

<b>Date</b>	<b>Prob Solving</b> (Try these problems BEFORE taking that day's reading quiz.)	<b>Lecture Topics</b> (Read these sections BEFORE taking that day's quiz and watching that day's video.)
8/31	Read Introductory e-mails and Policies/Procedures document. <b>LEC 1</b> posted	<ul style="list-style-type: none"> <li>• Electric Charge (19.1)</li> <li>• Insulators and Conductors (19.2)</li> </ul> <b>(NO READING QUIZ TODAY!)</b>
9/2	<b>Chapter 19</b> posted CQ 1 CE 1,2 <b>LEC 2</b> Prob 1,2,6,7	<ul style="list-style-type: none"> <li>• Coulomb's Law (19.3)</li> <li>• Electric fields (19.4)</li> </ul> <b>(Reading quizzes due NOON starting today!)</b>
9/4	<b>Chapter 19</b> posted CQ 7 CE 7,8 <b>LEC 3</b> Prob 8,9,11,12,32,35	<ul style="list-style-type: none"> <li>• Electric Field lines (19.5)</li> <li>• Charging by contact/induction (19.6)</li> <li>• Electric Flux and Gauss' law (19.7)</li> </ul>
9/7	<b>*** NO CLASS - LABOR DAY ***</b>	
9/9	<b>Chapter 19</b> posted CQ 4,5,6,11 CE 17 <b>LEC 4</b> Prob 42,43,45,49,50,51,54, 56	<ul style="list-style-type: none"> <li>• Electric Potential Energy and Electric Potential(20.1)</li> <li>• Energy Conservation (20.2)</li> </ul>
9/11	<b>*** NO CLASS - K-DAY ***</b>	
9/14	<b>Chapter 20</b> posted CQ 2 CE 1,2,3,4 <b>LEC 5</b> Prob 1,4,5,6,7,16,17	<ul style="list-style-type: none"> <li>• Electric Potential, Pt.Charges (20.3)</li> <li>• Equipotential surfaces/E-fields (20.4)</li> </ul>
9/16	<b>Chapter 20</b> posted CQ 5,8 CE 10,12 <b>LEC 6</b> Prob 21,22,23,24,36,39	<ul style="list-style-type: none"> <li>• Capacitors and dielectrics (20.5)</li> <li>• Electrical Energy Storage (20.6)</li> </ul>
9/18	<b>Chapter 20</b> posted CQ 10,13 CE 15 <b>LEC 7</b> Prob 40,42,43,48,49,54,59	<ul style="list-style-type: none"> <li>• Electric current (21.1)</li> <li>• Resistance and Ohm's law (21.2)</li> </ul>
9/21	<b>Chapter 21</b> posted CQ 1 CE 1,3,5,6 <b>LEC 8</b> Prob 2,4,8,9,10,16	<ul style="list-style-type: none"> <li>• Energy and power (21.3)</li> <li>• Resistors in Series and Parallel (21.4)</li> </ul>
9/23	<b>Chapter 21</b> posted CQ 8 CE 9,11,13 <b>LEC 9</b> Prob 19,20,23,26,31,36	<ul style="list-style-type: none"> <li>• Resistors in Series and Parallel (continued)</li> <li>• Kirchoff's Rules (21.5)</li> <li>• Ammeters and Voltmeters (21.8)</li> </ul>
9/25	<b>Chapter 21</b> posted CQ 13,15. CE 14,17 <b>LEC 10</b> Prob 33,37,38,46,47	<ul style="list-style-type: none"> <li>• Capacitors in circuits (21.6)</li> <li>• RC circuits (21.7)</li> </ul>
9/28	<b>Chapter 21</b> CQ 16,17 CE 25,26 Prob 53,54,55,56,61,62	<ul style="list-style-type: none"> <li>• <b>Exam #1 Review</b></li> </ul>
9/30	<b>EXAM #1 (Time/Location TBD)</b>	
10/2	<b>Exam 1 Return/Review</b> posted <b>LEC 11</b>	<ul style="list-style-type: none"> <li>• Magnetic fields (22.1)</li> <li>• Mag. force on moving charges(22.2)</li> <li>• Motion of particles-mag field (22.3)</li> </ul>

