COURSE CONTENT

Date : 21 March 2006

Academic Year : 2005/6

Study Year (if applicable) : First

Course Code & Title : CBC112 Principles of Modern Chemistry with Laboratory 2

Academic Unit : 4 AU

Pre-requisite : CBC111 or by permission

Course Description :

CBC112 Principles of Modern Chemistry with Laboratory 2
[Lectures: 39; Laboratory: 39; Pre-requisite: CBC111 or by permission; Academic Units: 4]

Content
Thermodynamics, rate of chemical reactions and reaction kinetics, chemical equilibria, electrochemistry and nuclear chemistry. Laboratory work includes chemical synthesis, separation and purification processes, kinetic measurements and instrumental analysis.

Objectives
To show the place of thermodynamics in Chemistry, and to introduce additional fundamental topics.

Learning Outcomes
Students will be able to manipulate thermodynamic and kinetic equations and relate them to real systems in order to make predictions. Students will understand the principles of electrochemistry and nuclear chemistry and be able to apply the principles to simple systems. Laboratory skills will be enhanced.

Course Assessment
Students will be assessed by:
a. A final 2-hour written examination (60%)
b. Written laboratory experimental reports throughout the term (20%)
c. Continuous assessment (20%)