Course Syllabus

Code - Course Title	**KİM263 - Basic Biochemistry**
Course Type	III. SEMESTER
Laboratory + Practice	2+0
ECTS	**5.0**
Language of Instruction	Türkçe
Course Type	Required Courses
Course Instructor(s)	PROF. DR. RÜSTEM KEÇİLİ

Mode of Delivery	Face to face
Prerequisites	There is no prerequisite or co-requisite for this course.
Work Placement	Not Applicable

Course Syllabus

Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 1	**LO-1**	Introduction to biochemistry, cells and organelles	Lecture
Week - 2	**LO-2**	Carbonhydrates I	Lecture
Week - 3	**LO-2**	Carbonhydrates II	Lecture
Week - 4	**LO-3**	Lipids	Lecture
Week - 5	**LO-4**	Proteins I	Lecture
Week - 6	**LO-4**	Proteins II	
Week - 7	**LO-5** **LO-6**	Enzymes	Lecture
Week - 8	**LO-7**	Vitamins I	Lecture
Week - 9	**LO-7**	Vitamins II	
Week - 10	**LO-8**	Minerals	Lecture
Week - 11	**LO-9**	Hormones I	Lecture
Week - 12	**LO-9**	Hormones II	Lecture
Week - 13	**LO-10**	Nucleic Acids I	Lecture
Week - 14	**LO-10**	Nucleic Acids II	

Learning Outcomes

#	Learning Outcome
1	The student will be able to explain the basic structure of the cell, the functions of organelles, and the mechanisms of substance transport across the cell membrane.
2	debate the function and regulation of carbonhydrate metabolism.
3	Students will be able to classify lipids and fatty acids according to their chemical structures and fundamental properties.
4	explain the structure of proteins
5	Discuss the definition and function of the enzyme.
6	Students will be able to compare types of enzyme inhibition by interpreting the factors that affect enzyme activity.
7	Students will be able to classify vitamins according to their solubility and explain their biological functions and the primary disorders that arise from their deficiencies.
8	Students will be able to relate the biological functions of macrominerals and trace elements to the effects of their deficiency and excess on the organism.
9	Students will be able to classify hormones according to their chemical structures and explain their mechanisms of action and their roles in the regulation of metabolism.
10	Students will be able to explain the roles of DNA and RNA in the storage and transmission of genetic information and in protein synthesis by comparing their structural characteristics.

Sustainable Development Goals

No content has been provided.

Course Theme

No content has been provided.

AKTS Workload

Activity	Duration (Hour)	Count	Workload
Teorik Derse Katılım	0	0	0
Sınıf Dışı Çalışma (Ön Hazırlık & Pekiştirme Amaçlı)	0	0	0
Ödevler	0	0	0
Proje - Rapor - Sunum Hazırlama	0	0	0
Ara Sınav Hazırlığı (sınav süresi dahil)	0	0	0
Final Sınavı Hazırlığı (sınav süresi dahil)	0	0	0
Uygulama (Laboratuvar, Müzik/Enstrüman Uygulaması, Atölye/Saha Çalışması vb.)	0	0	0
Staj Uygulaması	0	0	0
		Calculated ECTS	**0**

Assessment Method and Passing Requirements

No content has been provided.

Assessment Method and Passing Requirements	Quamtity	Percentage (%)
1.Midterm Exam	1	40
Final Exam	1	60
	Sum (%)	**100**