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
KİM728	Food chemistry and technologies	Spring	E	2+0+0	2	4	English

COURSE INFORMATION

Course Catalog Description (Content)	1- Nutrient elements 2- Carbohydrates 3- Oils and oil-like natural substances 4- Proteins 5- Enzymes 6- Vitamins 7- Mineral substances 8- Midterm Exam 9- Water and Its Properties 10- Alcohols and Alkaloids 11- Color and Flavorings 12- Organic Acids in Foods 13- Food additives 14- Storage methods in foods
The Aim of the Course	The aim of this course is to inform students about important food groups, their chemical structure, physical properties, preparation and preservation.
Course Level	Degree
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 Dr. Öğr. Üyesi İbrahim Evren KIBRIZ
Prerequisite Course(s) of the Course	-
Learning Outcomes from the Course	1. Learns functional groups in foods 2. Gıda katkı maddeleri ile ilgili bilgi sahibi olur 3. Learns the codes in food additives. 4. Learns alkaloids in food additives. 5. Reinforce knowledge of organic chemistry

COURSE CONTENT

Week	Theory	Practice/Laboratory
1	nutritional elements	
2	Carbohydrates	
3	Oils and oil-like natural substances	
4	Proteins	
5	Enzymes	
6	Vitamins	
7	Mineral substances	
8	Midterm Exam	
9	Water and Its Properties	
10	Alcohols and Alkaloids	
11	Color and Flavorings	
12	Organic Acids in Foods	

13	Food additives	
14	Storage methods in foods	
15	Final Exam	

Course Learning Resources

1. Celal Tüzün, Organic Chemistry
2. Fessenden, Organic Chemistry
3. Solomon, Organic Chemistry

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
Midterm Examination	1	2	2
Final Examination	1	2	2
Attending Lectures	14	3	42
Field Work	1	2	2
Self Study	7	3	21
Individual Study for Mid term Examination	2	9	18
Individual Study for Final Examination	2	9	18
Total Workload			
Total Workload / 25 (s)			105/25
ECTS Credits of the Course			$105/25 \cong 4$
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**			