Quantum Mechanics        Physics 361

Text Book: Introductory Quantum Mechanics, Richard L. Liboff
Instructor: Dr. J.G. Story Room 108, Story@MST.EDU Phone 341-4792
Office Hours 3:00-5:00 Monday, 10:00-12:00 Tuesday

Grading

Homework 40%
Midterms (2) 20% each September 27, November 1
Final 20% Friday, December 15, 3:00 pm

Home work is due on Wednesday.
One unexcused late homework will be accepted.

Outline

Introduction
   Fourier Transforms
   Hamiltonian
   Coordinates

Fundamental Concepts
   Postulates of Quantum Mechanics
   Eigen States
   Probability Distribution
   Uncertainty Principle
   Superposition
   Time evolution

One Dimensional Problems
   Wave Functions
   Calculation Techniques
   Reflection and Transmission
   Tunneling

Three Dimensional Problems
   Angular Momentum
   Atomic Physics

Perturbation
   Approximation Methods for “Real World Problems”