

PHYSICS 202: Fall '95

Prerequisites: Pysics 201 or equivalent.

Materials needed: Text: *Fundamentals of Physics* by D. Halliday, R. Resnick and J. Walker (4th edition)

Laboratory Manual: Rollefson and Richards, *Laboratory Experiments in General Physics*, 1995 edition.

Laboratory notebook: Spiral bound, preferably with 5 or 6 mm cross hatched ruling. Bring to first laboratory meeting.

Calculator: Must have trigonometric, exponential, and logarithmic functions.

Lectures: The lectures are to supplement, not substitute for, reading and studying the text. They will be shared by Profs. Ögelman and van den Brand

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 LABORATORY ASSIGNMENTS IN ORDER TO RECEIVE CREDIT FOR THE COURSE.** You must get written permission from *only your* lab TA (Teaching Assistant) to take a make-up lab. Make up times are the three weeks indicated in the syllabus.

Homework: The homework problems are assigned in the syllabus for each week and should be handed in at the first meeting of your discussion section after week of the assignment. Homework will count toward your grade. Feel free to discuss the homework with others. The solutions will be explained in your discussion section and will be available in the Physics Library.

Quizzes: There will be a weekly 10-minute quiz in your discussion section, consisting of a problem similar to one of the homework problems you have solved.

Office Hours: Teaching Assistants will have office hours in the consultation room (2312 Sterling Hall). You may go to the office hours of any TA. Prof. Ögelman will have office hours from 11 am to noon, Tues. and Thurs. or by appointment. Office hours for Prof. van den Brand will be announced later.

Examinations: **MAKE SURE THAT YOU WILL BE ABLE TO ATTEND ALL EXAMS.** (i.e. do not take a course that meets or has exams on Mondays Oct. 2, Oct. 30 and Nov. 20 at 7:15 PM, or a Final at 7:25 PM on Dec. 18). Makeup exams will not be given. The average of the other exam scores will be substituted for the missing exam, *provided* you have a written excuse from a physician, dean, or academic advisor only. There will be three one hour exams on the dates shown above at 7:15 pm. Rooms to be announced. You may bring *one* 8.5" x 11" crib sheet to each exam.

Grading: The course grade will be made up of 75% exams and 25% discussion, homework and labs. The 75% exam grade will consist of one hour exams of 20% + 20% + 10% (your worst exam will count least) and the cumulative final of 25%

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Phys. 202 Week	Date (1995)	Chapter	Lab Topic	Homework
1	T Sep. 5	23 Electric Charge	No Lab	4,8,14,19,23,27
	R 7	24 Electric Field		4,21,26,33,52,58
2	T 12	25 Gauss' Law	E-1	4,9,18,25,35,48
	R 14	26 Electric Potential		2,8,27,32,38,48
3	T 19	26	E-2	50,55,62,65,79,88
	R 21	27 Capacitance		16,30,43,49,60,66
4	T 26	28 Current and Resistance	E-3	11,25,33,38,51,55
	R 28	7 Review of 23 - 27		
5	M Oct. 2	EXAM 7:15 pm Ch 23 - 27		
	T 3	29 Circuits	Make-up	8,21,29,46,57,77
	R 5	30 Magnetic Field		5,12,31,48,56,67
6	T 10	31 Ampere's Law	E-6	13,25,32,47,60,66
	R 12	32 Faraday's Law		6,15,19,29,36,43
7	T 17	33 Inductance	E-7	6,19,21,35,45,47
	R 19	34 Magnetism and Matter		2,5,8,12,24,32
8	T 24	17 Waves - I	E-8	7,13,25,33,38,55
	R 26	Review 28 - 34		
9	M 30	EXAM 7:15 pm Ch 28 - 34		
	T 31	18 Waves - II	Make-up	9,17,56,67,87,96
	R Nov. 2	35 Electromagnetic Osc.		6,7,18,25,34,38
10	T 7	36 Alternating Currents	S-1,S-3	8,21,23,33,41,45
	R 9	37,38 Maxwell's Eqn., E-M Waves		(37)2,4,11,15; (38)7,41
11	T 14	39 Geometrical Optics	E-9	8,11,23,29,33,42,
	R 16	Review 17,18,35 - 38		
12	M 20	EXAM 7:15 pm Ch 17,18,35 - 38		
	T 21	39	Make-up	53,66,68,71,76,78
13	T 28	40 Interference	L-2	14,33,40,57,67,80
	R 30	41 Diffraction		9,15,22,32,34,40
14	T Dec. 5	41	L-1	50,52,58,67,72,78
	R 7	42 Relativity		1,7,9,15,18,23
15	T 12	42	E-10	30,36,38,47,53,5
	R 14	Review 39 - 42		
	M 18	FINAL EXAM 7:25 pm Ch 17,18,23 - 42		