List of Assignments

1	23 Jan 2007	1.5, 1.7, 1.8, 1.21, 2.23 (in class 3.3)
2	25 Jan 2007	Please solve the free particle (no potential in free space) by yourself – do the math for all the operations. Give a proof that the Hamiltonian and the linear momentum operators for a free particle have common eigenfunctions. 3.6, 3.7
3	30 Jan 2007	3.11
4	1 Feb 2007	4.1, 4.11(b), 4.14, 4.17, Prove that eigenfunctions of a Hermitian operator are orthogonal to each other.
5	6 Feb 2007	5.12, 5.13, 6.19 and If $\hat{C}\psi=\psi^*$ is $\hat{C}$ Hermitian?
6	8 Feb 2007	6.16
7	12 Feb 2007	Prove Cauchy-Schwartz inequality, Prove Roberston-Schrodinger equation, 5.28
8	15 Feb 2007	6.1.a.1, 6.10
9	20 Feb 2007	-
10	1 Mar 2007	7.4, prove that $\hat{N}$ is Hermitian
11	6 Mar 2007	7.8, 7.9, 7.10
12	20 Mar 2007	8.35, 8.36
13	27 Mar 2007	9.5, 9.6
14	29 Mar 2007	9.23, 9.24
15	3 April 2007	-
16	5 April 2007	-
17	10 April 2007	-
18	12 April 2007	Find ground state energy for H2, He+, Positronium, and Exciton with ε=10
19	19 April 2007	-
20	24 April 2007	10.6
21	26 April 2007	11.45