

Electric charge, force, field

Physics 7B Syllabus, Fall 2014

Lectures 2, 3 Lanzara

<u>Week</u>	<u>Week of</u>	<u>Topics</u>	<u>Reading</u>	<u>Labs</u>
1 *	8/28	Intro, thermal expansion, ideal gas law	17	
2	9/2, 4	Kinetic theory, phase diagrams, First law	18-19	
3	9/9, 11	First law, Specific heat, adiabatic processes	19	
4	9/16, 18	Second Law	20	Heat engine
5	9/23, 25	Electric charge, force, field, dipole	21-22	
6 ^I	9/30, 10/2	Electric flux, Gauss's law	22	<i>Midterm 1</i>
7	10/7, 9	Electric Potential	23	
8	10/14, 16	Capacitors	24-25	Equipot. lines & E. field
9	10/21, 23	Current, Ohm's law, resistors	25-26	
10	10/28, 30	DC circuit, Magnetic force, magnetic dipole	26-27	DC circuits
11 ^{II}	11/4, 6	Magnetic force, magnetic dipole, Hall effect	27	<i>Midterm 2</i>
12	11/11, 13	Ampère's law	28	
13	11/18, 20	Biot Savart Law, Electromagnetic induction	28-29	e/M
14 *	11/25, 27	Inductance, Faraday's law	29	
15	12/2, 4	LR and LC circuits	30	O-scope & time dep. circuits
16	12/9-11	<i>Reading/Review/Recitation Week</i>	<i>No new material</i>	
17	12/18	<i>Final examination</i>	---	---

*week 1 starts on Aug.28 ; Thanksgiving (11/27).

Midterm 1: Tuesday, September 30, 7-9PM (Lec. 2: 155 Dwinelle), (Lec. 3: 1,3,4Le Conte)

Midterm 2: Tuesday, November 4, 7-9PM (Lec 2: 155 Dwinelle), (Lec 3: 2040 & 2050 VLSB)

Final Exam: Wednesday, Dec. 17, 3-6PM (Lecture 2) and Dec. 17, 8-11AM (Lecture 3)

Please check on bspace for any updates or further information.

Sections covered per chapter:

Ch. 17.1 – 17.9

Ch 18.1 – 18.3

Ch 19.1 – 19.9

Ch 20.1 – 20.6

Ch 21.1 – 21.11

Ch 22.1 – 22.3

Ch 23.1 – 23.8

Ch 24.1 – 24.6

Ch 25.1 – 25.5, 25.7 – 25.9

Ch 26.1 – 26.5

Ch 27.1 – 27.5, 27.8

Ch 29.1 – 29.4, 29.6 – 29.7

Ch 28.1 – 28.7

Ch 29.1 – 29.4, 29.6, 29.7

Ch 30.1 – 30.5