

Lecture Topics Ph 109 (FALL 1997)			
revised August 13, 1997			
WK	DATE	Lect Topic	HW assignment LAB
1	3-Sep	Introduction	no lab
2	8-Sep	Ch. 1: Periodic Motion: displacement, T, f...	Principles - loudspeaker etc
	10-Sep	SHM, damping, res. curve (?)	
3	15-Sep	Ch. 2: superposition	Oscilloscope, hearing
	17-Sep	beats, beat frequency, phase shift	
4	22-Sep	Ch. 3: waves and pulses, speed of sound	Harmonic Osc. resonance
	24-Sep	standing waves	
5	29-Sep	Ch 6: Strings	Strings
	1-Oct	Ch 7: Pipes	
6	6-Oct	First Exam	Pipes
	8-Oct	Ch. 8: Fourier Analysis	
7	13-Oct	Ch. 9: Scales - intervals	Sound analysis
	15-Oct	Scales, harmony	
8	20-Oct	Ch. 10: Musical Instruments	Scales
	22-Oct	Ch. 12 Mirrors, refraction	
9	27-Oct	Ch 12: refraction; Ch 13: lenses	Musical Instruments
	29-Oct	Ch 13: Lenses, images, lens formula	
10	3-Nov	Second Exam	Lenses
	5-Nov	Ch 13: magnification	
11	10-Nov	CH. 14: Cameras. f-stop	Photography 1
	12-Nov	film speed	
12	17-Nov	Ch. 11: Nature of light	Photography 2
	19-Nov	Young's expl.	
13	24-Nov	Ch. 15: Colorimetry: RGB, hue, chroma	no lab
	26-Nov	color triangle; pigments and filters	
		Thanksgiving week	
14	1-Dec	other possible topics: color film (reversal process);	Additive color mixing
	3-Dec	color TV; the sensors: eye and ear differences	
15	8-Dec	and limitations, authentication, age determination etc	no lab
	10-Dec	Thrd Exam	