

Physics 1408 General Physics Homework

Spring 2001

Date	Lecture Topic	Problems	Due Date
Jan 16	Introduction; Electrical Force	CQ18; 9,10 14	Jan 25
Jan 18	Electric Field	19, 20, 27 32	Jan 25
Jan 23	Gauss' Law; Electric Potential	Ch. 15: 38, 41, 43, 47	Feb 1
Jan 25	Electric Potential	Ch. 16: 2, 7, 9, 15	Feb 1
Jan 30	Capacitance and Capacitors	Ch. 16: 19, 23, 29, 36, 39	Feb 8
Feb 1	Electric Current and Power; Real Batteries	Ch .17: CQ3; 14, 33, 47, 49	Feb 8
Feb 6	Direct Current Circuits	Ch 18: 5, 6, 7, 11, 22	Feb 15
Feb 8	Kirchhoff's Law	Ch 18: 16, 17, 23	Feb 15
Feb 9	Test 1		
Feb 13	The Magnetic Field	Ch 19: CQ12; 2, 3, 7, 11	Feb 22
Feb 15	Force on a Current/Charge	Ch 19; 14, 21, 32, 33	Feb 22
Feb 20	Ampere's Theorem; Solenoid	Ch 19: 38, 39(b), 43, 47, 49(b)	
Feb 22	Electromagnetic Induction	Ch 20: CQ2; 3, 7, 11, 14.	Mar 1
Feb 27	Applications of Faraday's Law	Ch 20: 17, 21, 22, 31	Mar 8
Mar 1	Energy Stored in a Magnetic Field	Ch 20: 33, 37, 43, 55	Mar 8
Mar 6	Alternating Current Circuits; RLC Circuit	Ch 21: 5, 9, 13, 19, 23	Mar 22
Mar 8	RLC Circuits; Resonance; Transformers	Ch 21: 26, 29, 30, 37	Mar 22
Mar 9	Test 2		
Mar 13	Spring Break		
Mar 15	Spring Break		
Mar 20	EM Waves, Reflection and Refraction	Ch 21: 41, 45, 57, 58. Ch 22: 5, 11	
Mar 22	Reflection/Refraction; Internal Reflection	Ch 22: 17, 28, 31, 37	Mar 29
Mar 27	Spherical Mirrors	Ch 22: CQ2; Ch 23: 6, 9, 13, 19	
Mar 29	Thin Lenses	Ch 23: 30, 34, 39, 42	Apr 5

DATE	LECTURE TOPIC	Problems	Due Date
Apr 3	Interference of Light	Ch 24: CQ6, 3, 5,8, 13, 20	Apr 10
Apr 5	Diffraction of Light	Ch 24: 16, 17, 27, 32	Apr 10
Apr 10	Polarization of Light; Optical Instruments	Ch 24: 35, 39, 40. Ch 25: 18, 21, 25, 46	
Apr 12	Relativity	Ch 26: 3, 4, 6, 7, 14	Apr 17
Apr 13	Test 3		
Apr 17	Relativity; Quantum Nature of Light	Ch 26: 18, 25, 26, 29, 43. Ch 27: 7, 13, 17	
Apr 19	Wave Particle Duality	Ch 27: 29, 37, 41	Apr 26
Apr 24	Bohr Model of Hydrogen; Radioactivity	Ch 28: 13, 14, 17, 18. Ch 29: 10, 12, 15	
Apr 26	Radioactivity	Ch 29: 17, 18, 20, 24, 25, 31	May 3
May 1	Test 4		

FINAL EXAMINATION: Thursday, 10 May '01, 8:00 AM – 11:00 AM.