

Canada College
Physics 260 MWF – 10:10 to 11:00 Lab Friday 2:10 to 5:00
Fall 2007

Instructor Dr. Martin Partlan
Office 16-105
Phone 650-306-3355
E-Mail Partlanm@smccd.net
Office Hrs. Wed & Fri 12:00-1:00 Learning Center
Tues & Thurs 5:30 - 6:00 pm Learning Center

Text *University Physics 11th ed., Young and Freedman*
Mastering Physics Web access code (comes with text if you buy it new)
(www.masteringphysics.com) (Class mppartlan0022)

Other useful items: Floppy disks, colored pencils, good calculator, knowledge of how to use spreadsheets.

Description:

(Note: this course has been newly realigned starting Fall 2007 to be similar to course offered at UC. Berkeley)

Physics 260 is the second semester of a three semester course in basic physics with calculus. We will cover the basics of thermal physics and electric and magnetic fields, AC and DC circuits.

Math Requirements:

Integral and differential calculus. Good algebra skills. Setting up and solving equations: linear, quadratic, and systems. Good graphing skills: making and reading graphs. Basics of geometry and trigonometry. Scientific notation! Prefixes. Calculus: basic integration and differentiation.

Exams: Four exams and a comprehensive final (all of equal weight)

Grading:

Minimum of 50% average on best four exams then:

Best 5 Exams (50%)

Quizzes (10%)

Homework (25%)

Lab (15%)

A 90% to 100%

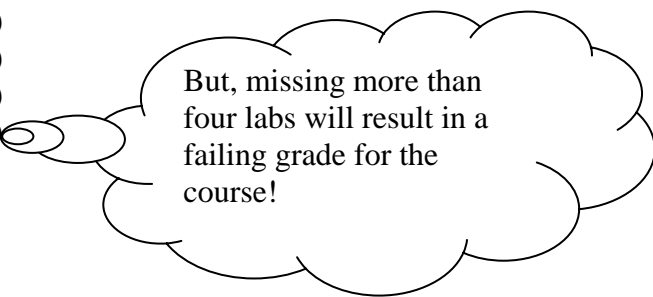
B 75% to 90%

C 55% to 75%

D 35% to 55%

F Below 35%

If the average of your best four exams is less than 50% then your grade is **F**



But, missing more than four labs will result in a failing grade for the course!

Lab Reports:

Keep your lab reports in a separate folder to be collected three times over the semester. Generally, lab reports are typed double spaced. Equations, formulas, and diagrams can be done by hand. All graphs must be done on a spreadsheet.

Format for lab report

- I) Introduction
- II) Setup
- III) Procedure-details of experiment and observations
- IV) Analysis and presentation of data
- V) Summary – Conclusions and inferences that may be drawn from this experiment.

In addition to the lab work, some online assignments will also be part of the lab grade.

Warning, if you show up late to the lab, you may not be allowed to do it.

Physics 260 content/schedule

Week	Chapter		Exams
1	17	Temperature & Heat	
2	18	Thermal Properties of Matter	
3	19	1 st Law of thermodynamics	1
4	20	2 nd Law of thermodynamics	
5	21	Electric Charge & Electric Field	
6	21	Electric Charge & Electric Field	
7	22	Gauss's Law	2
8	23	Electric Potential	
9	24	Capacitance & Dielectrics	
10	25	Current & resistance	
11	26	DC circuits	3
12	27	Magnetic fields & Magnetic Forces	
13	28	Sources of Magnetic fields	
14	29	Electromagnetic induction	
15	30	Inductance	
16	31	Alternating Current	4
17			Final