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
KİM362	Organic Chemistry Laboratory -II	Autumn	C	0+4+4	4	4	English

COURSE INFORMATION

Course Catalog Description (Content)	
The Aim of the Course	To teach Organic Chemistry laboratory techniques, to make students comprehend that preliminary preparation is required for synthesis, to be able to synthesize, to purify the synthesized compounds and to control their purity, to use the theoretical knowledge learned in the lesson to interpret the data collected from the experiment, to teach to write a clear, complete and understandable laboratory report.
Course Level	Lisans
Course Language	English
Teaching method	(X) Formal ( ) Online ( ) Mixed/Hybrid
Teaching Staff of the Course	Prof. Dr. Mustafa SAÇMACI Prof. Dr. Ş.Hakan ÜNGÖREN Prof. Dr. İrfan KOCA Asst. Prof. İbrahim Evren KIBRIZ
Prerequisite Course(s) of the Course	-
Learning Outcomes from the Course	Learns to determine the melting ranges of organic solids. Learns to purify organic solids by crystallization. Learns how to determine reaction times by thin layer chromatography. Learns to verify the structures of organic substances by analysis. Learns to apply techniques such as simple distillation, steam distillation and reflux, which are part of synthesis procedures, and to set up their mechanisms.

COURSE CONTENT

Week	Theory	Practice/Laboratory
1		Requirement to use glasses, clothing, gloves, use of chemical and glass materials, labeling and storage of laboratory accidents and toxicity chemicals, disposal of waste and hazardous chemicals, use of handbook, and report preparation in relation to Laboratory Safety.
2		Polymer Synthesis
3		Addition Condensation
4		Nucleophilic Substitution
5		Elimination
6		Electrophilic Substitusyon
7		Conversion Reactions
8		Diagnosis-Recognition 1

9		Diagnosis-Recognition 2
10		Diagnosis-Recognition 3
11		Unknown Sample Analysis 1
12		Unknown Sample Analysis 2
13		Unknown Sample Analysis 3
14		Delivery of substances and preparation
15	Final Exam	

Course Learning Resources

1. Celal Tüzün, Organic Chemistry
2. Fessenden, Organic Chemistry
3. Solomon, Organic Chemistry
4. Denel Organic Chemistry Ender Erdik, Ankara University

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 (%)		%60
Total		%100

COURSE WORKLOAD TABLE

Activity	Total Weeks	Duration (Weekly Hours)	Total Workload
Theory			
Practice	14	4	56
Forum/ Discussion Application			
Reading	4	4	16
Internet Scanning, Library Study			
Material Design, Application			
Report Preparation	14	1	14
Presentation Preparation			
Presentation			
Final Exam	1	2	2
Preparation for the Final Exam	4	3	12
Other(s) (Specify: … …. ……..)			
Total Workload			
Total Workload / 25 (s)			100/25
ECTS Credits of the Course			$100/25 \cong 4$
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**			