

Module Title:	Scientific Analysis
Academic year:	2009 2010
Credit Value:	9
Pre- requisites:	Scientific Analysis 1
Assessment:	End of semester exams (50%), laboratory reports and oral practical exam (35%) and mid semester continuous assessment (15%).
Aims	<p>This module aims to provide the student with:</p> <ul style="list-style-type: none"> ▪ A knowledge of both spectroscopic and electrochemical methodologies. ▪ Practical skills in spectroscopic analysis and electroanalytical methods, including the ability to select, set up and analyse given solutes. ▪ The ability to carry out quantitative and qualitative analysis. ▪ The ability to carry out structural identification using appropriate spectroscopic technique(s).
Module Content	<p>Spectroscopy UV-Visible Spectroscopy Infrared Spectroscopy Atomic Spectroscopy Potentiometric Techniques Voltammetry.</p> <p>A practical course will be designed and developed to support and reflect the aims and learning outcomes of this module. It will be comprised of twelve three hour practicals.</p>

Intended Learning Outcomes:
(September 2007)

The student will be able to:

- Demonstrate competency in basic spectroscopy and electrochemical techniques.
- Carry out prescribed laboratory experiments.
- Utilise diagnostic skills in order to carry out basic trouble shooting.
- Perform analysis of simple organic/bioorganic molecules using spectroscopy and electrochemical techniques.