

Topics and HW Assignments (Preliminary schedule, subject to change)

Week No.	Week Dates	Topics	Suggested Reading
1	Aug 23-25	Quantum Mechanics: Introduction	Wichmann, Ch 1
2	Aug 28-Sep 1	Quantum Mechanics: Black Body Radiation, the Photoelectric Effect, photons	Wichmann, Ch 2 Wichmann, Ch 4
3	Sep 4-8 (Sep 4: Mon - Labor Day)	Quantum Mechanics: Waves, diffraction, the uncertainty principle	Wichmann, Ch 5 Wichmann, Ch 6, Sections 1-19
4	Sep 11-15	Quantum Mechanics: Relativistic wave equation, de Broglie's theory of matter waves	Wichmann, Ch 5 Wichmann, Ch 6, Sections 1-19
5	Sep 18-Sep 22	Quantum Mechanics: The Schrodinger Equation, potential barriers	Wichmann, Ch 7
6	Sep 25-Sep 29	Quantum Mechanics Potential barriers/steps, transmission, reflection	Wichmann, Ch 7
7	Oct 2-Oct 6	Quantum Mechanics Bound states, the infinite well, the finite well, the harmonic oscillator	Wichmann, Ch 8
8	Oct 9-Oct 13	Quantum Mechanics The harmonic oscillator, 3d Schrodinger Equation NOTES: Harmonic Oscillator Notes.pdf Actions	Notes from Griffiths
9	Oct 16-Oct 20 Midterm 1, Oct 19, In class	Quantum Mechanics	Notes from French

		Angular Momentum, Hydrogen Atom, The Periodic Table NOTES: Hydrogen Notes.pdf Actions	
10	Oct 23-27	Quantum Mechanics Hydrogen Atom, The Periodic Table Statistical Mechanics	Reif, Ch1
11	Oct 30 - Nov 3	Statistical Mechanics Probabilities, Binomial Distribution, Counting Microstates, 2-state Systems	Reif, Ch2
12	Nov 6-10	Statistical Mechanics	Reif, Ch3 and Ch4
13	Nov 13-17	Statistical Mechanics	Reif, Ch5,
14	Nov 20-24 (Nov 24-25: Th/Fri Thanksgiving)	Statistical Mechanics Temperature, Entropy, Partition functions, Free energy	Reif, Ch6,
15	Nov 27-Dec 1	Statistical Mechanics The monoatomic Ideal Gas, Quantum Harmonic Oscillator, Blackbody Radiation	Reif, Ch7
16	Dec 4- 8	RRR Week	
17	Dec 11-15 Final Exam Wed. Dec. 13, 11:30-2:30PM	Stanley 106 (Note Unusual Location/Time) Exam Covers Everything we did in class. Bring Blue/Green Books No Smartphones 1 sheet of notes is allowed, 8x11, one-sided.	