

Course Code	Course Name	Teorical	Practice	Laboratory	Credits	ECTS
FZK-1011	General Chemistry I	2.00	2.00	0.00	3.00	4.00
Course Detail						
<b>Course Language</b>	: Turkish					
<b>Qualification Degree</b>	: Bachelor					
<b>Course Type</b>	: Compulsory					
<b>Preconditions</b>	: Not					
<b>Objectives of the Course</b>	: The aim of this course is to provide the student with the ability to understand and interpret chemical properties, chemical reactions and chemical reaction mechanisms and solution chemistry as well as solving chemical problems.					
<b>Course Contents</b>	: This course covers basic units, ISI units, atomic theories and structure of atoms, naming of chemical compounds, equilibrium of chemical reactions, basic trends in periodic table, core chemistry and radioactivity, chemical bonding types and bonding theories and gases.					
<b>Recommended or Required Reading</b>	: 1) Temel Üniversite Kimyası, Ender ERDİK, Yüksel Sarkaya, Gazi Kitapevi, 22. Baskı, Ankara, 2016. 2) Genel Kimya, Petrucci,R.H., Harwood, W.S., Herring, F.G., (8. Baskıdan Çeviri Uyar, T., Aksoy, S.), Palme Yayıncılık, Ankara, 2005.					
<b>Planned Learning Activities and Teaching Methods</b>	: Oral presentation, discussion, question-answer					
<b>Recommended Optional Programme Components</b>	: None					
<b>Course Instructors</b>	: Prof. Dr. Ali Bilici					
<b>Instructor's Assistants</b>	: There is no assistant instructor.					
<b>Presentation Of Course</b>	: The mode of delivery of this course is face to face.					

## Course Outcomes

## Upon the completion of this course a student :

- 1 Will be able to understand and analyze the basic rules of General Chemistry.
- 2 Will be able to solve chemical problems.
- 3 Will be able to compare elemental properties in the periodic table.
- 4 Will be able to explain the types and properties of chemical bonds.
- 5 Will be able to describe the properties of gases, explain the basic gas laws
- 6 Will be able to explain the structure of the atom.

## Preconditions

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## Weekly Contents

	Teorical	Practice	Laboratory	Preparation Info	Teaching Methods
1.Week	*Matter and energy, Basic measurement units and ISI units, significant numbers	*Matter and energy, Basic measurement units and ISI units, significant numbers			
2.Week	*Basic laws of chemistry	*Basic laws of chemistry			
3.Week	*Structure of atom	*Structure of atom			
4.Week	*Electromagnetic radiation and Atomic spectra	*Electromagnetic radiation and Atomic spectra			
5.Week	*Periodic table and properties of atoms	*Periodic table and properties of atoms			
6.Week	*Chemical compounds	*Chemical compounds			
7.Week	*Equations of chemical reactions and reaction equations	*Equations of chemical reactions and reaction equations			
8.Week	*Chemical reactions and balancing reaction equations	*Equations of chemical reactions and reaction equations			
9.Week	*Structure of atomic nucleus	*Structure of atomic nucleus			
10.Week	*Radioactive fragmentation series	*Radioactive fragmentation series			
11.Week	*Chemical Bond I, Basic Concepts	*Chemical Bond I, Basic Concepts			
12.Week	*Chemical Bond II, Bond Theories	*Chemical Bond II, Bond Theories			
13.Week	*Gases (simple gas laws)	*Gases (simple gas laws)			
14.Week	*Real gases	*Real gases			

## Assesment Methods %

2 Final : 60.000

3 Mz : 40.000

## ECTS Workload

