

Faculty	Natural sciences
Home Department	Chemistry
Module Topic	General chemistry
Generic Module Name	Chemistry 114
Alpha-numeric Code	CHE114
NQF Level	5
NQF Credit Value	15
Duration	Semester
Proposed semester to be offered	First Semester
Programmes in which the module will be offered	BSc (Chemical Sciences) (3019,3220); BPharm (3305); BEd (Science Education) (4516, 4092); BSc (Applied Geology) (3011, 3214); BSc (Physical Science) (3120,3233)
Year level	1
Main Outcomes	<p>On completion of this module students should be able to:</p> <ul style="list-style-type: none"> • Apply the following chemical concepts and principles to qualitatively engage with real-world phenomena or examples: accepted symbolic conventions; models for understanding structure and bonding; links between electronic structure and reactivity; and mass and energy balance in chemical reactions. • Solve quantitative chemistry problems, both in familiar and novel contexts. • Conduct simple scientific investigations, including the collection, handling and interpretation of experimental data. • Conduct research using the library, the web and other sources of information. • Reference sources of information correctly. • Use the internet and computer-based word-processing, spreadsheet, and presentation software to complete selected tasks. • Recognise the relationship of chemistry to society, technology and the environment. • Begin to develop life-long learning capabilities and to see chemistry as discipline in a wider context. • Present a clear, well-structured oral presentation and well-structured practical reports. • Work productively in co-operative learning groups.
Main Content	<ul style="list-style-type: none"> • Basic concepts of chemistry • Atoms, molecules and ions • Chemical reactions • Quantitative information about chemical reactions (Stoichiometry) • Energy and chemical reactions • Atomic structure and periodic trends • Bonding and molecular structure • Gases and their properties
Pre-requisite modules	None
Co-requisite modules	None
Prohibited module Combination	None

Breakdown of Learning Time	Hours	Timetable Requirement per week		Other teaching modes that does not require time-table
<i>Contact with lecturer: / tutor:</i>	50	<i>Lectures p.w.</i>	3	
<i>Assignments & tasks:</i>	10	<i>Practicals p.w.</i>	1	
<i>Practicals:</i>	30	<i>Tutorials p.w.</i>	1	
<i>Tutorials:</i>	0			
<i>Tests & Examinations:</i>	15			
<i>Selfstudy:</i>	45			
<i>Other:</i>	0			
Total Learning Time	150			
Methods of Student Assessment	Continuous Assessment (CA): 60% Final Assessment (FA): 40%			
Assessment Module type	Continuous and Final Assessment (CFA)			