Tarih: 5 Şubat 2026 12:59

Year

Department of Food Engineering / Department of Food Engineering /

Course Code	Course Name	Teorical	Practice	Laboratory	Credits	ECTS
KİM-104	ORGANIC CHEMISTRY	2.00	0.00	0.00	2.00	3.00

Course Detail

Course Language	:	Turkish
Qualification Degree	:	Bachelor
Course Type	:	Compulsory
Preconditions	:	Not
Objectives of the Course	:	The aim of this course is to teach fundamental principles and theories of Organic Chemistry.
Course Contents	:	Synthesis and purification of organic compounds Alkanes and cycloalkanes Alkenes and alkynes, synthesis and reactions Aromatic compounds (Benzene and its structure and reactions) Alcohols, Physical Properties and important alcohols Reactions an identifications of alcohols Physical properties and reactions of Phenols Nomenclature and Classification of epoxy and ethers Synthesis of aldehydes and ketones Carboxylic acids and their synthesis General reactions and derivatives of carboxylic acids Amins, synthesis and reactions Aminoacids and proteins.
Recommended or Required Reading	:	Lecture notes; Tüzün, C., Organik Kimya, Palme Yayıncılık, Ankara, 2006. Solomons, G., Fryhle, C., Çev. Ed. Güral Okay, Yılmaz Yıldırır, Organik Kimya, Literatür Yayınları, İstanbul, 2002.
Planned Learning Activities and Teaching Methods	:	Lecturing, question–answer
Recommended Optional Programme Components	:	.....
Course Instructors	:	Doç. Dr. Kamil Emre Gerçekaslan
Instructor's Assistants	:	.....
Presentation Of Course	:	Face to face
Update Date	:	2/2/2026 2:57:50 PM
Dosya İndirilme Tarihi	:	2/5/2026

Course Outcomes

Upon the completion of this course a student :

1 Explain the fundamental concepts of organic chemistry and its importance in the field of food engineering.

2 Classify organic compounds according to their structures and functional groups and name them based on the IUPAC nomenclature system.

3 Explain the structures, basic physical properties, and reactions of alkanes, alkenes, alkynes, and aromatic compounds.

4 Explain the molecular structures, synthesis pathways, and chemical reactions of alcohols, ethers, aldehydes, and ketones.

5 Explain the structures, physical and chemical properties, and basic reaction mechanisms of carboxylic acids and their derivatives.

Pre / Side Conditions

Course Code	Course Name	Condition	Teorical	Practice	Laboratory	Credits	ECTS

Weekly Contents

	Teorical	Practice	Laboratory	Preparation Info	Teaching Methods	Course Learning Outcomes
1.Week	*Introduction to organic chemistry			*Lecture notes pages 1-20	*Lecture, question and answer, problem solving	Ö.Ç.1 Ö.Ç.2
2.Week	*Introduction to organic chemistry			*Lecture notes pages 1-20	*Lecture, question and answer, problem solving	Ö.Ç.1 Ö.Ç.2
3.Week	*Alkanes *The system according to lUPAC Nomenclature of Organic Structures			*Lecture notes pages 22-42.	*Lecture, question and answer, problem solving	Ö.Ç.3 Ö.Ç.2 Ö.Ç.3 Ö.Ç.4
4.Week	*Alkanes *The system according to lUPAC Nomenclature of Organic Structures			*Lecture notes pages 22-42.	*Lecture, question and answer, problem solving	Ö.Ç.3 Ö.Ç.2 Ö.Ç.3 Ö.Ç.4
5.Week	*Alkenes			*Lecture notes pages 43-53.	*Lecture, question and answer, problem solving	Ö.Ç.4 Ö.Ç.3
6.Week	*Alkynes; isomerism in organic compound			*Lecture notes pages 54-68.	*Lecture, question and answer, problem solving	Ö.Ç.3 Ö.Ç.4
7.Week	*Aromatic hydrocarbons			*Lecture notes pages 69-78.	*Lecture, question and answer, problem solving	Ö.Ç.3 Ö.Ç.4
8.Week	*mid-term exam					
9.Week	*Characteristics of alcohol, Synthesis and Chemical Reactions			*Lecture notes pages 79-114.	*Lecture, question and answer, problem solving	Ö.Ç.3 Ö.Ç.4
10.Week	*Characteristics of alcohol, Synthesis and Chemical Reactions			*Lecture notes pages 79-114.	*Lecture, question and answer, problem solving	Ö.Ç.3 Ö.Ç.4
11.Week	*Nomenclature of ethers, Synthesis and Reactions			*Lecture notes pages 115-123.	*Lecture, question and answer, problem solving	Ö.Ç.4
12.Week	*Nomenclature of aldehydes and ketones, Physical Properties, Synthesis and Reactions			*Lecture notes pages 124-152.	*Lecture, question and answer, problem solving	Ö.Ç.4
13.Week	*Nomenclature of aldehydes and ketones, Physical Properties, Synthesis and Reactions			*Lecture notes pages 124-152.	*Lecture, question and answer, problem solving	Ö.Ç.4
14.Week	*Nomenclature of carboxylic acids, Physical Properties, Synthesis and Reactions			*Lecture notes pages 153-177.	*Lecture, question and answer, problem solving	Ö.Ç.5
15.Week	*Nomenclature of carboxylic acids, Physical Properties, Synthesis and Reactions			*Lecture notes pages 153-177.	*Lecture, question and answer, problem solving	Ö.Ç.5

