



**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
KİM242	Inorganic Chemistry Laboratory II	Spring	C	0+0+4		4	Turkish

**COURSE INFORMATION**

<b>Course Catalog Description (Content)</b>	Synthesis methods of inorganic compounds, Analysis of coordination compounds by spectrochemical methods, Theoretical calculations of compounds
<b>The Aim of the Course</b>	The course provides students with information about the synthesis and properties of inorganic compounds and aims to help them increase their laboratory experience.
<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-Can learn laboratory conditions and basic chemicals 2-Can learn how to do experiments in the laboratory environment 3-After learning how to do experiments in a laboratory environment, they can make all kinds of comments about similar compounds. 4-Can predict the results of any chemical reaction 5-Before making any presentation, it can be fully equipped with all kinds of information and documents.

**COURSE CONTENT**

Week	Theory	Practice/Laboratory
1		Introduction, Recall of previous information
2		Molecule Modeling I
3		Synthesis of tin iodides
4		Magnetism
5		Binding isomerism
6		Synthesis of metal oxalate hydrates / Inert double effect
7		Potassium tris(oxalato)aluminate(III) trihydrate
8		Molecule Modeling II
9		Geometric isomerism
10		KAYE and spectrochemical series
11		Substitution reaction kinetics in the Co(III) complex
12		Interhalides and Tetrathionates
13		Compensation Week
14		Compensation Week

15	Final Exam
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### Course Learning Resources

1. Inorganic Chemistry Laboratory Sheet, Yozgat Bozok University Publication, Yozgat
2. Kaya, C. 2008; Inorganic Chemistry 2, Ankara, Turkey
3. Tunalı, N.K., Özkar, S. 2005; Inorganic Chemistry, Ankara, Turkey

### 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			
Laboratory	14	4	56
Forum/ Discussion Application			
Reading	14	1	14
Internet Scanning, Library Study	14	1	14
Material Design, Application			
Report Preparation	14	1	14
Presentation Preparation			
Presentation			
Final Exam	1	1	1
Preparation for the Final Exam	1	3	3
Other(s) (Specify: ... ..)			
Total Workload			102
Total Workload / 25 (s)			102/25
ECTS Credits of the Course			102/25 $\cong$ 4

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 Inorganic 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			

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