AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Structures and Features of Biomolecules I								
Course Code	VBY601		Couse Level	Third Cycle (Doctorate Degree)					
ECTS Credit	4	Workload	105 *(Hours)*	Theory	2	Practice	0	Laboratory	0
Objectives of the Course	The purpose of this course to understand of carbohydrates and lipids in the structure of biomolecules, chemical properties, functions, digestion, synthesis and degradation, examine and give the ability to use this basic information								
Course Content	Carbohydrate definition, formula, occurences, classification, Important chemical properties of monosaccharides, Fatty acids, description, classification, physical and chemical properties, Neutral lipids, chemical and physical properties								
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 Kitapevi
2	Biyokimya Leninger
3	Biyokimya Lipinkot

Week	Weekly Detailed Course Contents	
1	Theoretical	Carbohydrate definition, formula, occurences, classification
2	Theoretical	Monosaccharide, disaccharide, oligosaccharides
3	Theoretical	Polysaccharides
4	Theoretical	Monosaccharides of structural features
5	Theoretical	Carbohydrate derivatives
6	Theoretical	Important chemical properties of monosaccharides
7	Theoretical	Monosakkarid Derivatives
8	Theoretical	Fatty acids, description, classification, physical and chemical properties
9	Theoretical	Neutral lipids, chemical and physical properties
10	Theoretical	Midterm exam
11	Theoretical	Phosphoglycerids
12	Theoretical	Sphingolipids
13	Theoretical	Terpens
14	Theoretical	Steroids

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	3	2	70
Assignment	2	2	1	6
Reading	5	1	0	5
Quiz	2	4	1	10
Midterm Examination	1	4	1	5
Final Examination	1	8	1	9
			Total Workload (Hours)	105
			[Total Workload (Hours) / 25*] = **ECTS**	4
**25 hour workload is accepted as 1 ECTS*				

Learning Outcomes	
1	To have the general knowledge about Carbohydrates
2	To have knowledge about of Physical and chemical properties of carbohydrates, digestion, absorption
3	To have knowledge about monosaccharide, disaccharide and polysaccharides
4	To have knowledge about monosaccharide derivatives
5	To have knowledge about fatty acids
6	To recognize lipids with glycerol
7	To recognize lipids without glycerol
8	To have inform about the general characteristics of lipids and absorption
9	To give it the ability to use learned basic information

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
P5									4
P8		3							
P12	3		3	3	3	3	3	3	
P18	4	4	4	3	3	3	3	3	5