

Month	Day	Lecture Topic	Reading	HW Due	Labs	Notes / Deadlines
June	22	Introduction What's wrong with Netwon?	Syllabus, 2.2-2.4, 2.7		#1 Start	
	23	The Term Paper / Form Term Paper Groups / Study Groups				
	24	de Broglie Waves Matter Waves	3.0-3.3 3.4-3.6	#1, 2	The Photo-Electric Effect	
	25	Researching Your Topic / Working in Groups / Study Groups				
	26	Uncertainty The Bohr Atom	3.7-3.9 4.3-4.5	#3, 4	#1 Due	
	29	More on the Atom Schrodinger's Equation	4.6-4.8 5.0-5.3		#2 Start --- 3.4 Group and Phase	Term Paper Proposal Due Add/Drop deadline
July	30	LaTeX and LyX / Study Groups				
	1	Working with Wavefunctions Square Wells and Tunneling	5.4-5.7 5.8-5.10	#5, 6	Velocity #2 Due July 2	
	2	Study Groups				
	3	Holiday – Independence Day (or rather, the day before) <i>A House Divided, Malice Toward None, Tear Down This Wall</i> ¹				
	6	Reflection, Harmonic Oscillators Solving the Hydrogen Atom	Reflection ² , 5.11 6.0-6.5	#7, 8	#3,4 Start	
	7	Writing an Outline / Citing References / Study Groups				
	8	More on the Hydrogen Atom Selection Rules and Zeeman	6.6-6.8 6.9-6.10	#9, 10	The Square Well and Stationary States	
	9	Study Groups				Exam #1 in testing center July 9-11 (ch 3-5)
	10	Organizing the Elements Properties of Multi-electron Atoms	7.0-7.4 7.5-7.6	#11, 12	#3,4 Due	
	13	Angular Momentum Molecules	7.7-7.8 8.0-8.4		#5,6 Start	Term Paper Outline Due
	14	Flow / Key Sentences / Study Groups				
	15	Complex Molecules, Spectra Classical Statistics	8.5, 8.8 9.0-9.3	#13, 14	Hydrogen Spectrum and Covalent Bonds	
	16	Common Mistakes / Quotes and Citations/ Study Groups				
	17	Quantum Statistics, R-Jeans Planck Radiation Law	9.4-9.5 9.6	#15,16	#5,6 Due	
	20	Einstein Coefficients, Laser More Applications of Q. Stat.	9.7-9.8, 4.9 9.9-9.10			
	21	Abstracts and Introductions / StudyGroups				
	22	Solids Van der Waals and Metal Bonds	10.0-10.3 10.4-10.5	#17, 18		
	23	Study Groups				
	24	Holiday – Pioneer Day <i>Remarks at Pioneer Day</i> ³ , <i>Memories of the Way West</i> ⁴				
	27	Band Theory, PN Junctions Superconductivity	10.6-10.7 ⁵ 10.9-10.10		#7,8 Start	Exam #2 in testing center July 27-28 (ch 6-9)
28	Study Groups					
29	The Nucleus Liquid Drop and Shell Models	11.2-11.4 11.5-11.6	#19, 20	Band Theory and Light Emitting Diodes	Term Paper Due	
30	Study Groups					
31	Review of Unit 2 Midterm		#21, 22	#7,8 Due	Peer Review Due Aug 1	
Aug	3	Meson Theory, Radioactivity Half Life, Radioactive Series	11.7, 12.0-12.1 12.2-12.3			
	4	Term Paper Presentations / Study Groups				
	5	Decay Mechanisms Nuclear Reactions	12.4-12.6 12.7-12.8	#23, 24		
	6	Term Paper Presentations / Study Groups				
	7	Fission Fusion	12.9-12.10 12.11-12.12	#25, 26		
	10	Elementary Particles Quantum Numbers and Quarks	13.0-13.3 13.4-13.5	#27		Final Term Paper Due
12		FINAL EXAM	Wednesday 1:00 p.m. - 2:50 p.m.			FINAL EXAM

1 – Supplemental reading material available at <http://www.celebrateboston.com/speeches/speeches.htm>

2 – Supplemental reading material available from class web page

3 – Supplemental reading material available at <http://www.lds.org> – October 2001 Ensign

4 – Supplemental reading material available at <http://www.lds.org> - January 1980 Ensign

5 – You are only required to read up to the middle of page 365 where the section on tunnel diodes begins.

The information in the rest of this section and section 10.8 is really interesting, but unfortunately we don't have time to cover it in class. You are free to read it and ask me questions on your own if you want.