

Schedule – as of Mon 3 Mar

Date	Griffiths	Topics
1/8	1.1, 1.2	Wave function, Born interpretation
1/10	1.3, 1.4	Momentum representation
1/13	1.5, 1.6	Heisenberg inequality
1/15	2.1, 2.2	Schrodinger eqn, infinite square well
1/17	2.3	harmonic oscillator
1/22	2.3 cont'	
1/24	2.4	free particle
1/27	2.5	delta-function potential
1/29	2.6	finite square well
1/31	2.6 cont'	(Test #0)
2/3	2.6	tunneling
2/5	3.1, 3.2	Hilbert space, observables
2/7	3.3, 3.4	eigenfunctions, Born interpretation
2/10	3.5	uncertainty principle
2/12	3.6	Dirac notation
2/14		Test #1
2/19		test review
2/21	4.1	two-state oscillator, 3D curvilinear coordinates
2/24	4.1 cont'	radial equation – box, infinite spherical well
2/26	4.2	angular equations, hydrogen atom
2/28	4.2 cont'	normalized hydrogen wave functions
3/3	4.3	angular momentum – algebraic
3/5	4.3 cont'	raising and lowering operators
3/7	4.4	spin
3/10	4.4	spinors
3/12	Ch 4	review
3/14		Test #2

Problem sets

#1. Due Fri 17 Jan.

Griffiths Ch 1 – 1, 4, 6, 7, 9(a)(c)(d), 11, 17, 18, [EC 13]

#2. Due Fri 24 Jan.

Griffiths Ch 2 – 2, 7, 8, 9, 12, 13, 16, 17(b)(c)

#3. Due Fri 31 Jan.

Griffiths Ch 2 – 19, 22, 24, 25, 29, 33($E > V_0$ only – no new work!), 40, [EC 43]

#4. Due Fri 7 Feb

Griffiths Ch 2 – 33, 34(c)(d), 35; Ch 3 – 4, 5, 26

#5. Due Fri 14 Feb

Griffiths Ch 3 – 8, 9, 13(a)(c), 17, 18, 27, 30, 34

#6. Due Wed 26 Feb

Griffiths Ch 4 – 1, 3, 5, 9 [EC 6]

#7. Due Wed 5 Mar

Griffiths Ch 4 – 11, 12, 13, 14, 15, 17, 19

#8. Due Wed 12 Mar

Griffiths Ch 4 – 20, 21, 22, 23, 24, 26, 27