# Physics 2B Fall 2015

Section PHYS-D002B-01 CRN: 22395

Lecture Instructor Lana Sheridan

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Office S13

Office Hours Tuesdays 2:30-3:30pm & 4:30-5:30pm; Fridays 2:30-3:00pm

Lecture Hours Tu,Th 5:30-7:20 pm

Lab Hours Thursdays 7:30-10:10 pm

Textbook Fundamentals of Physics Extended, 9th Edition,

Halliday, Resnick, Walker

Prerequisites Physics 2A with a C or higher

Final Exam Date Tuesday, Dec 8, 4-6 p.m.

## 1 Topics

This course covers basic electricity and magnetism. This course is algebra-based, but the textbook includes calculus and some derivations in the course may involve calculus. Students should leave this course with an understanding of electromagnetic fields and forces. We will cover charge, static electric interactions, electric fields, flux, electric potential, capacitance, current, resistance, circuits, magnetic fields, induction, alternating currents, and Maxwell's equations. This will be chapters 21–33 of the textbook.

### 2 Homework

The homework set from the book will not be collected or count towards your grade, however, it is very important to do this homework as part of your study! This will make concrete the ideas discussed in the lectures by allowing you to apply them immediately. I will try to set almost exclusively problems that have answers in the back of the textbook. If you have difficulty with the homework you can come to office hours, ask me just before or after a lecture, work together with other students, or go to the Math and Science Tutorial Center (Student Success Center). Doing these problems will help you prepare for the tests and quizzes.

From time to time there will be worksheets set for homework that will count towards your grade.

The set problems should not be viewed as the only problems you can do: you are strongly encouraged to look through all of the problems at the end of each chapter and consider how each should be approached. You should read the textbook.

# 3 Quizzes

Each week there will be a quiz on the material covered in the lectures. The quiz questions will be based on homework questions. Make sure you do the homework, so you can do well on the quizzes!

#### 4 Tests

There will be a midterm set in class time, in addition to the and final exam. In order to do well on the tests, read the textbook, and do the homework problems.

**Note:** If there is any dispute about marking, I will consider it only within two school days of the paper being returned to you. Grades for the final exam are final and not subject to dispute.

# 5 Cheating

In the case that a student is found to be cheating on a piece of work or test, the grade for that will be zero.

### 6 Evaluation

quizzes & worksheets	30%
midterm	20%
final	30%
labs	20%

Projected Grading Scheme:

$$88\% \to 100\% = A$$
 $76\% \to 87\% = B$ 
 $65\% \to 75\% = C$ 
 $54\% \to 64\% = D$ 
 $0\% \to 53\% = F$