

PHYS6520 *Quantum Mechanics II*

Problem Sets for Spring 2003 Semester

Instructor: Jim Napolitano

February 6, 2003

Your grade in this course will be based on these problem sets. You are encouraged to collaborate with other students on all problem sets, **except for the midterm and final sets** on which you must work independently. The due dates and times are indicated and will be strictly enforced.

Number	Due	Material
1	January 27 Start of Class	Through January 23: Perturbation Theory Formalism
2	February 13 Start of Class	Through February 10: Applications of Perturbation Theory, Time Dependent Formalism
3	February 27 Start of Class	Through February 24: Perturbation Theory (including Time Dependence) Applied to Classical Radiation and Atoms, Introduction to Scattering Theory
Midterm Problem Set: Work on this independently		
4	March 17 Start of Class (First class after break)	Through March 6: Theory and Applications of Perturbation Theory and Scattering
5	March 31 Start of Class	Through March 27: Identical particles and Nonrelativistic Field Theory
6	April 14 Start of Class	Through April 10: The Photon Field
Final Problem Set: Work on this independently		
7	May 5 (Monday) At 5pm <i>in the Physics</i> <i>Department office</i>	All of the course