

# Physics 1408 General Physics Syllabus Spring 2001

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Office hours: Monday, 2:00 – 4:00 PM. Also by appointment.

DATE	LECTURE TOPIC	READING
Jan 16	Introduction; Electrical Force	15.1 –15.3
Jan 18	Electric Field	15.4-15.7
Jan 23	Gauss' Law; Electric Potential	15.10, 16.1-16.4
Jan 25	Electric Potential	16.1-16.4; 16.6-16.8
Jan 30	Capacitance and Capacitors, Electrical Energy	16.6 –16.10.
Feb 1	Electric Current and Power; Real Batteries	17.1, 17.3, 17.4, 17.7; 18.1, 18.2
Feb 6	Direct Current Circuits	18.3
Feb 8	Kirchhoff's Law	18.4
Feb 9	<b>Test 1</b>	
Feb 13	Magnetic Field	19.1-19.4
Feb 15	Force on a Current/Charge	19.5-19.9
Feb 20	Ampere's Theorem; Solenoid	19.10-19.12
Feb 22	Electromagnetic Induction	20.1-20.4
Feb 27	Applications of Faraday's Law	20.5-20.6
Mar 1	Energy Stored in a Magnetic Field	20.7-20.9
Mar 6	Alternating Current Circuits; RLC Circuit	21.1-21.5
Mar 8	RLC Circuits; Resonance; Transformers	21.4-21.7
Mar 9	<b>Test 2</b>	
Mar 13	<b>Spring Break</b>	
Mar 15	<b>Spring Break</b>	
Mar 20	EM Waves; Reflection and Refraction	21.8-21.12; 22.1-22.5
Mar 22	Internal Reflection	22.5-22.9
Mar 27	Spherical Mirrors	23.1-23.3
Mar 29	Thin Lenses	23.6-23.7

<b>DATE</b>	<b>LECTURE TOPIC</b>	<b>READING</b>
Apr 3	Interference of Light	24.1-24.4
Apr 5	Diffraction of Light	24.5-24.6
Apr 10	Polarization of Light; Optical Instruments	24.7; 25.1, 25.3-25.5
Apr 12	Relativity	26.1-26.6
Apr 13	<b>Test 3</b>	
Apr 17	Relativity; Quantum Nature of Light	26.7-26.8; 27.1-27.3
Apr 19	Wave Particle Duality	27.4-27.9
Apr 24	Bohr Model of Hydrogen; Radioactivity	28.1-28.3; 29.1-29.3
Apr 26	Radioactivity	29.4-29.5
May 1	<b>Test 4</b>	

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