Course Syllabus

Code - Course Title	**KİM460 - Clinical Biochemistry**
Course Type	VIII. SEMESTER
Laboratory + Practice	1+0
ECTS	**1.5**
Language of Instruction	Türkçe
Course Type	Required Courses
Course Instructor(s)	PROF. DR. FİLİZ ÖZDEMİR, PROF. DR. HALİDE EDİP TEMEL

Mode of Delivery	The mode of delivery of this course is Face to face
Prerequisites	There is no prerequisite or co-requisite for this course.
Courses Recomended	There is no recommended optional programme component for this course.
Work Placement	NA

Course Syllabus

Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 1		Introduction to Clinical Biochemistry	
Week - 2		Disorders of Nucleic Acid Metabolism	
Week - 3		Disorders of Amino Acid (Protein) Metabolism	
Week - 4		Metabolism of Hemoglobin, Porphyrins, Iron, and Bilirubin	
Week - 5		Enzymes Used in Clinical Diagnosis	
Week - 6		Enzymes Used in Clinical Diagnosis	
Week - 7		Disorders of Carbohydrate Metabolism	
Week - 8		Disorders of Lipid Metabolism	
Week - 9		Hormones	
Week - 10		Disorders of Vitamin and Mineral Deficiencies	
Week - 11		Disorders of Vitamin and Mineral Deficiencies	
Week - 12		Tumor Markers	
Week - 13		Tumor markers	
Week - 14		Tumor Markers	

Learning Outcomes

#	Learning Outcome
1	Will be able to explain Clinical Biochemistry.
2	Will be able to explain nucleic acid metabolism disorders.
3	Will be able to explain amino acid dysfunctions.
4	Will be able to explain hemoglobin metabolism disorders.
5	Will be able to explain enzymes and their clinical significance.
6	Will be able to explain liver, cardiac, and skeletal enzymes (Transaminases, Creatine Kinase, Lactate Dehydrogenase, Alkaline Phosphatase).
7	Will be able to explain bile duct enzymes (5' nucleotidase, Gamma-glutamyl transferase).
8	Will be able to explain pancreatic digestive enzymes (Amylase, Lipase, Trypsin, Chymotrypsin).
9	Will be able to explain other clinically significant enzymes (Acid phosphatase, Angiotensin-converting enzyme, Cholinesterase, Glutamate dehydrogenase, Isocitrate dehydrogenase).
10	Will be able to explain blood glucose homeostasis.
11	Will be able to explain Diabetes Mellitus.
12	Will be able to explain hypoglycemia.
13	Will be able to explain serum lipids, lipoproteins, and related diseases.
14	Will be able to explain thyroid dysfunctions.
15	Will be able to explain the laboratory evaluation of thyroid functions.
16	Will be able to explain deficiencies and disorders of fat-soluble vitamins.
17	Will be able to explain deficiencies and disorders of water-soluble vitamins.
18	Will be able to explain disorders of calcium homeostasis.
19	Will be able to explain disorders of phosphate homeostasis.
20	Will be able to explain metabolic bone disease.
21	Will be able to explain disorders of magnesium homeostasis.
22	Will be able to explain disorders of sodium and water metabolism.
23	Will be able to explain potassium deficiency and hypokalemia.
24	Will be able to explain the clinical interpretation of tumor markers.

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

AKTS Workload

Activity	Duration (Hour)	Count	Workload
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.