

PHYSICS 201 – Spring '94

Prerequisites : Calculus (Math 221 or equivalent). Algebra, trigonometry and calculus will be used extensively.

Materials needed : **Text:** Fishbane, Gaziorowicz and Thornton, *Physics for Scientists and Engineers*,
Laboratory Manual: Rollefson and Richards, *Laboratory Experiments in General Physics*, 1992 edition.

Laboratory notebook: preferably spiral bound with cross hatched ruling. Bring to first laboratory meeting.

Calculator: Preferably one with trigonometric, exponential, and logarithmic functions. Know how to use it and be sure that batteries are charged for exams.

Lectures : The lectures are to supplement, not to substitute for, reading and studying the text. They will be shared by Profs. Carlsmith and Reeder.

Discussion : Your discussion section will be led by your TA, who will be your prime contact and source of assistance. General questions about the homework are allowed before it is due, but don't expect your TA to work out the solutions for you in advance. Quizzes occasionally may be given in your discussion section and will count toward your grade.

Laboratory : Follow the "General Instructions" in the laboratory manual (pages 1-3). The experiments are to be written up during the laboratory period in the lab notebook. The lab notebook is not to be taken from the laboratory. **YOU MUST COMPLETE AT LEAST 10 OF THE 11 LABORATORIES ASSIGNMENTS IN ORDER TO RECEIVE CREDIT FOR THE COURSE.** Make up time is provided during the week of the exam only for those labs given since the last exam.

Homework : The home work problems are assigned in the syllabus for each week and should be handed in at the first meeting of the discussion section after the assignment. Late problem sets will not be accepted. Homework will be considered in your grade. Feel free to discuss the homework with others, but you will not benefit by simply copying another's work. The solutions will be explained in your discussion section and will be available on reserve in the Physics Library (4420 Chamberlin Hall).

Office Hours : Teaching Assistants will have office hours in the consultation room (1402 Sterling Hall). You may go to the office hours of any T.A. (hours posted on the door). Prof. Reeder will have office hours at 9 to 11 Tuesday and 1530 to 1600 Thursday or by appointment. Prof. Carlsmith 1530 Tuesday and by appointment.

Examinations : **DO NOT REGISTER FOR THIS COURSE IF YOU ARE NOT SURE THAT YOU WILL BE ABLE TO ATTEND THE EXAMS AS LISTED IN THE TIMETABLE.** Makeup exams will be not be given. If you have a written medical excuse, the missed exam will be prorated using the other exam scores. There will be three one hour exams on the dates shown (Wednesdays) at 7.15 pm. Rooms to be announced. The exams will be closed book, however, you may bring one $8\frac{1}{2} \times 11$ -in sheet of notes.

Grading : The course grade will be made up of 80% exams (16% for each hour of examination) and 20% discussion, homework and labs.

Concerns : If you have a question or concern relating to non-subject matters that cannot be resolved by your TA or Professor, you may contact Jean Buehlman, Instructional Program Manager (afternoons in 2520 Sterling Hall, 262-2629).

Alternate Refs : To see a different presentation of the same material, try the following texts on reserve in the Physics Library (4220 Chamberlin):

Halliday and Resnick, *Fundamentals of Physics*

Giancoli, *General Physics*

Rusbult, *Tools for Problem Solving*

Serway, *Physics For Scientists and Engineers*

General Advice : Physics is not something you read and memorize, rather it is something you learn how to *do*! Try the following study procedure:

- 1.) Read the chapter prior to lecture, so that you know what it is about.
- 2.) Listen carefully to the lecture and take notes.
- 3.) This is crucial!! Do not go back to read and re-read the chapter until you "understand" it. Rather, start working problems, referring to the chapter to clarify points as they come up.

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Spring '94

PHYSICS 201 SYLLABUS

Week	Date	Chapter	Lab Topic	Homework
1	T Jan. 25	Chapter 1	No Lab	10,36,46,52,66
	R 27	Chapter 2		16,30,44,58,60
2	T Feb. 1	Chapter 3	M-1	6,10,26,42,48
	R 3	Chapter 4		2,6,18,24,28
3	T 8	Chapter 4	M-2	30,40,44,52
	R 10	Chapter 5		6,14,24,34,36
4	T 15	Chapter 5	Make-up	44,48,54,62,66
	W 16	EXAM 7:15 pm Ch 1 - 4		
5	R 17	Chapter 6		6,26,38,46,50
	T 22	Chapter 7	M-4	6-72,2,12,20,26
R 24	Chapter 7	36,40,52,54,60		
6	T Mar. 1	Chapter 8	M-10	6,16,22,26,32
	R 3	Chapter 8		34,40,48,58,66
7	T 8	Chapter 9	M-5	8,14,16,20,28
	R 10	Chapter 9		30,34,40,44,50
8	T 15	Chapter 10	Make-up	4,14,20,24,42
	W 16	EXAM 7:15 pm Ch 5 - 9		
9	R 17	Chapter 11		2,10,18,30,38
	T 22	Chapter 12	M-6	8,18,24,36,50
R 24	Chapter 12	52,56,58		
10	T 29	Spring Vacation		
	R 31	Spring Vacation		
11	T Apr. 5	Chapter 16	M-9	6,10,14,24,34
	R 7	Chapter 17		4,12,22,36,56
12	T 12	Chapter 18	makeup	2,8,14,18,28
	W 13	EXAM 7:15 pm Ch 10-17		
13	R 14	Chapter 18		30,32,42,58,60
	T 19	Chapter 19	M-7	6,12,14,24,28
R 21	Chapter 19	50,52,56,60		
14	T 26	Chapter 20	M-15	4,10,16,24,28
	R 28	Chapter 20		32,36,42,54,56
15	T May 3	Chapter 20-21	H-4	2,6,12,16,22
	R 5	Chapter 21		24,26,30,38
16	T May 10	Chapter 21	H-2	
	R 12	Review		
	F 16	FINAL EXAM 5.05 pm Ch 1-12 and 17-21		