

Module Title:	<b>Principles of Chemistry I – Semester 1</b>
Academic year:	2008 – 2009
Credit Value:	5 – Mandatory
Pre- requisites:	None
Module Content	<ul style="list-style-type: none"> <li>• Introduction</li> <li>• Matter and Energy</li> <li>• Atomic structure</li> <li>• The Periodic Table &amp; Periodic Properties</li> <li>• Compounds</li> <li>• Acids, Bases and Ionic compounds</li> <li>• Units of measurement and calculations</li> <li>• Chemical Sterilants</li> </ul>
Intended Learning Outcomes: (September 2007)	<p><b>On successful completion of this module the student will be expected to be able to:</b></p> <ol style="list-style-type: none"> <li>1. Define and distinguish the fundamental laws and principles of elementary chemistry</li> <li>2. Distinguish the different types of matter – by state and chemical type –and describe their properties.</li> <li>3. Assign the number of sub atomic species in each of the early elements</li> <li>4. Use the Periodic Tables to predict an element's and a compound's chemical and physical properties.</li> <li>5. Distinguish between acid, base, salt and buffer solutions.</li> <li>6. Identify and take suitable precautions for dealing with day to day hazards in the chemistry laboratory.</li> <li>7. Have gained competency in laboratory calculations involving the preparation of working solutions.</li> <li>8. Write experimental reports concisely and in proper scientific format.</li> <li>9. Describe a range of volumetric analyses to include acid/base titrations.</li> <li>10. Explain the properties of chemical sterilants.</li> </ol>