

Physics 7B Syllabus, Fall 2019

Prof. Birgeneau, Lecture 1, 1 LeConte Hall (M, W, F 11:00am – 12:00pm)

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

*Holidays – no class:

September 2 – Labor Day

November 11- Veterans Day

November 27, 28 – Thanksgiving Break

Sections covered per chapter:

Ch 17.1 – 17.9

Ch 18.1 – 18.3, 18.5-18.6

Ch 19.1 – 19.10

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 28.1 – 28.7

Ch 29.1 – 29.4, 29.6 – 29.7

Ch 30.1 – 30.5

Exam Schedule

MIDTERM 1

Review Sessions 1:

Review Sessions 2:

Midterm 1, Lecture 3:

MIDTERM 2

Review Sessions 1:

Review Sessions 2:

Midterm 2, Lecture 3:

FINAL EXAM

Please check on bCourses for any updates or further information.