

PHYSICS 104 - SPRING 1992

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COURSE MATERIALS:

- a) Contemporary College Physics
Jones/Childers (Addison Wesley, Second Printing, May 1990)
- b) Physics 104 Lab Manual
- c) calculator with trig functions

EXAMS:

- > There will be three exams on the dates shown (Mondays) at 7:15 - 8:15 pm
- > You may bring a calculator to the exams
- > All needed formulae and constants will be provided with the exams. NO books or crib sheets will be permitted.
- > **THERE WILL BE NO MAKEUP EXAMS. IN CASE OF DOCUMENTED ILLNESS OR EMERGENCY, GRADES WILL BE BASED ON THE REMAINING EXAMS. DROP THE COURSE IF YOU ARE NOT SURE THAT YOU WILL BE ABLE TO ATTEND ALL EXAMS.**

HOMEWORK:

- > The homework is due in the boxes at the entrance to the lecture hall before your lecture on **Wednesday**.
- > Solutions to the homework will be on reserve in the Physics Library

LABORATORIES:

- > You must complete all 11 laboratories. You must attend the lab section to which you are assigned. Your TA will initial your lab note book before you leave. Your TA will make provisions for makeup of missed labs.
- > You must bring a bound, quadrilled notebook to the lab. The book remains in the lab until the end of the semester. You may use last semester's book.

GRADES:

- > the final grade will be computed in the following way:
 - quizzes, homework and labs 20%
 - one-hour exams: 20%, 20% and 10% (your worst exam counts least)
 - final exam (cumulative) 30%

OFFICE HOURS:

- > Profs. Haeberli and Ogelman will have office hours on Monday 3:30 and Tuesday 1:20. For help at other times make an appointment after lecture.
- > All TA office hours will be in the consultation room (Room 3512 Sterling). You may go to the office hours of any TA. Hours will be announce in class and are posted on the door of the consultation room.

(Syllabus on reverse).

PHYSICS 104 SYLLABUS SPRING 92

WK	DATE	CHAPTER	HOMEWORK	LAB
1	W Jan. 22	15: Electric Charge	1,6,17,18,23,29	no lab
	F Jan. 24	15: Electric Charge	32,36,43,47,54,55 (due 1/29)	
2	M Jan. 27	15: Electric Charge		E2: Electric Fields
	W Jan. 29	16: Electric Potential	1,5,6,11,20,52	
	F Jan. 31	16: Electric Potential	26,29,42,47,54,60 (due 2/5)	
3	M Feb. 3	16: Electric Potential		E1: Electrostatics
	W Feb. 5	17: Electric Current	15,16,22,37,44,45	
	F Feb. 7	17: Electric Current	46,50,52,54,57,67 (due 2/12)	
4	M Feb. 10	17: Electric Current		E4: DC Circuits
	W Feb. 12	18: Magnetism	8,13,20,21,34,37	
	F Feb. 14	18: Magnetism	40,41,45,50,55,57 (due 2/19)	
5	M Feb. 17	REVIEW Ch 15-17		no lab
	EXAM Ch 15 - 17 (7:15 - 8:15 pm)			
	W Feb. 19	18: Magnetism		
	F Feb. 21	19: Induction	4,7,8,12,13,20	
6	M Feb. 24	19: Induction	22,25,28,35,51,53 (due 2/26)	E7: Induction
	W Feb. 26	19: Induction		
	F Feb. 28	20: AC Circuits	4,15,20,26,29,31	
7	M March 2	20: AC Circuits	33,34,36,43,53,56 (due 3/4)	E8: Oscilloscope and RC Circuit
	W March 4	20: AC Circuits		
	F March 6	20: AC applications		
SPRING RECESS Sat. March 7 to March 15				
8	M March 16	21: Geometrical Optics	3,7,11,14,20,28,33,36	E9: AC Circuits
	W March 18	21: Geometrical Optics	39,41,44,46,51,52 (due 3/25)	
	F March 20	21: Geometrical Optics		
9	M March 23	REVIEW Chapters 18 - 20	Willy	no lab
	EXAM Ch 18 - 20 (7:15 - 8:15 pm)			
	W March 25	22: Optical Instruments	5,8,14,17,23,28,32	
	F March 27	22: Optical Instruments	34,37,40,56 (due 4/1)	
10	M March 30	23: Wave Optics	6,8,11,14,20,23,27,34	L2: Lenses
	W April 1	23: Wave Optics	39,45,58,63,67,68 (due 4/8)	
	F April 3	23: Wave Optics		
11	M April 6	24: Relativity	3,6,10,11,14,18,23	L3: Telescope and Microscope
	W April 8	24: Relativity	27,31,38,50 (due 4/15)	
	F April 10	25: Atomic Structure	8,15,25,34 (due 4/22)	
12	M April 13	REVIEW Chapters 21 - 23		no lab
	EXAM Ch 21 - 23 (7:15 - 8:15 pm)			
	W April 15	26: Quantum Theory	1,7,13,18,25,28	
	F April 17: Good Friday Recess, Passover			
13	M April 20	26: Quantum Theory	34,49,53,56 (due 4/22)	L1: Diffraction
	W April 22	26: Quantum Theory	4,8,9,18,22,26,30,32	
	F April 24	27: Quantum Mechanics	34,45,52,58,62,63 (due 4/29)	
14	M April 27	27: Quantum Mechanics		L5 Spectrum of Hydrogen
	W April 29	28: The Nucleus	5,10,17,21,25,31,34,39	
	F May 1	28: The Nucleus	43,49,51,59,63,64 (due 5/6)	
15	M May 4	28: The Nucleus		N2: Radioactivity
	W May 6	REVIEW		
	F May 8	REVIEW		
FINAL EXAM: 5:05 pm May 14				