



## AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Biochemistry of Porphirine and Heme.							
Course Code		VBY611		Couese Level		Third Cycle (Doctorate Degree)			
ECTS Credit	4	Workload	105 ( <i>Hours</i> )	Theory	2	Practice	0	Laboratory	0
Objectives of the Course		Porphyrin and heme synthesis and degradation of these molecules, control mechanisms, both synthesis and degradation of molecules containing, on porphyrin metabolism disorders, and the Drive is the ability to provide information and give information.							
Course Content		Porphyrin and heme synthesis and degradation of these molecules, control mechanisms, synthesis and degradation of molecules containing both, and both porphyrin metabolism disorders							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation)					
Name of Lecturer(s)		Prof. Pınar Alkım ULUTAŞ, Prof. Serap ÜNÜBOL AYPAK							

### Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	20
Final Examination	1	60
Quiz	2	10
Assignment	2	10

### Recommended or Required Reading

1	Biyokimya Güneş Tıp Kitapevi
2	Biyokimya Leninger
3	Biyokimya Lipinkot

Week	Weekly Detailed Course Contents	
1	Theoretical	Classification of Proteins and Proteins
2	Theoretical	Kromoproteinler
3	Theoretical	Porphyrins
5	Theoretical	Hemoproteidleri
6	Intermediate Exam	Midterm exam
7	Theoretical	Myoglobin
8	Theoretical	Hemoglobin
9	Theoretical	Cytochromes
10	Theoretical	Enzymes containing ferrous porphyrin
11	Theoretical	Bile colored substances
12	Intermediate Exam	Midterm exam
13	Theoretical	Hem and porphyrin metabolism disorders
14	Theoretical	Discussion
15	Theoretical	Homework presentations
16	Final Exam	Final exam

### Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	2	28
Assignment	2	5	1	12
Reading	2	10	1	22
Quiz	2	5	0.5	11
Midterm Examination	1	10	1	11



Final Examination	1	20	1	21
Total Workload (Hours)				105
[Total Workload (Hours) / 25*] = ECTS				4
*25 hour workload is accepted as 1 ECTS				

### Learning Outcomes

1	To be informed about and synthesis of porphyrin
2	To be informed about hemoglobin and the synthesis of hemoglobin
3	To be informed about Control mechanisms .
4	To obtain information about porfirine and hem metabolism disorders.
5	Gain the ability to use information obtained

### 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
P1	5	5	5	5	
P4	5	5	5	5	
P5					5
P6					5
P8	4	4	4	4	4
P12	3	3	3	3	
P14	5	5	5		
P15				5	
P16	4	4	4	4	
P17	4	4	4	4	

