## Physics 7B Syllabus, Spring 2014

## Lecture 2, C. Bordel

Week	Lectures	Topics	Reading	<u>Labs</u>
1	Jan. 21, 23	Thermal expansion, ideal gas law, kinetic theory	17.4, 17.7-9,18.1-2	
2	Jan. 28, 30	Phase changes, heat, internal energy, specific heat, calorimetry, latent heat, work, first law, equipartition	18.3-4(evaporation only), 19.1-9	
3	Feb. 4, 6	Heat conduction, heat engines, entropy, second law	19.10(conduction only), 20.1-3, 20.5-6	
4	Feb. 11, 13	Electric charge, force, field	21.1-10	Heat engine
5	Feb. 18, 20	Electric dipole, flux, Gauss's law	21.11, 22.1-2	
6 <sup>1</sup>	Feb. 25, 27	Applications of Gauss's law, electric potential	22.3, 23.2	Midterm 1
7	Mar. 4, 6	Electric Potential	23.3-8	
8	Mar. 11, 13	Capacitors	24.1-6	Equipot. lines & E. field
9	Mar. 18, 20	Current, resistors, DC circuits	25.1-5, 25.8, 26.1-5	
	Mar. 24-28	Spring Break		
10	Apr. 1, 3	Magnetic force, magnetic dipole, Hall effect	27.1-8	DC circuits
11 <sup>II</sup>	Apr. 8, 10	Ampère's law and applications	28.1-5	Midterm 2
12	Apr. 15, 17	Biot-Savart law and applications	28.6-7	e/M
13	Apr. 22, 24	Electromagnetic induction	29.1-4	
14	Apr. 29, May 1	Inductance, LR and LC circuits	30.1-5, 25.7, 29.6	O-scope & time dep.
15	May 5-9	Reading/Review/Recitation Week	No new material	
16	May 12	Final examination		

<sup>I</sup><u>Midterm I</u>: Tuesday, 2/25, 7-9pm <sup>II</sup><u>Midterm II</u>: Tuesday, 4/8, 7-9pm <u>Final Exam</u>: Monday, 5/12, 11:30am-2:30pm

Please check on bspace for any updates or further information.