

**PHYS-272 SPRING 2012---MORSE---DETAILED COURSE OUTLINE---version 2.0 (10/30/11)**

<i>week</i>	<i>day</i>	<i>2010 Date</i>	<i>Lec #</i>	<i>Reading due</i>	<i>Lecture</i>	<i>Mastering Physics problem set assigned</i>	<i>HW due</i>
1	Tues	Jan 10	#1	21.1-3	Charges, conductors, Coulombs Law	#1: Ch 21: Electric Charge & Field	
	Thurs	Jan 12	# 2	21.4-7	Electric Fields		
2	Tues	Jan 17	# 3	22.1-2	Electric Flux	#2: Ch 22: Gauss' law	#1
	Thurs	Jan 19	# 4	22.3-5	Gauss' Law		
3	Tues	Jan 24	# 5	23.1-2	Potential Energy	#3: Ch 23: Electric Potential	#2
	Thurs	Jan 26	# 6	23.3-5	Electric Potential		
4	Tues	Jan 31	# 7	24.1-3	Capacitance	#4 Ch 24: Capacitance, Dielectrics	#3
	Thurs	Feb 02	# 8	24.4-6	Dielectrics		
5	Tues	Feb 07	# 9	25.1-3	Currents-Resistance	#5: Ch 25: Currents, Resistance	#4
	Thurs	Feb 09	#10	25.4-6	Power - Energy		
6**	Tues	Feb 14	#11	26.1-2	DC Circuits	#6 Ch 26: DC circuits	#5
	Thurs	Feb 16			<b>Exam I (inclass) Lectures 1-10</b>		
7	Tues	Feb 21	# 12	26.3-5	Kirchoff Circuit Rules	#7 Ch 26, Kirchoff's Rules, Ch 27: Magnetic Fields	#6
	Thurs	Feb 23	# 13	27.1-4	Magnetic Fields		
8	Tues	Feb 28	# 14	27.5-7	Magnetic Forces	#8 Ch 27, Magnetic Forces, Ch 28: Sources of Magnetic Fields	#7
	Thurs	Mar 01	# 15	28.1-4	Sources of Magnetic Fields		
9	Tues	Mar 06	# 16	28.5-7	Ampere's Law--Applications	#9 Ch 28, Ampere's Law; Ch 29: Electromagnetic Induction	#8
	Thurs	Mar 08	#17	29.1-3	Electromagnetic Induction		
10	Tues	Mar 13	#18	29.4-7	Maxwell's equations	#10 Ch 29: Maxwell, Ch 30: Inductance	#9
	Thurs	Mar 15	#19	30.1-3	Inductance		
11	Tues	Mar 20	#20	30.4-6	Inductors	#11 Ch 30, Inductors; Ch 31, AC Circuits, Reactance	#10
	Thurs	Mar 22	#21	31.1-3	AC Circuits--Reactance		
	Tues	Mar 27			Spring Break Mar 26-30		
	Thurs	Mar 29					
12**	Tues	Apr 03	#22	31.4-6	AC Power--Resonance	#12 Ch 31: AC Power--Resonance, Transformers	#11
	Thurs	Apr 05			<b>Exam II (inclass) Lectures 11-20</b>		
13	Tues	Apr 10	#23	32.1-3	Electromagnetic Waves	#13 Ch 32, EM Waves, Wave Energy & Momentum	#12
	Thurs	Apr 12	#24	32.4-6	EM Waves, Energy, Momentum		
14	Tues	Apr 17	#25	33.1-4	Light--Reflection and Refraction	#14 Ch 33, Light: Reflection, Refraction, Polarization, Huygens	#13
	Thurs	Apr 19	#26	33.5-7	Polarization--Huygen's Principle		
15	Tues	Apr 24	#27	34.1-3	Reflection from Mirrors	#15 Ch 34, Reflection & Refraction from Mirrors and Lenses	#14
	Thurs	Apr 26	#28	34.4-6	Reflection-Refraction from Lenses		
16*	Tues	May 01	#29	34.7-8	Cameras, Eyes, Magnifiers	#16 Ch 34, Optical Instruments, Final Study Questions	#15
17	Tues	May 08			<b>Final Exam (in class) 9:45--11:45</b>	66% Ch-31-34, Lec 21-29; 33% Ch-21-30 Lec 1-20	#16
*					*Only one lecture this week		
**					**Exam Week --Exam on Thursday		