

Vocational School of Health Services / Medical Laboratory Techniques

2023 - 2024 Academic Year

BASIC BIOCHEMISTRY

Syllabus

Course Description					
Name	Code	Semester	T+A Hour	Credit	ECTS
BASIC BIOCHEMISTRY	TLT1277960	Spring Semester	2+0	2	6
Prerequisites Courses					
Recommended Elective Courses					
Language of Instruction	Turkish				
Course Level	Short Cycle (Associate's Degree)				
Course Type	Required				
Course Coordinator	Assist.Prof. Neziha HACIHASANOĞLU ÇAKMAK				
Name of Lecturer(s)	Assist.Prof. Neziha HACIHASANOĞLU ÇAKMAK				
Assistant(s)					
Aim	To describe all chemical reactions taking place in the cell at the molecular level and to explain the changes that occur in these reactions in pathological conditions.				
Course Content	This course contains; Introduction to Biochemistry- Structure of Atom,Proteins,Enzymes- Structure of Metabolism,Catabolism,Carbohydrates,Carbohydrate Metabolism,Lipids,Lipid Metabolism,Protein Metabolism,Anabolism and It's Control 1,Anabolism and It's Control 2,Hormones 1,Hormones 2,Vitamines and minerals.				
Course Learning Outcomes			Teaching Methods	Assessment Methods	
1.Defines the structure and functions of macromolecules (carbohydrates, proteins, lipids).			16, 9	A, B, C	
2.Defines the pathways of metabolism in the human body and the control mechanisms of these pathways.			16, 9	A, B, C	
3.Interpret the changes in chemical reactions at the cell level in pathological conditions.			16, 9	A, B, C	
Teaching Methods	16: Question - Answer Technique, 9: Lecture Method				
Assessment Methods	A: Traditional Written Exam, B: Short Answer Exam, C: Multiple-Choice Exam				
Lecture Schedule					
Sequence	Topics	Preliminary Preparation			
1	Introduction to Biochemistry- Structure of Atom	Studying the relevant section in the relevant source			
2	Proteins	Studying the relevant section in the relevant source			
3	Enzymes- Structure of Metabolism	Studying the relevant section in the relevant source			
4	Catabolism	Studying the relevant section in the relevant source			
5	Carbohydrates	Studying the relevant section in the relevant source			
6	Carbohydrate Metabolism	Studying the relevant section in the relevant source			
7	Lipids	Studying the relevant section in the relevant source			
8	Lipid Metabolism	Studying the relevant section in the relevant source			
9	Protein Metabolism	Studying the relevant section in the relevant source			
10	Anabolism and It's Control 1	Studying the relevant section in the relevant source			
11	Anabolism and It's Control 2	Studying the relevant section in the relevant source			
12	Hormones 1	Studying the relevant section in the relevant source			
13	Hormones 2	Studying the relevant section in the relevant source			
14	Vitamines and minerals	Studying the relevant section in the relevant source			
Evaluation Methods		Weight(%)			
Midterm Exam		40			
General Exam		60			

Resources
Sağlık Bilimleri için Biyokimya (Editör: Dr. Öğr. Üyesi Neziha HACIHASANOĞLU ÇAKMAK)