Physics 7B Syllabus, Spring 2017
Lecture 2, S. Bale

Week	Lectures	Topics	Reading	Labs
1	Jan. 17, 19	Intro to Thermal Physics, Temperature	17	---
2	Jan. 24, 26	Gases & Kinetic theory	18-19	---
3	Jan. 31, Feb. 2	Heat, Work, First law, Entropy	19-20	---
4	Feb. 7, 9	Engines, 2nd law; Electric Charge	20- 21	---
5	Feb. 14, 16	Electric force, Electric field, Electric dipoles	21	Heat engine
6	Feb. 21, 23	Electric flux, Gauss's law	22	---
7	Feb. 28, Mar. 2	Electric Potential, Capacitors	23-24	---
8	Mar. 7, 9	Capacitors, Dielectrics, Ohm's Law	24-25	Equipot. lines & E. field
9	Mar. 14, 16	Resistivity, AC power	25-26	---
10	Mar. 21, 23	DC circuits, Magnetic force	26-27	DC circuits
---	---	SPRING BREAK	---	---
11	Apr. 4, 6	Magnetic forces, Magnetic torques, Currents, Ampere's Law	27-28	---
12	Apr. 11, 13	Biot-Savart Law, Magnetic materials, Induced EMF	28-29	---
13	Apr. 18, 20	EMF and Faraday's Law	29	e/M lab
14	Apr. 25, 27	Inductance, Inductors, DC circuits w/ inductors, and Maxwell Equations	30-31	O-scope & time dep.
15	*May 2, 4*	*Reading/Review/Recitation Week*	---	---
	May 8	*Final examination*	---	---

Midterm I: February 21, 7-9pm

Midterm II: April 4, 7-9pm

Final Exam: May 8, 11:30am-2:30pm

Sections covered in D. C. Giancoli, *Physics for Scientists and Engineers*, Volume 2 (custom edition for the University of California, Berkeley), 4th edition:

17.1 – 17.9
18.1 – 18.7
19.1 – 19.10
20.1 – 20.9
21.1 – 21.11
22.1 – 22.4
23.1 – 23.8
24.1 – 24.6
25.1 – 25.9
26.1 – 26.7
27.1 – 27.9
28.1 – 28.10
29.1 – 29.7
30.1 – 30.5
31.1 – 31.3