

Module Title:	Chemical Science
Academic year:	2009 2010
Credit Value:	5.0
Pre- requisites:	None
Assessment:	Continuous assessments: 30% Final examination: 70%
Aims	<p>The aim of this module is to develop the student's knowledge of the basic principles of chemistry including knowledge and understanding of the different types of matter by state and chemical type; Knowledge and understanding of the formulae of compounds formed by various combinations of elements and type of bonding involved; Knowledge and understanding of balancing equations for simple reactions and classification of reactions.</p>
Module Content	<p>The student will learn about and be able to describe and explain the basic concepts of chemical structure. They will be able to identify, describe and/or explain:</p> <ul style="list-style-type: none"> Introduction Atomic structure Compounds and their formation Stoichiometry Redox Reactions Electronic Configurations Periodic Table Thermochemistry Equilibrium Gas Laws

Intended Learning Outcomes:

At the end of this module the student will be able to:

1. Assign the number of atomic species of each type and have a detailed knowledge of the structure of an atom.
2. Predict the electronic configuration of Group 1 to Group 8 elements in the periodic table
3. Balance equations for simple reactions and use of the periodic table to predict an elements chemical physical and chemical property.
4. Predict the different types of bonds in simple molecules
5. Measure the heat change involved in a reaction and predicting the equilibrium position of a reaction and the effect of various disturbances of same.