AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Control Mechanism in Biochemistry								
Course Code	VBY608		Couse Level		Third Cycle (Doctorate Degree)				
ECTS Credit	4	Workload	99 *(Hours)*	Theory	2	Practice	0	Laboratory	0
Objectives of the Course	Control mechanisms of carbohydrate, lipid and protein metabolism, irreversible reactions, negative feedback mechanisms, hormones that control metabolism and effects								
Course Content	Control mechanisms of carbohydrate, lipid and protein metabolism, irreversible reactions, negative feedback mechanisms, hormones that control metabolism and effects								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Discussion, Individual Study								
Name of Lecturer(s)	Prof. Ayşegül BİLDİK								

Assessment Methods and Criteria		
Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	60

Recommended or Required Reading	
1	Biyokimya Güneş Tıp Kitapevi
2	Biyokimya Leninger
3	Biyokimya Lipinkot

Week	Weekly Detailed Course Contents	
1	Theoretical	General features of the metabolism
2	Theoretical	Feed back control of enzyme activity
3	Theoretical	The control of enzyme activity with protein modification
4	Theoretical	The control of enzyme activity with Ca
5	Theoretical	Allosteric enzymes
6	Intermediate Exam	Midterm exam
7	Theoretical	Control mechanisms in carbohydrate metabolism-1
8	Theoretical	Control mechanisms in carbohydrate metabolism-2
9	Theoretical	Control mechanisms in lipid metabolism
10	Theoretical	Lipid metabolism checkpoints
11	Theoretical	Control mechanisms in protein metabolism
12	Intermediate Exam	Midterm exam
13	Theoretical	Control mechanisms in nucleic acid metabolism
14	Theoretical	Hormones and their effects on metabolism
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	0.5	9
Midterm Examination	1	4	1	5

Final Examination	1	8	1	9
			Total Workload (Hours)	99
			[Total Workload (Hours) / 25*] = **ECTS**	4
**25 hour workload is accepted as 1 ECTS*				

Learning Outcomes	
1	To knowledge of control mechanisms in carbohydrate metabolism
2	To knowledge of control mechanisms in lipid metabolism
3	To knowledge of control mechanisms in protein metabolism
4	To knowledge of feed back mechanisms
5	To knowledge of hormones that control metabolism
6	6. to win ability to use learned knowledge

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
P1	5	5	5	5	5	
P4	5	5	5	5	5	
P5						5
P6						5
P8	5	5	5	5	5	
P12	5	5	5	5	5	