Date	TENT	ATIVE SCHEDULE FOR PHYS	ICS 402 Spring 2000		
	Mtg.#		Topic	HW Due	Exams
Week 1	witg.#	Griffiths/Krane	Торю	TIVE DUC	LAGINS
1/26	1	1.1-1.6, 4.1 / 1.1-1.4, 5.1, 5.3	Paview of OM OM in 3D		
1/28	2	4.1,4.3 / 7.1, 7.4	Angular Momentum Review		
1/28	3	4.1,4.3 / 7.1, 7.4	Hydrogen Atom Review	#0	-
Week 2	3	4.2 / 1.2,1.2	Hydrogen Atom Keview	#0	
	4	40/7070	II store Warrefreeting		
2/2	4	4.2 / 7.2,7.2	H-atom Wavefunctions		
2/4	5	4.3 / 7.4	Angular Momentum Ladder Operators	11.4	
2/6	6	4.2,4.4,6.3 / 6.4, 7.6	Spectroscopy and Spin of the Electron	#1	
Week 3					
2/9	7	4.4 / *	Spinors, Pauli Spin Matrices		
2/11	8	6.1 / *	Stern-Gerlach and Time Independent Perturbation Theory		
2/13	9	6.1 / *	Time-Independent Perturbation Theory	#2	
Neek 4					
2/16	10	6.1, 6.3 / *	2nd-Order Perturbation Theory and Fine Structure		
2/18	11	6.3 / 7.8	Spin-Orbit Interaction		
2/20	12	6.3 / 7.8	J=L+S Addition of Angular Momenta	#3	
Neek 5			_		
2/23	13	6.4 / 7.7	Spins and Entangled States		
2/25		6.5 / *	Hyperfine Splitting and the 21-cm line		
2/27	15	7.2 / 8.7	He Atom	#4	
Neek 6	-	, 5			
3/2	16	5.1 / 8.1	Pauli Exclusion Principle and He		
3/4		2, 3	Chapters 4, 6 (roughly)		EXAM #1
3/6	18	5.1, 5.2 / 8.2	Exchange		-70'31#1 # 1
Neek 7	10	0.1, 0.2 / 0.2	Exonango		
3/9	19	5.2 / 8.3, 8.4	Excited States of He, Periodic Table		
3/11		10.1 / *	H2 Molecule, Bonding		-
3/13		9.1 / *		4Е	-
			Time Dependent Perturbation Theory	#5	
SPRING BREA	N 16-	20 MARCH			
Week 8		0.4./*	T 1 10 1 0 1 0 1 5 1 1		
3/23		9.1 / *	Two Level Systems, Quantum Computing, Entanglement		
3/25		9.1 / *	Sinusoidal Perturbation, Atomic Transitions	""	
3/27	24	9.2 / *	Absorption of Radiation, Selection Rules	#6	
Week 9					
3/30		9.3 / 8.8	Absorption, Spontaneous Emission, LASERs		
4/1	26	5.4 / 10.2	Quantum Statistical Mechanics		
4/3	27	5.4 / 10.5	Distinguishable And Indistinguishable Particles	#7	
Neek 10					
4/6	28	*/*	Review		
4/8	29		Chapters 5, 9 (roughly)		EXAM #2
4/10	30	5.4 / 10.5	Occupation Distribution Functions		
Neek 11					
4/13	31	5.4 / 10.6	Photons in a box		
414-		5.4 / 10.6	Density of States		
4/15					
4/15 4/17	33	5.4 / 10.6	Superfluid He-4	#8	
4/17	33		Superiiuid He-4	#8	
4/17			Bose-Einstein Condensation	#8	
4/17 Veek 12	34	5.4 / 10.6		#8	
4/17 Week 12 4/20 4/22	34 35	5.4 / 10.6 */* 5.4 / 10.6	Bose-Einstein Condensation Two-Fluid Model of SF He		
4/17 Neek 12 4/20 4/22 4/24	34 35	5.4 / 10.6	Bose-Einstein Condensation	#8	
4/17 Neek 12 4/20 4/22 4/24 Neek 13	34 35 36	5.4 / 10.6 */* 5.4 / 10.6 5.3 / 11.1-11.4	Bose-Einstein Condensation Two-Fluid Model of SF He Electrons in a Crystal, Fermi Energy		
4/17 Neek 12 4/20 4/22 4/24 Neek 13	34 35 36 37	5.4 / 10.6 */* 5.4 / 10.6 5.3 / 11.1-11.4 */11.7	Bose-Einstein Condensation Two-Fluid Model of SF He Electrons in a Crystal, Fermi Energy Cooper Pairing of Electrons		
4/17 Veek 12 4/20 4/22 4/24 Veek 13 4/27 4/29	34 35 36 37 38	5.4 / 10.6 */* 5.4 / 10.6 5.3 / 11.1-11.4 */11.7 8.1 /*	Bose-Einstein Condensation Two-Fluid Model of SF He Electrons in a Crystal, Fermi Energy  Cooper Pairing of Electrons WKB Approximation		
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4/17 Neek 12 4/20 4/24 Veek 13 4/27 4/29 5/1 Neek 14	34 35 36 37 38 39	5.4/10.6  */*  5.4/10.6  5.3/11.1-11.4  */11.7  8.1/*  8.2/12.7  7.1, 7.2/*	Bose-Einstein Condensation Two-Fluid Model of SF He Electrons in a Crystal, Fermi Energy  Cooper Pairing of Electrons WKB Approximation Fowler-Nordheim Tunneling, STM  Variational Principle		
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4/17 Neek 12 4/20 4/22 4/24 Neek 13 4/27 4/29 5/1 Neek 14 5/4 5/6 5/8	34 35 36 37 38 39 40 41	5.4/10.6  */*  5.4/10.6  5.3/11.1-11.4  */11.7  8.1/*  8.2/12.7  7.1, 7.2/*	Bose-Einstein Condensation Two-Fluid Model of SF He Electrons in a Crystal, Fermi Energy  Cooper Pairing of Electrons WKB Approximation Fowler-Nordheim Tunneling, STM  Variational Principle		
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