Phys 451- Fall 2011

Date	Lecture	Reading
M Aug 29	#1	Introduction
W Aug 31	#2	1.1 The Schrödinger Equation 1.2 The statistical interpretation
F Sep 2	#3	1.3 Probabilities
M Sep 5		Holiday
W Sep 7	#4	1.4 Normalization/ 1.5 Momentum/ 1.6 The uncertainty principle
F Sep 9	#5	2.1 Stationary states
M Sep 12	#6	2.2 The infinite square well (pp 30-32)
W Sep 14	#7	2.2 The infinite square well
F Sep 16	#8	2.3 The harmonic oscillator (pp 40-46)
M Sep 19	#9	2.3 The harmonic oscillator
W Sep 21	#10	2.4 The free particle
F Sep 23	#11	Review
M Sep 26	#11	Review **Exam I Sep 27- Sep 29 (testing center)**
W Sep 28	#12	2.5 The delta-function potential (pp 68-71)
F Sep 30	#13	2.5 The delta-function potential (pp 72-76)
M Oct 3	#14	2.6 The finite square well (pp78-80)
W Oct 5	#15	2.6 The finite square well and other potential
F Oct 7	#16	A.1 Vectors/ A.2 Inner products/ A.3 Matrices/ A.4 Changing bases
M Oct 10	#17	3.1 Hilbert space/ 3.2 Observables
W Oct 12	#18	A.5 Eigenvectors and Eigenvalues/ A.6 Hermitian transformations
F Oct 14	#19	3.3 Eigenfunctions of a Hermitian operator
M Oct 17	#20	3.4 Statistical interpretation/ 3.5 The uncertainty principle
W Oct 19	#21	3.6 Dirac notation
F Oct 21	(APS Four corners conference)	
M Oct 24	#22	Review
W Oct 26	#22	Review **Exam II Oct 27 – Oct 29 (testing center)**
F Oct 28	#23	4.1 Schrödinger equation in spherical coordinates (pp 131-139)
M Oct 31	#25	4.1 Schrödinger equation in spherical coordinates (pp 140-144)
W Nov 2	#26	4.2 The hydrogen atom (pp 145- 153)
F Nov 4	#27	4.2 The hydrogen atom (pp 154-159)
M Nov 7	#28	4.3 The angular momentum (pp 160 – 166)
W Nov 9	#28	4.3 The angular momentum (pp 167 – 170)
F Nov 11	#29	4.4 Spin (pp 171 – 177)
M Nov 14	#30	4.4 Spin (pp 178 – 189)
W Nov 16	#31	Review
F Nov 18	#32	Review
M Nov 21	#33	**Exam III Nov 21- Nov 22 (testing center)**
M Nov 28	#34	5.1 Two-particles systems
W Nov 30	#35	5.2 Atoms
F Dec 2	#36	5.2 Solids (pp 218 – 223)
M Dec 5	#37	5.3 Solids (pp 224 – 229)
W Dec 7	#38	Final Review
M Dec 12		**Final Exam: 7am – 10am, C285 ESC**