

# Physics 4B

Fall 2015

Instructor: David Newton

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**Office Hours:** Monday 2:30 PM -3:20 PM, Tuesday 11:30-12:20, Wednesday- 12:30-1:20 PM, Thursday - 11:30-12:20, Friday 12:30-1:20 and by appointment.

**Final exam date:** Wednesday, Dec. 9, at 1:45-3:45 p.m. Finals will not be given earlier or later.

**Text:** Physics for Scientists and Engineers: by Serway, edition... whatever.

**Prerequisites:** Passing Physics 4A and at least concurrent enrollment in Math 1C.

- The goal of this course is to understand the four Maxwell equations of classical electro-dynamics in integral form and the "Lorentz force" equation and solve problems using them.
  - If you miss more than five lectures you may find yourself dropped from the class.
  - It is the student's responsibility to drop the class if necessary. Otherwise, an F grade will be assigned.
  - NO make-up exams will be given without PRIOR consent from the instructor. Use the office phone number given above if you can't see me at school. If I'm not in my office, there is an answering machine at that number available for you to leave a message day or night (the phone may have to ring many times to answer). You must make arrangements to make-up the exam as soon as possible; if you wait too long (i.e., three days) to take your make-up exam, you will be scored a zero.
  - No questions are allowed on the day of the exam regarding exam material. This does not apply to quizzes, just exams and the final. Any other type of questions on exam day are, of course, fine.
  - **No exam score will be thrown out.** The two midterm exams will count for the final grade with an average score calculated by using a "weighted" average where the high score will be doubled. No cheat sheets or note cards will be allowed during exams and quizzes. Exams will not require detailed memorization of many equations.
  - Your lowest quiz score will be dropped. About six quizzes will be given throughout the quarter based on the assigned homework.
  - Grading mistakes, or protests for exams and quizzes will *only* be considered when a written cover letter is submitted to your instructor with the exam or quiz in question. Your appeal will be considered, and the resultant decision will be final. No protests will be considered orally, this includes simple addition errors.
  - To pass the class you *must* take all exams and the lecture and lab final exam.
  - A grade of zero points will be assigned to any work done if a student has been found cheating.
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- You will be graded on the *union* of the information provided in the lecture and from the assigned text readings. The grades will be given on the traditional percentages:

A: 92-100%;

A-: 90-91%

B+: 88-89%

B: 82-87%;

B-: 80-81%

C+: 78-79%

C: 60-77%;

D: 50-60%;

F: lower than 50%.

Overall class scores may be curved to fit this pattern.

The grade distribution is as follows:

Lab 10%

Lecture Quizzes 10%

Exams (2 Exams) 40%

Final 40%

**Lab Policy:** Lab attendance is mandatory. You may miss *no* labs without a *written* physician's note or some other documented and serious reason. **If you miss two labs even with a justified excuse or just one unexcused lab you will be liable for an instructor initiated drop from the entire course.** You are dismissed from a lab for the day after you have the instructor's permission to leave. Although you may leave the lab for a *short* time and then return, attending lab and leaving early for the day without explicit permission from the instructor will constitute an unexcused absence.

The **LABS SKILLS MANUAL** is recommended. Every lab requires the following items:

1. A *quadrille* ruled (looks like graph paper), non-spiral bound lab book. This book will be kept permanently in the lab after you bring it the first day.
2. A pen *and* pencil.
3. A ruler.
4. A scientific calculator. It would be helpful if your calculator could perform statistical functions, but it is not required.
5. The **4B LAB EXERCISE MANUAL on line version.** Download and print out a copy of each lab and bring it to the lab. Do not rely on being able to print out copies in the lab.  
<http://nebula.deanza.edu/~newton/4B/4BLab/4BLabsTitle.htm> Enrollment for the lecture (adds, drops, etc...) is done in the laboratory. Make sure you show up to your lab section the first day it meets; otherwise, you may be dropped from the class.