

# Quantum Mechanics I

## Course Information for Fall 2002

September 9, 2002

Course Number: PHYS6510 (also PHYS4510)  
Course Name: Quantum Mechanics I  
Meeting Times: Monday and Thursday 8:30-9:50am  
Classroom: DCC 235  
Email list: PHYS6510-l@lists.rpi.edu

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|---------------|-------------------------|----------|-------------------------|
| Instructor:   | Jim Napolitano          | Grader:  | Melissa Cravey          |
| Office:       | SC 1W07                 | Office:  | HBH Lab, Science Center |
| Contact:      | napolj@rpi.edu or x8019 | Contact: | cravem@rpi.edu or x8403 |
| Office Hours: | Mon 2-4; Tue 10-12      | Hours:   | Wed 2-4                 |

This is a graduate level course in Quantum Mechanics. Suitable prerequisites include undergraduate Quantum Physics and a working knowledge of (multivariable and vector) calculus, linear algebra, and differential equations.

The main textbook for the course is *Modern Quantum Mechanics, Revised Edition*, by Sakurai (Addison Wesley, 1994). For some material, I will also follow *Quantum Mechanics, Third Edition*, by Merzbacher (Wiley, 1998). Both books are available in the bookstore, *but you can likely find a copy to borrow from one of your graduate student colleagues*. I will also take ideas from other books from time to time, including *Principles of Quantum Mechanics, Second Edition*, by Shankar (Plenum, 1994).

Your course grade will be based on seven homework problem sets throughout the term. You are strongly encouraged to collaborate with other students on working these problem sets *except for the midterm and final sets on which you must work independently*. Due dates and times for all problem sets will be strictly enforced. The midterm and final problem sets will account for about half the total course grade.

Collaboration does not extend to copying someone else's solution to the homework and handing it in as your own. The first time it happens, you will receive a grade of zero for that problem set. If it happens again, you will be reported to the Dean of Students. Regarding the midterm and final problem sets, if I suspect that you have cheated, I shall ask for an explanation. If your explanation is unsatisfactory, you will be given a grade of zero and reported to the Dean of Students.

The reverse side of this page outlines the class schedule we will follow. It will be helpful if you can read the material in the text before coming to class. (We will try hard to stick close to this schedule, but it may be subject to change.) A tentative agenda for next semester (PHYS6520 Quantum Mechanics II) is available, and will make rely more on Merzbacher.