



## Course Specifications of CHEM 3111

Course No.	Course Title	No. of Units			Pre-requisites
		Th.	Pr.	Credit	
CHEM 3111	General Chemistry I	3	2	4	-

### Course Objectives:

The course aims to introduce students to basic knowledge and principle in chemistry.

### Course Description:

#### Theoretical part:

It provides basics of chemistry, which can be underlined according to the following subjects: Matter: definition and classification; Atoms, molecules and ions; Mass relationships in chemical reactions; Aqueous reactions: Properties and types; Gases: definition, properties and laws; Thermochemistry; Electronic structure of atom; Periodic table: properties of elements and Bonding: definition, types and properties.

#### Practical Part:

It provides laboratory safety rules and some practical experiments (acidic radicals investigation and preparation of solutions), which reinforce understanding of some basic chemical concepts learnt in the theoretical part of the course.

### Main Textbooks:

- Chemistry, by Rymond Chang, 12th. ed., 2016, McGraw-Hill.
- Laboratory Manual prepared by teaching staff for practical part.

### Subsidiary books:

- Chemistry, by Steven S. Zumdahl, 9th ed., Houghton Mifflin College Div., 2013.
- Chemistry. THE CENTRAL SCIENCE, by Brown, LeMay, Bursten, Murphy, Woodward, PEARSON, 2012.