



**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
KİM115	Laboratory and Occupational Safety	Fall	C	2+0+0		4	Turkish

**COURSE INFORMATION**

<b>Course Catalog Description (Content)</b>	Laboratory Safety, devices and consumables used in the laboratory. The concept and development of occupational health and safety; Developments in the world and Turkey regarding occupational health and safety; Occupational health and safety overview and safety culture, duties of institutions, organizations and employees in the creation of safety culture; National and international organizations and conventions related to occupational health and safety; Occupational health and safety management systems; Concepts of danger and risk in occupational health and safety; Risk management, assessment and methodology; Risk analysis and sample applications; Occupational health and safety risk factors (physical, chemical, biological...); Work accidents, their causes, prevention and protection principles; Occupational diseases, their causes, prevention and protection principles, the concept of ergonomics and first aid, to provide basic occupational health and safety training to students and to create a culture of safety in students.
<b>The Aim of the Course</b>	This course aims to enable students to determine the causes of work accidents and occupational diseases, to determine safety measures in the workplace by acquiring knowledge and skills for protection from work accidents and occupational diseases, to learn about occupational health and safety legislation and to evaluate them with practices in the workplace.
<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>	Related Lecturers
<b>Prerequisite Course(s) of the Course</b>	
<b>Learning Outcomes from the Course</b>	<ol style="list-style-type: none"><li>1. Learns the causes of work accidents and occupational diseases.</li><li>2. Gains knowledge and skills to prevent work accidents and occupational diseases.</li><li>3. Can detect safety measures at work.</li><li>4. Obtain information on occupational health and safety legislation.</li><li>5. Learns to work safely in the laboratory.</li></ol>

**COURSE CONTENT**

Week	Theory	Practice/Laboratory
1	Entrance	
2	Laboratory Layout	
3	Safe Working Rules in the Laboratory	
4	Safe Working Rules in the Laboratory	
5	Laboratory Safety Signs and Labels	
6	Laboratory Safety Signs and Labels	

7	Storage of Chemicals	
8	Storage of Chemicals	
9	Wastes	
10	Wastes	
11	What to Do in a Time of Danger	
12	What to Do in a Time of Danger	
13	Accidents and Precautions	
14	First aid	
15	Final Exam	

### Course Learning Resources

1. Laboratory Safety, Feyyaz Onur, Ankara University Press

### 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
<b>Total</b>		<b>%100</b>

### COURSE WORKLOAD TABLE

Activity	Total Weeks	Duration (Weekly Hours)	Total Workload
Theory	14	2	28
Practice			
Forum/ Discussion Application			
Reading	14	2	28
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	2	7	14
Other(s) (Specify: ... ..)			
<b>Total Workload</b>			
<b>Total Workload / 25 (s)</b>			100/25
<b>ECTS Credits of the Course</b>			100/25 $\cong$ 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				

*Bozok*