<table>
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<tr>
<th>Week</th>
<th>Date</th>
<th>Topic</th>
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<tr>
<td>1</td>
<td>Mar 26</td>
<td>Introduction and Review (H Atom)</td>
<td>Chp 4</td>
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<td>Mar 28</td>
<td>Harmonic oscillator, Two particle Systems</td>
<td>2.3, 5.1</td>
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<td>Apr 2</td>
<td>Beyond H: Rydberg, Alkali, and 2-electron atoms</td>
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<td>Apr 4</td>
<td>Solids, Quantum Statistical Mechanics</td>
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<td>3</td>
<td>Apr 9</td>
<td>Time-independent perturbation theory</td>
<td>6.1, 6.2</td>
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<td>Apr 11</td>
<td>Fine and hyperfine structure, Zeeman effect.</td>
<td>6.3, 6.4, 6.5</td>
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<td>4</td>
<td>Apr 16</td>
<td>Variational principle, Helium ground state</td>
<td>7.1, 7.2</td>
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<td>Apr 18</td>
<td>Hydrogen molecule ion, molecules</td>
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<td>5</td>
<td>Apr 23</td>
<td>Quantum tunneling</td>
<td>8.1, 8.2, 8.3</td>
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<td>Apr 25</td>
<td>Two-level systems, Rabi problem</td>
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<td>6</td>
<td>Apr 30</td>
<td>Emission and absorption of EM radiation</td>
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<td>May 2</td>
<td>Laser cooling, Ultracold Atoms and Applications</td>
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<td>7</td>
<td>May 7</td>
<td>Scattering and Scattering Resonances</td>
<td>11 and Notes</td>
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<td>May 9</td>
<td>Quantum computing</td>
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<td>8</td>
<td>May 14</td>
<td>In-class presentations I</td>
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<td>May 16</td>
<td>In-class presentations II</td>
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<td>In-class final exam</td>
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