

Module Title:	Physical Chemistry 1
Academic year:	2009 /2010
Credit Value:	5
Pre- requisites:	8
Assessment:	Continuous assessments: 30% Final examination: 70%
Aims	This module aims to provide the student with: Knowledge of and ability to use quantum mechanics to calculate solutions to atomic and molecular problems; Knowledge of advanced kinetics, including transition-state theories, and the kinetics of photochemical processes; Basic and applied knowledge of electrochemical techniques.
Module Content	Quantum Mechanical Methods: Chemical Kinetics and Photochemistry Electrochemistry:
Intended Learning Outcomes: (September 2007)	Having successfully completed this module, the student will: Understand the application of the quantitative methods by which atomic structure, bonding and reactions can most accurately be calculated and explained. Have a thorough knowledge of the kinetic factors in chemical processes – including photochemical processes - and be familiar with the methods by which they are investigated. Understand the kinetics of electrode reactions, together with the methods used for studying such reactions.