

<b>Course Title:</b>	<b>General Chemistry</b>
<b>Course Code:</b>	<b>Chem 101</b>
<b>Program:</b>	<b>Medicine, Pharm. D., Nursing, Respiratory Therapy, Emergency Medical Services, Anesthesia, Health Information System</b>
<b>Department:</b>	<b>General science and English Language</b>
<b>College:</b>	<b>Applied Science</b>
<b>Institution:</b>	<b>Almaarefa University</b>

## Course Identification

<b>1. Credit hours:</b>	<b>4</b>			
<b>2. Course type</b>				
<b>a.</b>	University <input type="checkbox"/>	College <input checked="" type="checkbox"/>	Department <input type="checkbox"/>	Others <input type="checkbox"/>
<b>b.</b>	Required <input checked="" type="checkbox"/>	Elective <input type="checkbox"/>		
<b>3. Level/year at which this course is offered:</b>	<b>Year 1-Level 2</b>			
<b>4. Pre-requisites for this course (if any):</b>	<b>None</b>			
<b>5. Co-requisites for this course (if any):</b>	<b>None</b>			

## Course Objectives

### 1. Course Description

This course aims to cover comprehensive concept in all aspects of general and organic chemistry. At the end of the course, each student should be able to understand chemical reactions, chemical equations and stoichiometry, electronic and atomic structure of elements, chemical bonding & General concept of chemical bonding, chemical and physical properties of Gases and aqueous solutions and their calculations, the concept of Acid- Base, pH and Buffer calculations, principals of Organic chemistry such as structure, nomenclature, classification and stereochemistry, Aromaticity; benzene and substitution reactions, inorganic salt examination through identification of cation and anion ions, examine the unknown concentrations of aqueous solutions by using titration method and examine the functional groups in organic compounds.

## 2. Course Main Objective

- The ability to recognize the chemical equations, the concept of mole and stoichiometry of chemical reactions.
- The ability to Describe the atomic structure and the properties of Periodic table and Ionic compounds.
- The ability to recognize the chemical and physical properties of Gases and aqueous solutions and their calculations.
- The ability to Describe a principles of organic chemistry such as; classification of functional groups, nomenclature, stereochemistry and reactions.