<b>10/5</b>	<b>Chapter 22</b> CQ 1,2,3 CE 4 Prob 2,3,5,8,13,15	posted <b>LEC 12</b>	<ul style="list-style-type: none"> <li>• The magnetic Force on a current carrying wire (22.4)</li> <li>• Loops of current and magnetic torque (22.5)</li> <li>• Electric Currents, Magnetic Fields, and Ampere's law (22.6)</li> <li>• Current Loops and Solenoids (22.7)</li> <li>• Magnetism in Matter (22.8)</li> </ul>
<b>10/7</b>	<b>Chapter 22</b> CQ 6 CE 15,20,21 Prob 23,24,26,30,33,38,41,49	posted <b>LEC 13</b>	<ul style="list-style-type: none"> <li>• Induced emf (23.1)</li> <li>• Magnetic flux (23.2)</li> <li>• Faraday's law (23.3)</li> </ul>
<b>10/9</b>	<b>Chapter 23</b> CQ 3 CE 4,5 Prob 2,3,4,5,6,9,10,14	posted <b>LEC 14</b>	<ul style="list-style-type: none"> <li>• Lenz's Law (23.4)</li> <li>• Mechanical Work and Electrical Energy (23.5)</li> <li>• Generators and Motors (23.6)</li> </ul>
<b>10/12</b>	<b>Chapter 23</b> CQ 2,5,6,9 CE 6 Prob 18,19,25,27,29,34,36	posted <b>LEC 15</b>	<ul style="list-style-type: none"> <li>• Inductance (23.7)</li> <li>• RL circuits (2.8)</li> <li>• Energy Stored in a Mag Field (23.9)</li> <li>• Transformers (23.10)</li> </ul>
<b>10/14</b>	<b>Chapter 23</b> CQ 12 CE 12,14 Prob 39,40,45,49,56,61	posted <b>LEC 16</b>	<ul style="list-style-type: none"> <li>• AC voltages and currents (24.1)</li> <li>• Capacitors in AC circuits (24.2)</li> <li>• RC circuits (24.3)</li> </ul>
<b>10/16</b>	<b>Chapter 24</b> CQ 7 CE 1,5,6 Prob 1,4,6,9,10,19,20	posted <b>LEC 17</b>	<ul style="list-style-type: none"> <li>• Inductors in AC circuits (24.4)</li> <li>• RLC circuits (24.5)</li> <li>• Resonance (24.6)</li> </ul>
<b>10/19</b>	<b>Chapter 24</b> CQ 11 CE 9,15,16 Prob 28,29,42,43,53,54	posted <b>LEC 18</b>	<ul style="list-style-type: none"> <li>• Production/Propagation of Electromagnetic Waves (25.1-25.2)</li> <li>• The Electromagnetic Spectrum (25.3)</li> <li>• Energy and Momentum in Electromagnetic Waves (25.4)</li> <li>• Polarization (25.5)</li> </ul>
<b>10/21</b>	<b>Chapter 25</b> CQ 5,9 CE 1,6 Prob 3,9,17,26,29,44,63,64,66		<b>Exam #2 Review</b>
<b>10/23</b>	<b>EXAM #2 (Location/Time TBD)</b>		
<b>10/26</b>	Exam #2 Return and Review Posted <b>LEC 19</b>		<ul style="list-style-type: none"> <li>• The reflection of light (26.1)</li> <li>• Images in a plane mirror (26.2)</li> <li>• Spherical Mirrors (26.3)</li> <li>• Ray tracing/mirror equation (26.4)</li> </ul>
<b>10/28</b>	<b>Chapter 26</b> CQ 1,4,5 CE 3,4,7 Prob 1,4,9,11,16,21,22,28,32	posted <b>LEC 20</b>	<ul style="list-style-type: none"> <li>• The refraction of light (26.5)</li> <li>• Ray tracing for lenses (26.6)</li> <li>• The thin lens equation (26.7)</li> <li>• Dispersion and the rainbow (26.8)</li> </ul>

