be covered on that test. The exams will be given during the lab periods of the weeks listed to allow you extra time. No make-up exams will be given unless arrangements are made **in advance**.

Grading: The total points earned by a student over the entire semester determines his or her final grade.

Homework	340 points	(or 20%)
Lab Reports	340 points	(or 20%)
Midterm 1	255 points	(or 15%)
Midterm 2	255 points	(or 15%)
Final Exam	510 points	(or 30%)

Total Possible:	1700 points	(or 100%)

With this system, all points (whether given on a homework, lab, or exam) have identical weight. Thus, a student wanting to know his or her grade at any time mid-semester simply has to find the total points he/she has accumulated, divide by the total points possible up to that time in the semester and then find his/her current percentage on the grading scale below.

Grading Scale:

1513 - 1700 points	(or 89 - 100%)	A
1309 - 1512 points	(or 77 - 88%)	B
1105 - 1308 points	(or 65 - 76%)	C
901 - 1104 points	(or 53 - 64%)	D
0 - 900 points	(or 0 - 52%)	F

Attendance: In accordance with state and school policy, attendance is mandatory. A student will be dropped after six absences unless special arrangements are made. Missed labs count toward your total of six allowed absences.

Drop Date: The last day to drop a semester-length course is at the end of the **NINTH WEEK**, or **Friday October 15, 1999** this semester.