

Schedule PHY 272 Fall 2009 (December 1, 2009)

Date	To read	Topic	HW
Week 1		The Electric Field (charges)	
1-Sep			
3-Sep		Introduction to Fields	
4-Sep	21.1-2	Electric Charge	
Week 2		The Electric Field	
8-Sep	21.3	Coulomb's Law	
10-Sep	21.4-5	Electric Field	
11-Sep	21 6-7	Motion of Charges	HW 1
Week 3		Continuous Charge Distribution	
15-Sep	22 1-3	Gauss's Law	
17-Sep	22 4-5	Charge and Field at Conductor Surfaces	
18-Sep	22 6	Gauss from Coulomb	HW 2
Week 4		Electric Potential	
22-Sep	23 1-2	Potential Difference	
24-Sep	23 3	Electric field from the Potential	
25-Sep	23 4	V for continuous charge distribution	HW 3
Week 5		Electric Potential	
29-Sep	23 5	Equipotentials	
1-Oct		<i>synthesis/review</i>	
2-Oct		First Exam (Ch. 21 and 22)	HW 4
Week 6		Electrostatic Energy	
6-Oct	24 1-3	Potential energy and Capacitance	
8-Oct	24 4	Circuits	
9-Oct	24 5-6	Dielectrics	HW 5
Week 7		Electric Currents	
13-Oct	25 1-2	Currents and Ohm's Law	
15-Oct	25 3-5	Circuits	
16-Oct	25 6	RC circuits	HW 6
Week 8		Magnetic Field	
20-Oct	26 1	Magnetic Force	
22-Oct	26 2	Charge in a magnetic field	
23-Oct	26 3	Torques on Currents loops	HW 7
Week 9		Magnetic Field	
27-Oct		<i>synthesis/review</i>	
29-Oct		Second Exam (Ch. 23, to 26)	HW 8
30-Oct	27 1-2,4	Biot Savart law, Ampere's Law	
Week 11		Magnetic Induction	
3-Nov	28 1-2	Magnetic Flux and Faraday Law	
5-Nov	28 3-4	Lenz Law, Motional EMF	
6-Nov	28 6	Inductance	HW 9
Week 12		Circuits	
10-Nov	29 1-3	AC Circuits	
12-Nov	28 8, 29 5	LR, LC with generators	
13-Nov	29 6	Resonance RLC	HW 10
Week 13		Maxwell's Equations	
17-Nov		<i>review</i>	
19-Nov		Third Exam (Ch. 27 to 29)	
20-Nov	30 1-2	Maxwell's Equations	HW 11
Week 14		Electromagnetic Waves	
24-Nov	30 1-2	Maxwell's Equations	
26-Nov		Thanksgiving	
27-Nov		Thanksgiving	
Week 15		Optics	
1-Dec	30 3-4	Electromagnetic Radiation	
3-Dec	31 7-8	Polarization, Reflection, and Refraction	
4-Dec	32 1-2	Mirrors and lenses	HW 12
Week 16		Interference and Diffraction	
8-Dec		Prof. Phillips Lecture	
10-Dec		<i>review lab visits</i>	
11-Dec		Outgoing review	
Week 17			

FINAL EXAM, Dec 18 1:30pm-3:30pm (tentative)

