



## AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Basic Biochemistry							
Course Code		BYK501		Couse Level		Second Cycle (Master's Degree)			
ECTS Credit	5	Workload	125 ( <i>Hours</i> )	Theory	2	Practice	2	Laboratory	0
Objectives of the Course		To learn the structure and functions of proteins, carbohydrates, vitamins, lipids, nucleic acids and minerals in our body							
Course Content		Biomolecules and cells, water, pH, carbohydrates and classification and general reactions of carbohydrates, structure and classification of lipids, biosynthesis of lipids, degradation of lipids, classification and structure of amino acids, amino acid metabolism, structure-function relationships of proteins, nucleic acids.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Experiment, Demonstration, Discussion, Individual Study					
Name of Lecturer(s)									

### Assessment Methods and Criteria

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

### Recommended or Required Reading

1	Biochemistry by lehniger
2	Biochemistry Richard A. Harvey (Ph. D.),Richard A. Harvey,Denise R. Ferrier
3	Biochemistry: Mary K. Campbell,Shawn O. Farrell

Week	Weekly Detailed Course Contents	
1	Theoretical	Biomolecules, cells, water and pH
2	Theoretical	Classification and general reactions of carbohydrates
	Practice	Practices
3	Theoretical	Biosynthesis, degradation and storage of carbohydrates
4	Theoretical	Biosynthesis, degradation and storage of carbohydrates
5	Theoretical	Structure and classification of lipids
	Practice	Practices
6	Theoretical	Biosynthesis and degradation of lipids
7	Theoretical	Biosynthesis and degradation of lipids
8	Intermediate Exam	Quiz
9	Theoretical	Structure and classification of amino acids
	Practice	Practices
10	Theoretical	Metabolism of amino acids
11	Theoretical	Metabolism of amino acids
12	Theoretical	Structure and function of proteins
	Practice	Practices
13	Theoretical	Structure and function of proteins
	Practice	Practices
14	Theoretical	Nucleic acids
15	Theoretical	Nucleic acids
16	Final Exam	Final exam

### Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	9	1	3	36
Lecture - Practice	5	1	4	25



Assignment	8	2	6	64
Total Workload (Hours)				125
[Total Workload (Hours) / 25*] = ECTS				5
*25 hour workload is accepted as 1 ECTS				

### Learning Outcomes

1	To have general knowledge about biomolecule, cell, water and pH
2	To have general knowledge about carbohydrates
3	To have general knowledge about lipids
4	To have general knowledge about amino acids
5	To have general knowledge about proteins
6	To have general knowledge about nucleic acids

### Programme Outcomes (Biochemistry (Medical) Master)

1	To have basic theoretical knowledge about biochemistry and 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	4	5	5	5	4	5
P2	5	4	5	4	4	4
P3	4	5	5	5	4	4
P4	5	4	4	4	5	4
P5	5	4	5	4	5	5

