



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Structures and Features of Biomolecules II							
Course Code		VBY602		Course Level		Third Cycle (Doctorate Degree)			
ECTS Credit	4	Workload	100 (<i>Hours</i>)	Theory	2	Practice	0	Laboratory	0
Objectives of the Course		Chemical properties, classification, synthesis, degradation of amino acids, , paths of change experienced by the organism, description, classification, chemical properties, synthesis, breakdown, digestion of proteins, the urea cycle, to be informed about the metabolism of ammonia							
Course Content		Chemical properties, classification, synthesis, degradation of amino acids, , paths of change experienced by the organism, description, classification, chemical properties, synthesis, breakdown, digestion of proteins, the urea cycle, to be informed about the metabolism of ammonia							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Individual Study					
Name of Lecturer(s)		Prof. Ayşegül BİLDİK							

Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Final Examination	1	100

Recommended or Required Reading

1	Biyokimya Güneş Tıp Kitabevi
2	Biyokimya Leninger
3	Biyokimya Lipinkot

Week	Weekly Detailed Course Contents	
1	Theoretical	Amino Acid, definition, classification
2	Theoretical	Metabolism of essential amino acids
3	Theoretical	Absorption and metabolism of amino acids
4	Theoretical	Glukogenic and ketogenic amino acids
5	Intermediate Exam	Midterm exam
6	Theoretical	Conversion physiological reactions of amino acids
7	Theoretical	Physical and chemical properties amino acids
8	Theoretical	Definition, chemical structures and genral properties of Proteins
9	Theoretical	Determination of Proteins of molecular weight
10	Intermediate Exam	Midterm exam
11	Theoretical	Classification and biological functions of proteins
12	Theoretical	Structure of the protein molecule
13	Theoretical	Ammonia metabolism
14	Theoretical	Urea cycle
15	Theoretical	Discussion
16	Final Exam	Final exam

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	15	2	2	60
Assignment	2	2	1	6
Reading	10	1	0	10
Quiz	2	4	1	10
Midterm Examination	1	4	1	5



Final Examination	1	8	1	9
Total Workload (Hours)				100
[Total Workload (Hours) / 25*] = ECTS				4
*25 hour workload is accepted as 1 ECTS				

Learning Outcomes

1	To have the general knowledge about aminoacids
2	To be informed about of classifications of amino acids
3	To be informed about essential amino acids and synthesis
4	To be informed about aminoacid metabolisms
5	To learn Glikojenik and Ketogenic amino acids
6	Knowing the general reactions of amino acids
7	To have the knowledge about the physical and chemical properties of aminoacids
8	To be a general knowledge about proteins
9	To be informed about molecular structureand classification of proteins
10	To be informed about Ammonia metabolism, urea cycle

Programme Outcomes (Biochemistry (Veterinary Medicine) Doctorate)

1	Has a deep and broad knowledge about the field and the interdisciplinary area related with the field through the achievements gained in undergraduate and professional levels.
2	Has the knowledge to create original ideas, analyze them and develop definition/product/diagnosis methods by using the knowledge gained in undergraduate and/or professional experience, when needed.
3	Is knowledgeable about theories and practices in methodological and scientific research methods to run an independent research.
4	Excels in the laboratory, clinical and similar fields by using the theoretical and practical information gained in former education, and has the ability to create solutions in related fields.
5	Designs and develops scientific methodology for the advanced level/newly defined/emerged problems about the field.
6	Excels in the known scientific methods in the field for the advanced level/ newly defined/emerged problems.
7	Designs unique researches and implements independently.
8	Analyzes, synthesizes and evaluates the new ideas in related fields by using critical thinking.
9	Plans, creates teams and carries out the interdisciplinary research projects in order to create solutions to the known/newly defined problems.
10	Joins to congresses, panels, symposiums, workshops, seminars, article discussions and problem solving sessions in different disciplines, and exchanges information with the other professionals to contribute to the solutions.
11	Broadens the borders of scientific information by publishing scientific articles in national and/or international peer-reviewed journals.
12	Creates new ideas and methods to contribute to the technological, social and cultural progress, or to help the development of information society by using the theoretical, practical, independent research, abilities responsibly.
13	Designs and implements social projects with the awareness of creating an information society.
14	Compiles and interprets any type of data (field observation, scientific knowledge etc.) in accordance with the aims.
15	Develops and uses strategies about related topics with the field.
16	Implements and defends institutional and practical information and abilities in accordance with the needs of the country and the world, and changes when necessary.
17	Follows up and uses all the updates about the field (scientific information, legislations etc.), and has the qualification to change them.
18	Adopts lifelong learning as a principle and acknowledges that the information gained through research is the most valuable gain.

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	L7	L8	L9	L10
P1	5	5	5	5	5	5	5	5	5	5
P4	5	5	5	5	5	5	5	5	5	5
P8	5	5	5	5	5	5	5	5	5	5
P12	5	5	5	5	5	5	5	5	5	5

