

UNIVERSITY OF SHEFFIELD
DEPARTMENT OF PHYSICS AND ASTRONOMY

PHY202 – Quantum Mechanics

Autumn Semester

Summary: This is an introductory, but challenging, course on quantum mechanics. The aims are:

- to explain why a quantum theory is required to explain microscopic phenomena;
- to describe the basis postulates of quantum mechanics;
- to introduce the Schrodinger equation and apply it to a wide variety of one-dimensional problems; and
- to demonstrate the wide utility of quantum mechanics in physics and chemistry.

Textbooks: C. A. Phillips, INTRODUCTION TO QUANTUM MECHANICS,
A.I.M. Rae, QUANTUM MECHANICS,
and many other texts.
(I will not follow them too closely. Please attend class!)

Lectures: **Monday, 12 noon, LT2**
Tuesday, 11:00 am, LT2

Office Hours: Tuesday, 14.00-15.00, Room D26

Problem class: Two problem sets (5% each):
1st: **week of 17 October 2011, due a week later,**
2nd: **week of 21 November 2011, due a week later.**

Homework: Two sets (10% each):
1st due **Wednesday 16 November 2011, 5pm,**
2nd due **Wednesday 7 December 2011, 5pm.**

Assessment: 70% final examination, 10% problem classes, 20% homework

Course webpage: <http://www.shef.ac.uk/physics/teaching/phy202/index.html>

Prof. Dan Tovey
Phone: 222-3546
Office: D26
E-mail: d.r.tovey@sheffield.ac.uk