

# Physics 2220, Fall 2011

(Readings from Knight, 2nd ed.)

		Monday	Tuesday	Wednesday	Thursday	Friday
Aug.	22	Electric Charge Sections 26.1-26.3	23 Coulomb's Law 26.4	24 Electric Fields 26.5-27.2	25 Fields of Lines and Planes 27.3-28.1	26 Problem Set and Quiz #1
	29	Flux and Gauss's Law 28.2-28.4	30 Applications of Gauss's Law 28.5-28.6	31 Electric Potential Energy 29.1-29.3	1 Problem Set and Quiz #2	2 Voltage (Elec. Potential) 29.4-29.7
September	5	Labor Day	6 Applications of Voltage 30.1-30.4, 38.1-38.5	7 Capacitors 30.5	8 Problem Set and Quiz #3	9 Energy in the Electric Field 30.6-30.7
	12	<b>Test</b> (problem sets 1-3)	13 Electric Current 31.1-31.3	14 Resistance and Ohm's Law 31.4-31.5, 32.1	15 Electric Power 32.3	16 Problem Set and Quiz #4
	19	Kirchhoff's Rules 32.2, 32.4-32.6	20 DC Circuits 32.7-32.9	21 Magnetism 33.1-33.2	22 Problem Set and Quiz #5	23 Magnetic Forces 33.7-33.9
	26	Sources of the Magnetic Field 33.3-33.5	27 Ampere's Law 33.6	28 Problem Set and Quiz #6	29 More about Magnetism 33.10	30 <b>Test</b> (problem sets 4-6)
October	3	Motional EMF 34.1-34.3	4 Faraday's Law 34.4-34.7	5 Inductance 34.8	6 Problem Set and Quiz #7	7 RL Circuits 34.10
	10	AC Circuits 34.9, Ch. 36	11 Maxwell's Equations 35.1-35.4	12 Electromagnetic Waves 35.5-35.6	13 Problem Set and Quiz #8	14 Polarization 35.7
	17	Reflection and Refraction 23.1-23.3	18 Image Formation 23.8, 23.4	19 Lenses 23.5-23.7	20 Problem Set and Quiz #9	21 Fall Break
	24	Two-Slit Interference 22.1-22.3	25 <b>Test</b> (problem sets 7 - 9)	26 Thin Films 21.6	27 Single-Slit Diffraction 22.4-22.6	28 Applications of Physical Optics Chapter 24
November	31	Problem Set and Quiz #10	1 The Particle Nature of Light 25.3, 39.1-39.3	2 The Wave Nature of Particles 25.4, 39.4	3 Wavefunctions Chapter 40	4 Problem Set and Quiz #11
	7	Energy Quantization 25.5, 41.3-41.10	8 The Hydrogen Atom 25.1, 38.8, 39.5-39.7	9 Applications of Quantum Mech's. Chapter 42	10 Problem Set and Quiz #12	11 The Principle of Relativity 37.1-37.4
	14	<b>Test</b> (problem sets 10 - 12)	15 Time Dilation 37.5-37.6	16 Length Contraction 37.7	17 Problem Set and Quiz #13	18 The Cosmic Speed Limit 37.8
	21	Relativistic Energy 37.9-37.10	22 Properties of Nuclei 38.6-38.7, 43.1-43.4	23 Problem Set and Quiz #14	24 Thanksgiving	25 Holiday
	28	Radioactivity 43.5-43.6	29 Energy in Nuclear Reactions handout	30 Fission and Fusion handout	1 Problem Set and Quiz #15	2 Review for Final Exam

Final Exam: Wednesday, December 7, 12:30 - 2:20 p.m.