

Physics 7B Syllabus, Fall 2019

Prof. A. Lanzara - Lecture 3, 1 LeConte Hall (T Th, 11:00am - 12:30am)

<u>Week</u>	<u>Dates</u>	<u>Topics</u>	<u>Reading</u>	<u>Labs/Exams</u>
1	8/29	Intro, thermal expansion, ideal gas law	17	
2	9/3, 9/5	Kinetic theory, phase diagrams, First law	18	
3	9/10, 9/12	First law, Specific heat, adiabatic processes	19	
4	9/17, 9/19	Second Law, Heat Engines	20	
5	9/24, 9/26	Electric charge, force, field, dipole	21	Heat engine
6	10/1, 10/3	Electric flux, Gauss's law	22	Midterm 1
7	10/8, 10/10	Electric Potential	23	
8	10/15, 10/17	Capacitors	24	Equipot. lines & E. field
9	10/22, 10/24	Current, Ohm's law, resistors	25 – 26	
10	10/29, 10/31	DC circuit, Magnetic force	26 - 27	DC circuits
11	11/5, 11/7	Magnetic dipole, torque, Hall effect	27	Midterm 2
12	11/12, 11/14	Ampère's law	28	
13	11/19, 11/21	Biot Savart Law, Electromagnetic induction	28 - 29	e/M
14*	11/26	Inductance, Faraday's law	29	
15	12/3, 12/5	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	12/18	<i>Final examination</i>	---	---

*Holidays – no class:

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: TBA
Review Sessions 2: TBA

Midterm 1, Lecture 3: Tuesday, October 1, 8 – 10PM, KROE 160, MOFF 101, NGAT 105, TANH 180

MIDTERM 2

Review Sessions 1: TBA
Review Sessions 1: TBA

Midterm 2, Lecture 3: Tuesday, November 5, 7:00 – 9:00PM, EVANS 60, GPBB 100, MULF 159

FINAL EXAM

Wednesday, December 18, 8:00 – 11:00 AM, Room TBA

Please check on bCourses for any updates or further information.