

Syllabus 8B - 1, Spring 2015

Week	Week begins	Topics	Chapters	Labs	Worksheets	Quizzes
1	Jan. 19	Intro / Electric Charge, Force, and Field	20		Review 8A	
2	Jan. 26	El charge, force, field. Gauss's Law	20; 21		#1, #2	
3	Feb. 02	Electric Potential; Currents; Circuits	22; 24; 25		#3, #4	Quiz #1
4	Feb.09	Currents; Circuits; El energy & capacity; Magnetism	24; 25; 23; 26	DC Circuits	#6, #7, #5	
5	Feb. 16 Mon	Magnetic Fields; Electromagnetic Induction	26; 27	Magnets	#8	Quiz #2
6	Feb. 23	Electromagnetic Induction + transformers (ch. 28.6)	27	Motors/gen	#9	
7	Mar. 2	Mon. Maxwell's Equations & EM Waves	29	No lab - MT	Review Ch. 20 - 25	
		Wed. Review. <i>MT 1 - Chapters 20 - 25. MT 1, Weds. evening, Mar. 4, Time, place TBD</i>				
		Fri. Maxwell's Eq. and EM waves	29		#11	
8	Mar. 09	Special Relativity; Reflection Refraction	33; 30	Light	#16, #12, #13	
9	Mar. 16	Optics: rays & opt instr; Interference and Diffraction	31; 32	Mirrors/lens	#14, #15	Quiz #3
	Mar. 23	Spring Break				
10	Mar. 30	Particles & Waves	34	Optical Instruments	#17	
11	Apr. 6	Quantum mechanics	35	Diffraction	#18	Quiz #4
12	Apr. 13	M - Quantum mechanics	35, 36	No Lab - MT2		
		W - Review. <i>MT 2 - Chapters 26 - 33 MT 2, Wed. evening Apr. 15, Time, place TBD</i>				
		F - Atomic physics				
13	Apr. 20	Atomic; Solids	36; 37	Atomic spectra	#19	
14	Apr. 27	Nuclear & review	38	Radioactivity	#19	Quiz #5
15	4-May	<i>Reading / Review / Recitation week</i>				
16	11-May	<i>Final Exam, Chapters 34 - 39 & all Final: Weds, May 13, 7 - 10 PM, Place TBD</i>				

Worksheets

#1	Charge and Coulomb's Law	#11	EM Waves
#2	Electric Fields	#12	Reflection and Refraction
#3	Gauss's Law and Electric Fields	#13	Mirrors and Lenses
#4	Electric Potential	#14	Optical Instruments
#5	Capacitance	#15	Interference & Diffraction
#6	Current, Resistance and Ohm's Law	#16	Special Relativity
#7	DC Circuits	#17	Modern Physics
#8	Magnetic Forces and Magnetic Fields	#18	Atomic Physics
#9	Induction	#19	Nuclear Physics
#10	AC Circuits	#20	Quantum Physics

|