



**YOZGAT BOZOK UNIVERSITY FACULTY OF ARTS AND SCIENCES**  
**CHEMISTRY DEPARTMENT COURSE PLAN**

Course Code	Course Title	Semester	Course Type (C/E)	T+A+L (Time/Week)	Credit	ECTS	Course Language
KİM223	Inorganic Chemistry I	Fall	C	4+0+0		6	Turkish

**COURSE INFORMATION**

<b>Course Catalog Description (Content)</b>	Electron structure of atom, molecular structure, covalent bond, ion and metal bond, interactions between particles, acids and bases.
<b>The Aim of the Course</b>	To provide students with sufficient knowledge about the basic principles of Inorganic Chemistry.
<b>Course Level</b>	Bachelor degree
<b>Course Language</b>	Turkish
<b>Teaching method</b>	(X) Formal ( ) Online ( ) Mixed/Hybrid
<b>Teaching Staff of the Course</b>	Prof. Dr. Mustafa SAÇMACI
<b>Prerequisite Course(s) of the Course</b>	
<b>Learning Outcomes from the Course</b>	1-Knows the electronic structure of the atom and the interaction of matter with light. 2-Defines molecular shapes using symmetry elements and point groups. 3-Explains chemical bonds and molecular orbital theory. 4-Defines the effects of intermolecular interactions. 5-Knows various acid-base concepts

**COURSE CONTENT**

Week	Theory	Practice/Laboratory
1	Introduction to Inorganic Chemistry	
2	Atomic Structure	
3	Atomic Structure	
4	Atomic Structure and Periodic Properties	
5	Atomic Structure and Periodic Properties	
6	Bonding Theories	
7	Bonding Theories	
8	Bonding Theories, VBT	
9	Symmetry and Group Theory	
10	Symmetry and Group Theory	
11	Symmetry and Group Theory	
12	Molecule Orbital Theory	
13	Molecule Orbital Theory	
14	Molecule Orbital Theory	
15	Final Exam	

### Course Learning Resources

1. Tunalı, N.K., Özkar, S. 2005; İnorganik Kimya, Ankara, Türkiye.
2. Kaya, C. 2008; İnorganik Kimya 2, Ankara, Türkiye
3. Poterfield, W. W. 1984; İnorganic Chemistry, USA

### ASSESSMENT CRITERIA

Work Activities During the Semester	Number	Contribution
Homework	1	%30
Practice		
Forum/ Discussion Application		
Short Exam (Quiz)	2	%35
Ratio Of Semester Studies To Semester Success (%)		%40
Ratio of Final to Success (%)	1	%60
Total		%100

### COURSE WORKLOAD TABLE

Activity	Total Weeks	Duration (Weekly Hours)	Total Workload
Theory	14	4	56
Practice			
Forum/ Discussion Application			
Reading	4	8	32
Internet Scanning, Library Study	14	2	28
Material Design, Application			
Report Preparation			
Presentation Preparation			
Presentation			
Final Exam	1	2	2
Preparation for the Final Exam	4	8	32
Other(s) (Specify: ... ..)			
Total Workload			
Total Workload / 25 (s)			150/25
ECTS Credits of the Course			150/25 $\cong$ 6

Note: The workload of the course will be determined by the instructor on a per-course basis.

### PROGRAM LEARNING OUTPUTS CONTRIBUTION LEVELS

No	Program Learning Outputs	1	2	3	4	5
1	Gains extensive knowledge about the basic chemical properties of matter and uses this knowledge in daily life, industrial scale, and practical chemistry and shares them with the society.					X
2	Performs experiments, collects data, interprets, evaluates results, defines problems parallel to current technological developments, produces solutions against problems encountered in the laboratory.	X				
3	Calculates and processes chemical information and data.			X		
4	Applies her/his knowledge and understanding of chemistry to the solution of unconventional qualitative and quantitative problems.				X	
5	Defines and comprehends chemical concepts and theories in İnorganic Chemistry, Organic Chemistry, Physical Chemistry, Analytical Chemistry, Biochemistry.					X
6	Can conduct research in the light of scientific data on any subject in the field of chemistry.				X	

7	Writes, presents, discusses scientific material, and presents it orally to a knowledgeable audience.			X		
8	Brings a chemical approach to the solution of environmental problems, makes environmental analyzes and reports.		X			
9	Knows a foreign language at a level to read and understand the basic terms and processes of the chemist profession.				X	
10	Can use computer software and information and communication technologies at the level required by the field.				X	
11	Adapts and transfers the knowledge gained in the field to secondary education.			X		
12	Apart from the field of chemistry, she/he gains knowledge in different branches of science that she feels close to.				X	
13	Carries out a study independently, makes group work and gains the awareness of taking responsibility.			X		
14	They can develop a positive attitude towards lifelong learning and constantly renew their professional knowledge and skills.					X
15	Have sufficient awareness of the universality of social rights, social justice, quality culture and protection of cultural values, environmental protection, occupational health and safety.		X			

Bozok