

Week		Monday	Wednesday	Friday
1	January 17-21 Lab: Review Wkst	ch16§1-3 Electric charges, insulators and conductors	ch16§4-7 Coulomb's law and electric fields	ch16§8-9 Field lines and conductors
2	January 24-28 Lab: Coulomb's Law	ch16§10 Gauss's law	ch17§1-2 Electric potential energy and potential difference	ch17§3-4 Equipotential lines and E-field lines
3	Jan 31-Feb 4 Lab: E-scope, Gauss	ch17§5-6 Point charges and dipoles	ch17§7,9 Capacitors and energy storage	ch18§1-3 Batteries and electric currents (Quiz)
4	February 7-11 Lab: Potential mapping	ch18§3-4 Ohm's law	ch18§3-5 Ohm's law and electrical power	ch19§1-2 Parallel and series circuits
5	February 14-18 Lab: Circuits	Ch19§3 Kirchoff's rules	Ch20§1 magnets and magnetic fields	Ch20§3-4 Magnetic force
6	February 21-25 Exam , No lab	Ch20§2,5 currents produce magnetic fields	Ch20§8 Ampere's law	Ch20§9-10 torque on a current loop and applications
7	Feb 28-March 4 Lab: B-field; solenoid	Ch21§1 Demonstrations of EM induction	Ch21§2 Faraday's law and lenz's law	Ch21§3 Generators and motional EMF
8	March 7-11 Lab: Cathode rays	Ch22§1 Changing $\mathbf{E} \Rightarrow \mathbf{B}$ and Maxwell's equations	Ch22§2 Electromagnetic (EM) waves and EM spectrum	Ch22§3,5 Producing EM waves and polarization (Quiz)
	March 14-18	Spring break!!!		
	March 21-25	Spring break!!!		
9	March 28-April 1 Lab: EM induction	Ch23§1,2,4 Light rays; laws of reflection and refraction	Ch23§3 Image formation by mirrors	Ch23§5-6 Total internal reflection and intro to lenses
10	April 4-8 Lab: Snell's law	Ch23§7 Image formation by lenses; ray tracing	Ch23§8 Thin lens equation	Ch24§1 Wave or particle?! Huygen's principle
11	April 11-15 Exam , No lab	Ch24§3,6 Interference –2-slit and multi-slit experiments	Ch24§4 Single slit diffraction and Poisson's spot	Ch24§8 Thin film interference
12	April 18-22 Lab: Thin lenses	Ch26§1 Galilean relativity	Ch26§2-3 Einstein's postulates and simultaneity	Ch26§4-5 Time dilation and length contraction
13	April 25-29 Lab: Interference	Ch27§1-3 Photoelectric effect	Ch27§4-5 Compton effect	Ch27§7-8 Particle waves (Quiz)
14	May 2-6 Lab: H-atom spectrum	Ch27§12 Bohr Model of hydrogen atom	Ch28§1-2 Wavefunctions and uncertainty	Ch28§3-6 Superposition, cats, and entanglement

Final exam is cumulative and is scheduled for Thursday May 12 from 2-5 pm.