

TOROS ÜNİVERSİTESİ

Vocational School
Medical Laboratory Techniques

Course Information

CLINICAL BIOCHEMISTRY II					
Code	Semester	Theoretical	Practice	National Credit	ECTS Credit
		Hour / Week			
TLT206	Spring	2	2	3	4

Prerequisites and co-requisites	
Language of instruction	Turkish
Type	Required
Level of Course	Associate
Lecturer	Lec. Dr. Ümit YAŞAR
Mode of Delivery	Face to Face
Suggested Subject	
Professional practise (internship)	None
Objectives of the Course	Teaching the metabolism of biochemical molecules and emerging the relations of biochemical molecules with diseases and clinic. Teaching the differential diagnoses of diseases and qualitative and quantitative analyses of biochemical parameters related with diseases
Contents of the Course	Importance of clinical biochemistry/Water, sodium and potassium balance/Globular and fibrous proteins/Structure of hemoglobin and anemias/Lipid metabolism disorders /Carbohydrate metabolism disorders/Cardiovascular disorders/Plasma proteins/Enzymes and relations with diseases/Liver function and disorders/Calcium phosphate and magnesium balance

Learning Outcomes of Course

#	Learning Outcomes
1	Understanding the differential diagnosis of diseases and quantitative determination of biochemical parameters involved in diseases.
2	Learning the relation between the occurrence of diseases and the metabolism of biochemical molecules.
3	Learning how serum levels of biochemical parameters are related to diseases
4	Learning how laboratory techniques are affected diagnosis

Course Syllabus

#	Subjects	Teaching Methods and Technics
1	Importance of Clinical Biochemistry	Lecture, discussion, presentation
2	Globular, fibrous proteins and their relations with diseases	Lecture, discussion, presentation
3	Carbohydrate metabolism disorders	Lecture, discussion, presentation
4	Lipid metabolism disorders	Lecture, discussion, presentation
5	Lipid metabolism disorders	Lecture, discussion, presentation
6	Cardiovascular diseases	Lecture, discussion, presentation
7	Midterm Exam	
8	Enzymes and their importance in clinic diagnosis	Lecture, discussion, presentation
9	Enzymes and their importance in clinic diagnosis	Lecture, discussion, presentation
10	Liver function and disorders	Lecture, discussion, presentation

11	Liver function and disorders	Lecture, discussion, presentation
12	Calcium, phosphate and magnesium balance	Lecture, discussion, presentation
13	Hormones	Lecture, discussion, presentation
14	Hormone metabolism	Lecture, discussion, presentation
15	Exam preparation	Lecture, discussion, presentation
16	Final Exam	

Course Syllabus

#	Material / Resources	Information About Resources	Reference / Recommended Resources
1	Course presentation documents		
2			

Method of Assessment

#	Weight	Work Type	Work Title
1	40%	Mid-Term Exam	Mid-Term Exam
2	60%	Final Exam	Final Exam

Relationship between Learning Outcomes of Course and Program Outcomes

#	Learning Outcomes	Program Outcomes	Method of Assessment
1	Understanding the differential diagnosis of diseases and quantitative determination of biochemical parameters involved in diseases.	3,4	1,2
2	Learning the relation between the occurrence of diseases and the metabolism of biochemical molecules.	5,7	1,2
3	Learning how serum levels of biochemical parameters are related to diseases	5,6	1,2
4	Learning how laboratory techniques are affected diagnosis	4,5	1,2

PS. The numbers, which are shown in the column Method of Assessment, presents the methods shown in the previous table, titled as Method of Assessment.

Work Load Details

#	Type of Work	Quantity	Time (Hour)	Work Load
1	Course Duration	14	4	56
2	Course Duration Except Class (Preliminary Study, Enhancement)	14	4	56
3	Presentation and Seminar Preparation	0	0	0
4	Web Research, Library and Archival Work	0	0	0
5	Document/Information Listing	0	0	0
6	Workshop	0	0	0
7	Preparation for Midterm Exam	1	3	3
8	Midterm Exam	1	1	1
9	Quiz	0	0	0
10	Homework	0	0	0
11	Midterm Project	0	0	0
12	Midterm Exercise	0	0	0
13	Final Project	0	0	0
14	Final Exercise	0	0	0
15	Preparation for Final Exam	1	3	3

16	Final Exam	1	1	1
				120