<b>10/30</b>	<b>Chapter 26</b> posted CQ 6,13 CE 17,21 LEC 21 Prob 37,40,43,53,57,64,66,69,77	<ul style="list-style-type: none"> <li>• Human Eye and Camera (27.1)</li> <li>• Lens combinations (27.2)</li> <li>• The Magnifying Glass(27.3)</li> <li>• The Compound Microscope (27.4)</li> <li>• Telescopes (27.5)</li> </ul>
<b>11/2</b>	<b>Chapter 27</b> posted CQ 1,6,8 CE 1,2,12 LEC 22 Prob: 1,3,17,18,24,26,47,48,53,61,63	<ul style="list-style-type: none"> <li>• Superposition and Interference (28.1)</li> <li>• Young's Two slit experiment (28.2)</li> <li>• Diffraction (28.4)</li> <li>• Diffraction Gratings (28.6)</li> </ul>
<b>11/4</b>	<b>Chapter 28</b> posted CQ 3,4 CE 3,7 LEC 23 Prob 1,5,10,12,18,37,54,56,58	<ul style="list-style-type: none"> <li>• Interference in reflected waves(28.3)</li> <li>• Resolution (28.5)</li> </ul>
<b>11/6</b>	<b>Chapter 28</b> posted CQ 8,9,11 CE 12 LEC 24 Prob: 24,28,33,46,50,53	<ul style="list-style-type: none"> <li>• Postulates of Special Relativity (29.1)</li> <li>• Time Dilation (29.2)</li> <li>• Length Contraction(29.3)</li> </ul>
<b>11/9</b>	<b>Chapter 29</b> posted CQ 2 CE 2,3,5 LEC 25 Prob: 1,2,3,6,9,10,19,21,24,27	<ul style="list-style-type: none"> <li>• Relativistic velocity addition (29.4)</li> <li>• Relativistic Momentum (29.5)</li> <li>• Relativistic Energy and <math>E=mc^2</math> (29.6)</li> <li>• The Relativistic Universe (29.7)</li> <li>• General Relativity (29.8)</li> </ul>
<b>11/11</b>	<b>Chapter 29</b> CQ 5,7 CE 10,13 Prob 31,32,36,41,47,49,52,57,64,65	<ul style="list-style-type: none"> <li>• <b>Exam 3 Review</b></li> </ul>
<b>11/13</b>	<b>Exam #3 (Location/Time TBD)</b>	
<b>11/16</b>	<b>Exam #3 Return and Review</b> Posted LEC 26	<ul style="list-style-type: none"> <li>• BlackBody Radiation/Planck's Hyp. of Quantized Energy (30.1)</li> <li>• Photons/PhotoElectric Effect (30.2)</li> </ul>
<b>11/18</b>	<b>Chapter 30</b> posted CQ 3,6 CE 1,4,5 LEC 27 Prob 2,7,8,13,14,17	<ul style="list-style-type: none"> <li>• Mass/momentum of a photon (30.3)</li> <li>• Photon Scattering and the Compton Effect (30.4)</li> </ul>
<b>11/20</b>	<b>Chapter 30</b> posted CQ 8,9 LEC 28 Prob 31,34,35,36,41,46	<ul style="list-style-type: none"> <li>• The DeBroglie Hypothesis and Wave-Particle Duality (30.5)</li> <li>• Heisenberg Uncertainty (30.6)</li> <li>• Quantum Tunnelling (30.7)</li> </ul>
<b>11/23-11/27</b>	<b>No Class – THANKSGIVING BREAK</b>	
<b>11/30</b>	<b>Chapter 30</b> posted CQ 11,12 CE 10,11 LEC 29 Prob 52,53,58,60,61,62,64	<ul style="list-style-type: none"> <li>• Early Models of the atom (31.1)</li> <li>• Atomic spectrum of hydrogen (31.2)</li> <li>• The Bohr Model of the Hydrogen Atom (31.3)</li> </ul>

		<ul style="list-style-type: none"> <li>• DeBroglie Waves and the Bohr Model (31.4)</li> </ul>
<b>12/2</b>	<b>Chapter 31</b> posted CQ 1,2,8 CE 1,8 <b>LEC30</b> Prob 1,2,7,8,13,14,18,31	<ul style="list-style-type: none"> <li>• The Quantum Mechanical Hydrogen Atom (31.5)</li> <li>• Multielectron Atoms and the Periodic Table (31.6)</li> <li>• Atomic Radiation (31.7)</li> </ul>
<b>12/4</b>	<b>Chapter 31</b> posted CQ 9,11 CE 12,16 <b>LEC 31</b> Prob 33,34,35,42,43,50,53	<ul style="list-style-type: none"> <li>• Constituents and Structure of the Nucleus (32.1)</li> <li>• Radioactivity (32.2)</li> <li>• Half-Life and Radioactive Dating (32.3)</li> </ul>
<b>12/7</b>	<b>Chapter 32</b> posted CQ 1,18 CE 1,5,8 <b>LEC 32</b> Prob 1,4,14,17,24,25,29,30	<ul style="list-style-type: none"> <li>• Nuclear Binding Energy (32.4)</li> <li>• Nuclear Fission (32.5)</li> <li>• Nuclear Fusion (32.6)</li> </ul>
<b>12/9</b>	<b>Chapter 32</b> posted CQ 9 CE 7,11 <b>LEC 33</b> Prob 37,42,44,48,50	<ul style="list-style-type: none"> <li>• Practical Applications of Nuclear Physics (32.7)</li> <li>• Elementary particles (32.8)</li> <li>• Unified Forces and Cosmology(32.9)</li> </ul>
<b>12/11</b>	<b>Chapter 32</b> CE: 13 Prob 52, 54, 56	<b>Final Exam Review</b>

Final Exam (2 hours, comprehensive) during finals week per finals schedule.  
(Time/Day to be announced/arranged.)