

**Vocational School / 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
<b>Prerequisites Courses</b>					
<b>Recommended Elective Courses</b>					
<b>Language of Instruction</b>	Turkish				
<b>Course Level</b>	Short Cycle (Associate's Degree)				
<b>Course Type</b>	Required				
<b>Course Coordinator</b>	Assist.Prof. Neziha HACIHASANOĞLU ÇAKMAK				
<b>Name of Lecturer(s)</b>	Assoc.Prof. Ozan Emre EYUPOĞLU				
<b>Assistant(s)</b>					
<b>Aim</b>	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.				
<b>Course Content</b>	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.				
<b>Course Learning Outcomes</b>			<b>Teaching Methods</b>	<b>Assessment Methods</b>	
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	
<b>Teaching Methods</b>	16: Question - Answer Technique, 9: Lecture Method				
<b>Assessment Methods</b>	A: Traditional Written Exam, B: Short Answer Exam, C: Multiple-Choice Exam				
<b>Lecture Schedule</b>					
<b>Sequence</b>	<b>Topics</b>	<b>Preliminary Preparation</b>			
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			
<b>Evaluation Methods</b>		<b>Weight(%)</b>			
Midterm Exam		40			
General Exam		60			

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