Course Outline

Course: Quantum Mechanics II
Instructor: Dr Alakabha Datta
Office: 121-B Lewis Hall
Meeting: M-W-F 10-10.50 pm at Lewis 126
Office Hours: By Appointment
Email: datta@olemiss.edu, datta@phy.olemiss.edu
Phone: (662) 915-5611
Course homepage: Check Blackboard.

Book

Modern Quantum Mechanics
J. J. Sakurai
Revised Edition
Course Goals: Learning to apply the basic postulates and rules of Quantum Mechanics learnt in QM 611 to solve problems in various areas of research.

Independent study: The course will also involve solving problems that will require students to research material on published journals to complete the project. The purpose of this is to help the student acquire skills to pursue independent research. The students will also complete a report on a topic of current research interest.

Marking:

Homework: 60%

Mid Term Report: 15%

Final Exam: 25%

Wed May 7, 2008 at 8 am (See Class Schedule)

An overall course average of the following percentages will guarantee the corresponding letter grade:

90% A
80% B
70% C
60% D

Topics Covered in course: Topics will be taken from chapters 4-7 in the book. Topics include symmetry in Quantum Mechanics, identical particles, perturbation theory and scattering theory.