

Physics 7B Syllabus, Fall 2018

Prof. A. Lanzara - Lecture 2, 1 LeConte Hall (T Th, 9:30am - 11:00pm)

<u>Week</u>	<u>Dates</u>	<u>Topics</u>	<u>Reading</u>	<u>Labs/Exams</u>
1	8/23	Intro, thermal expansion, ideal gas law	17	
2	8/28, 8/30	Kinetic theory, phase diagrams, First law	18	
3	9/4, 9/6	First law, Specific heat, adiabatic processes	19	
4	9/11, 9/13	Second Law, Heat Engines	20	
5	9/18, 9/20	Electric charge, force, field, dipole	21	Heat engine
6	9/25, 9/27	Electric flux, Gauss's law	22	Midterm 1
7	10/2, 10/4	Electric Potential	23	
8	10/9, 10/11	Capacitors	24	Equipot. lines & E. field
9	10/16, 10/18	Current, Ohm's law, resistors	25 – 26	
10	10/23, 10/25	DC circuit, Magnetic force	26 - 27	DC circuits
11	10/30, 11/1	Magnetic dipole, torque, Hall effect	27	Midterm 2
12	11/6, 11/8	Ampère's law	28	
13	11/13, 11/15	Biot Savart Law, Electromagnetic induction	28 - 29	e/M
14*	11/20	Inductance, Faraday's law	29	
15	11/27, 11/29	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	12/11	Final examination	---	---

*Holidays – no class:

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 1: Saturday September 22, 2:00 – 4:00 PM, Le Conte 1, 4
Review Sessions 2: Sunday September 23, 2:00 – 4:00 PM, Le Conte 1, 4

Midterm 1, Lecture 2: Tuesday, September 25, 8 – 10PM - 105, 1 Pimental

MIDTERM 2

Review Sessions 1: Saturday, October 27, 2:00 – 4:00 PM, Le Conte 1,4
Review Sessions 1: Sunday, October 28, 2:00 – 4:00 PM, Le Conte 1,4

Midterm 2, Lecture 2: Tuesday, October 30, 7:00 – 9:00 PM – 1, 2, 4 Le Conte Hall

FINAL EXAM

Tuesday, December 11, 3:00 – 6:00 PM, Room TBA

Please check on bCourses for any updates or further information.