

Tentative Course Schedule	Fall 2022	PHYS 2217			
Week	Date	Topic	Subtopics	Reading	Tentative Assignment Due Dates
1	Aug 22	Coulombs's law and Charges	Introduction		
	Aug 24		Clolumb's law, Symmetry		
	Aug 26		Continuous Charge distributions	1.1-4	
2	Aug 29	Electric Flux and Gauss's Law	electric potential energy	1.5-8	
	Aug 31		electric flux, Gauss's law	1.9-13	
	Sept 2		Electric Potential	1.15-2.4	PS1: 9/2
3	Sept 5	Potential of a Dipole	no class		
	Sept 7		Electric dipole	2.5-2.7	
	Sept 9		Divergence	2.8-10	PS2: 9/9
4	Sept 12	Conductors	Curl	2.13-17	
	Sept 14		Conductors	2.12, 3.1-3	
	Sept 16		Laplace's equation	3.4	PS3: 9/16
5	Sept 19	Capacitors and Current Density	Capacitive Coefficients	3.5-6	
	Sept 21		Energy in a Capacitor	3.7-9	
	Sept 23		Current density	4.1-6	PS4: 9/23
6	Sept 26	Circuits	Circuit analysis	4.7-10	
	Sept 28		Caps in a circuit, magnetostatics	4.11-12	
	Sept 30		Prelim 1		PS5: 9/30
7	Oct 3	Moving Charges and Relativity	Fields of moving charges	5.1-4	
	Oct 5		special relativity	5.5-6	
	Oct 7		special relativity	5.7-9	PS6: 10/7
8	Oct 10	Magnetism and Relativistic Transformations	No class		
	Oct 12		Ampere's law	6.1-2	
	Oct 14		Vector potential, transformation of B	6.3-8	
9	Oct 17	Biot-Savart Law and Induction	Biot-Savart Law	6.9-10	
	Oct 19		Electromagnetic Induction	7.1-3	
	Oct 21		Electromotive Force	7.4-5	PS7: 10/21
10	Oct 24	Inductance and Circuits	Induction	7.6	
	Oct 26		Mututal Inductance	7.7-8	
	Oct 28		self-inductancev, RL circuits	7.9-11	PS8: 10/28
11	Oct 31	Circuits	LC Circuits, RLC circuits	8.1-5	
	Nov 2		Prelim 2		
	Nov 4		Circuits, Ampere conundrum	8.6-7	
12	Nov 7	Plane Waves and Electromagnetism	Displacement current	9.1-2	
	Nov 9		maxwell's equations	8.3-5	
	Nov 11		Electromagnetic waves	9.6-8	PS9: 11/11
13	Nov 14	Dielectrics and Magnetic Materials	Dielectrics	10-1-2009	
	Nov 16		EM wave dielectrics	10.10-16	
	Nov 18		magnetic materials	11.1-12	PS10: 11/18
14	Nov 21	Review	Virtual Class if requested		
	Nov 23		No class		
	Nov 25		No class		
15	Nov 28	Review			
	Nov 30	Review			
	Dec 2	Review			PS11: 12/2
16	Dec 5	Last day of class			
	Study Period				
	TBD				Final Exam