

Week	Date	Topic	Text Reading
1	Mar 26	Introduction and Review (H Atom)	Chp 4
	Mar 28	Harmonic oscillator, Two particle Systems	2.3, 5.1
2	Apr 2	Beyond H: Rydberg, Alkali, and 2-electron atoms	5.2
	Apr 4	Solids, Quantum Statistical Mechanics	5.3, 5.4
3	Apr 9	Time-independent perturbation theory	6.1, 6.2
	Apr 11	Fine and hyperfine structure, Zeeman effect.	6.3, 6.4, 6.5
4	Apr 16	Variational principle, Helium ground state	7.1, 7.2
	Apr 18	Hydrogen molecule ion, molecules	7.3
5	Apr 23	Quantum tunneling	8.1, 8.2, 8.3
	Apr 25	Two-level systems, Rabi problem	9.1
6	Apr 30	Emission and absorption of EM radiation	9.2, 9.3
	May 2	Laser cooling, Ultracold Atoms and Applications	Notes
7	May 7	Scattering and Scattering Resonances	11 and Notes
	May 9	Quantum computing	Notes
8	May 14	In-class presentations I	
	May 16	In-class presentations II	
9	May 21	In-class presentations III	
	May 23	In-class presentations IV	
10	May 28	No class	
	May 30	In-class final exam	