

Physics 273 - Fall 2019 - Prof. Hall					
Week	Date	Lecture Topics	Suggested reading:		
			David Morin	Homework Due	PHYS 273H
1	27-Aug	Course introduction			
	29-Aug	Simple Harmonic Oscillator	Ch. 1		
LZ	30-Aug	Small oscillations	Ch. 1		
2	3-Sep	Complex exponentials	Ch. 1	1	
	5-Sep	Damped Oscillator, energy, Q factor	Ch. 1		
*	6-Sep	Damped Oscillator, energy, Q factor	Ch. 1	2	
3	10-Sep	Forced oscillator, resonance	Ch. 1		
	12-Sep	Forced oscillator, resonance	Ch. 1		
LZ	13-Sep	exam review	Ch. 1	3	
4	17-Sep	Exam 1	Ch. 1		
	19-Sep	AC circuits	Ch. 1		
*	20-Sep	AC circuits	Ch. 1		proposals due
5	24-Sep	AC circuits	Ch. 1		meeting
	26-Sep	Two coupled oscillators	Ch. 2		
LZ	27-Sep	Two coupled oscillators	Ch. 2	4	
6	1-Oct	Two coupled oscillators	Ch. 2		
	3-Oct	Loaded string	Ch. 2		
*	4-Oct	Loaded string	Ch. 2	5	
7	8-Oct	More on normal modes & initial conditions	Ch. 2		
	10-Oct	Wave Equation	Ch. 2		
LZ	11-Oct	Wave Equation	Ch. 2	6	
8	15-Oct	Fourier series	Ch. 3		
	17-Oct	Fourier series	Ch. 3		
	18-Oct	Fourier transform	Ch. 3	7	
9	22-Oct	Fourier transform	Ch. 3		meeting
	24-Oct	Travelling waves	Ch. 4		
LZ	25-Oct	exam review	Ch. 4	8	
10	29-Oct	Exam 2	Ch. 4		
	31-Oct	Mechanical impedance	Ch. 4		
*	1-Nov	Transmission and reflection	Ch. 4		
11	5-Nov	Energy transport	Ch. 4		
	7-Nov	Transmission lines	Ch. 8.1		
LZ	8-Nov	Dispersion	Ch. 6	9	
12	12-Nov	Group velocity, pulse propagation	Ch. 6		
	14-Nov	Maxwell's Eqs. & EM waves	Ch. 8		
*	15-Nov	Maxwell's Eqs. & EM waves	Ch. 8	10	
13	19-Nov	Differential vector calculus	Ch. 8		meeting
	21-Nov	Maxwell's Eqs. In differential form	Ch. 8		
LZ	22-Nov	EM waves in vacuum	Ch. 8	11	
14	26-Nov	EM waves in dielectrics	Ch. 8		deliverables due
	28-Nov	Thanksgiving holiday - no class			
*	29-Nov	Thanksgiving holiday - no class			
15	3-Dec	Interference & Diffraction	Ch. 9		
	5-Dec	Interference & Diffraction	Ch. 9		
LZ	6-Dec	Final exam review	Ch. 9	12	
16	16-Dec	Final Exam - 1:30 to 3:30 pm in Phys 1410			