

## AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title Basic Enzymology		ology							
Course Code	BYK502		Couse Level		Second Cycle (Master's Degree)				
ECTS Credit 5	Workload	125 (Hours)	Theory	/	3	Practice	0	Laboratory	0
Objectives of the Course To have general information		ral informatior	about	enzy	mes and th	eir reactions			
Course Content	Introduction to enzymology, enzyme purification, molecular structure of enzymes, introduction to enzyme kinetics, mechanisms of enzyme behavior, control of enzyme activity, enzymes in organized systems, enzymes within the cell, the meaning of enzyme turnover, enzyme technology, immobilized enzymes, the clinical applications of enzymology, the importance of enzymes in normal and pathological conditions								
Work Placement N/A									
Planned Learning Activities and Teaching Methods Explanation (Presentation), Discussion									
Name of Lecturer(s)									

#### Assessment Methods and Criteria

Method	Quantity	Percentage (%)	
Midterm Examination	1	40	
Final Examination	1	60	

#### **Recommended or Required Reading**

- 1 enzymes: Trevor Palmer Enzymes Trevor Palmer
- 2 Enzymes:Paul D. Boyer,Edwin G. Krebs

Week	Weekly Detailed Cours	se Contents
1	Theoretical	Introduction to enzymology, molecular structure of enzymes and purification of enzymes
2	Theoretical	Introduction to enzymology, molecular structure of enzymes and purification of enzymes
3	Theoretical	Introduction to enzyme kinetics, mechanism of enzyme behavior and control of enzyme activity
4	Theoretical	Introduction to enzyme kinetics, mechanism of enzyme behavior and control of enzyme activity
5	Theoretical	Enzymes in organized systems and in cells
6	Theoretical	Enzymes in organized systems and in cells
7	Theoretical	Enzyme cycle and its meaning
8	Intermediate Exam	Quiz
9	Theoretical	Enzyme technology
10	Theoretical	Immobilized enzymes
11	Theoretical	Clinical applications of enzymology
12	Theoretical	Clinical applications of enzymology
13	Theoretical	Clinical applications of enzymology
14	Theoretical	Importance of enzymes in normal and pathological conditions
15	Theoretical	Importance of enzymes in normal and pathological conditions
16	Theoretical	Final exam

#### **Workload Calculation**

Activity	Quantity	Preparation	Duration	Total Workload			
Lecture - Theory	14	1	3	56			
Assignment	10	1	5	60			
Individual Work	1	1	8	9			
	125						
	5						

\*25 hour workload is accepted as 1 ECTS

## Learning Outcomes

1 To have general information about enzyme terminology



2	Learning the behavior, kinetics and activity of enzymes
3	Learn about organized systems and enzymes in the cell
4	To obtain information about enzyme cycle and its meaning, enzyme technology and immobilized enzymes
5	Learn clinical applications of enzymology
6	To learn the importance of enzymes in normal and pathological conditions

## Programme Outcomes (Biochemistry (Medical) Master)

1	To have basic theoretical knowledge about biochemistry	y ar	nd to help understanding biochemistry

- 2 To have the basic laboratory knowledge, apparatus and methods used in biochemistry
- 3 Analysis: To be able to analyze information critically
- 4 Synthesis: To be able to synthesize and adapt the knowledge in the field from different directions
- 5 Evaluation: To critically evaluate research in the field

# Contribution of Learning Outcomes to Programme Outcomes 1:Very Low, 2:Low, 3:Medium, 4:High, 5:Very High

	L1	L2	L3	L4	L5	L6
P1	5	4	4	5	4	4
P2	4	4	4	4	4	3
P3	5	4	4	5	5	4
P4	4	4	4	4	5	5
P5	5	4	4	4	5	5

