

Physics 7B Syllabus, Fall 2018

Lecture 1, Birgeneau, 1 LeConte Hall (MWF, 11:00am-12:00pm)

<u>Week</u>	<u>Dates</u>	<u>Topics</u>	<u>Reading</u>	<u>Labs/Exams</u>
1	8/22, 8/24	Intro, thermal expansion, ideal gas law	17	
2	8/27, 8/29, 8/31	Kinetic theory, phase diagrams, First law	18	
3*	9/5, 9/7	First law, Specific heat, adiabatic processes	19	
4	9/10, 9/12, 9/14	Second Law, Heat Engines	20	
5	9/17, 9/19, 9/21	Electric charge, force, field, dipole	21	Heat engine
6	9/24, 9/26, 9/28	Electric flux, Gauss's law	22	Midterm 1
7	10/1, 10/3, 10/5	Electric Potential	23	
8	10/8, 10/10, 10/12	Capacitors	24	Equipot. lines & E. field
9	10/15, 10/17, 10/19	Current, Ohm's law, resistors	25 – 26	
10	10/22, 10/24, 10/26	DC circuit, Magnetic force	26 - 27	DC circuits
11	10/29, 10/31, 11/2	Magnetic dipole, torque, Hall effect	27	Midterm 2
12	11/5, 11/7, 11/9	Ampère's law	28	
13*	11/14, 11/16	Biot Savart Law, Electromagnetic induction	28 - 29	e/M
14*	11/19	Inductance, Faraday's law	29	
15	11/26, 11/28, 11/30	LR and LC circuits; Maxwell's equations	30	O-scope & time dep. circuits
16	12/3 – 12/7	<i>Reading/Review/Recitation Week</i>	<i>No new material</i>	
17	12/10	Final examination	---	---

*Holidays – no class:

September 3 – Labor Day

November 12 – Veterans Day

November 21 – Non-Instructional Day

November 22-23 – 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: Saturday, September 22, 2:00 – 4:00 PM, 1, 4 LeConte
Sunday, September 23, 2:00 – 4:00 PM, 1, 4 LeConte
Exam: Monday, September 24, 7:00 – 9:00 PM, 1, 2 LeConte & 100 GPBB

Midterm 2: Review Sessions: Saturday, October 27, 2:00 – 4:00 PM, 1, 4 LeConte
Sunday, October 28, 2:00 – 4:00 PM, 1, 4 LeConte
Exam: Monday, October 29, 7:00 – 9:00 PM, 1, 2 LeConte & Kroe 160/155

Final Exam: Monday, December 10, 11:30 – 2:30 PM, Room TBD

Please check on bCourses for any updates or further information.