Assesment Methods %

1 Ara Sınav : 40.000

3 Final : 60.000

ECTS Workload

Activities	Count	Time(Hour)	Sum of Workload
Vize	1	1.00	1.00
Final	1	2.00	2.00
Derse Katılım	14	2.00	28.00
Ders Öncesi Bireysel Çalışma	14	2.00	28.00
Ara Sınav Hazırlık	5	2.00	10.00
Final Sınavı Hazırlık	5	2.00	10.00
		Total :	79.00
		Sum of Workload / 30 (Hour) :	3
		ECTS :	3.00

Program And OutcomeRelation

	P.O.1	P.O.2	P.O.3	P.O.4	P.O.5	P.O.6	P.O.7	P.O.8	P.O.9	P.O.10	P.O.11	P.O.12	P.O.13	P.O.14
	P.O. 1	P.O. 2	P.O. 3	P.O. 4	P.O. 5	P.O. 6	P.O. 7	P.O. 8	P.O. 9	P.O. 10	P.O. 11	P.O. 12	P.O. 13	P.O. 14
L.O. 1	5	5	1	1	1	1	1	1	1	1	1	1	1	1
L.O. 2	5	5	1	1	1	1	1	1	1	1	1	1	1	1
L.O. 3	5	5	1	1	1	1	1	1	1	1	1	1	1	1
L.O. 4	5	5	1	1	1	1	1	1	1	1	1	1	1	1
L.O. 5	5	5	1	1	1	1	1	1	1	1	1	1	1	1
Avarage	8.20	8.20	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Ders/Program Çıktıları İlişkisi

P.O. 1	P.O. 2	P.O. 3	P.O. 4	P.O. 5	P.O. 6	P.O. 7	P.O. 8	P.O. 9	P.O. 10	P.O. 11	P.O. 12	P.O. 13	P.O. 14
16	16	0	0	0	0	0	0	0	0	0	0	0	0

BEWARE OF PLAGIARISM! Please pay attention to proper academic citation rules and avoid plagiarism, an unethical and academically fraudulent behavior, when completing reports, assignments, or other academic works, and it is treated with the same disciplinary action as cheating in a classroom setting. It is imperative to refrain from presenting another person s ideas, language, expressions, or any other form of intellectual property as your own. Regardless of quality, your assignments/projects/research should reflect your original work. Perfection is not a requirement, and in case of any uncertainties regarding academic writing guidelines, you may seek clarification from your course instructor.

Engel Durumu/Uyarlama Talebi : Engel durumuna ilişkin herhangi bir uyarlama talebinde bulunmak isteyen öğrenciler, dersin öğretim elemanı ya da Nevsehir Engelli Öğrenci Birimi ile en kısa sürede iletişime geçmelidir.