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
KİM122	General Chemistry Laboratory II	Spring	C	0+4+4		4	Turkish

COURSE INFORMATION

Course Catalog Description (Content)	Introduction, General Information, Water Hardness Measurements Experiment, Extraction, Determination of Molecular Mass of a Liquid by Water Vapor Distillation, pH (Acids and Bases), Determination of Equivalent Mass of Magnesium Experiment, Determination of Solubility Product of Copper (II) Iodate Experiment, Chemical Equilibrium Experiment, Chemical Equilibrium Kinetic Experiment, Organic Compounds Experiment, Chromatography Experiment
The Aim of the Course	It is aimed to teach the students to know the substance, prepare solution, basic laboratory experiments (crystallization, distillation, precipitation, centrifugation).
Course Level	Bachelor degree
Course Language	Turkish
Teaching method	(X) Formal ( ) Online ( ) Mixed/Hybrid
Teaching Staff of the Course	Related Lecturers
Prerequisite Course(s) of the Course	
Learning Outcomes from the Course	1. Have safe working skills in the laboratory. 2. Defines laboratory rules, instruments and techniques. 3. Can plan chemistry experiments. Can set up laboratory instruments as a set for experiment. 4. Uygun bilimsel ölçümleri uygular ve verileri kaydeder. 5. Prepares charts and graphs, analyzes and interprets test results.

COURSE CONTENT

Week	Theory	Practice/Laboratory
1		Introduction
2		General Information
3		Water Hardness Measurements Test
4		Extraction
5		Determination of Molecular Mass by Water Vapor Distillation of a Liquid
6		pH (Acids and Bases)
7		Determination of Equivalent Mass of Magnesium Experiment
8		Experiment for Determining the Solubility Product of Copper (II) Iodate
9		Chemical Equilibrium Experiment
10		Chemical Kinetic Experiment
11		Organic Compounds Experiment
12		Chromatography Experiment
13		Compensation Week
14		Compensation Week

15	Final Exam

Course Learning Resources

1. Sarikaya, Y. 2004. Basic University Chemistry, Gazi Bookstore, Ankara
2. 2- General Chemistry Laboratory Sheet

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			
Practice	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			
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**			