AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Techniques of General Laboratory								
Course Code	VBY645		Couse Level	Third Cycle (Doctorate Degree)					
ECTS Credit	5	Workload	125 *(Hours)*	Theory	2	Practice	0	Laboratory	0
Objectives of the Course	To teach to provide of security and layout of the biochemistry lab								
Course Content	Working principles of laboratory equipments that using in biochemistry laboratory, care and clean of this equipment, to provide the order of laboratory, the rules should be held laboratory								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Discussion								
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	Lippincott's Illustrated Reviews Biyokimya Seri Editörleri Richard A HARVEY, Pamela C. CHAMPE Biyokimya Çeviri Editörü Doç.Dr. Engin ULUKAYA, Nobel Tıp Kitabevleri 2007
2	Lehninger Biyokimyanın İlkeleri. David L. Nelson Michael M. COX. Çeviri Editörü Prof.Dr. Nedret KILIÇ, Palme Yayıncılık
3	Harper Biyokimya Robert K. Murray, Daryl K. Granner, Peter A. Mayes, Victor W. Rodwell. Çeviri Editörleri: Nurten DİKMEN, Tuncay ÖZGÜNEN. Nobel Tıp Kitabevleri

Week	Weekly Detailed Course Contents	
1	Theoretical	Biochemistry laboratory's rules
2	Theoretical	Security in biochemistry laboratory
3	Theoretical	Glaswares used in biochemistry laboratory
4	Theoretical	Qualitative and quantitative analysis
5	Theoretical	Chemicals used in biochemistry laboratory
6	Theoretical	Plastic materials used in biochemistry laboratory
7	Theoretical	Volumetric measurements
8	Intermediate Exam	Midterm exam
9	Theoretical	Distilled water
10	Theoretical	Principles of laboratory instruments
11	Theoretical	Maintenance of laboratory instruments
12	Intermediate Exam	Quizze
13	Theoretical	Sending samples to laboratory
14	Theoretical	Cleaning of laboratory instruments
15	Theoretical	Discussion
16	Final Exam	Final exam

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	15	3	2	75
Reading	1	17.5	0	17.5
Quiz	1	5	0.5	5.5
Midterm Examination	1	10	1	11

Final Examination	1	15	1	16
			Total Workload (Hours)	125
			[Total Workload (Hours) / 25*] = **ECTS**	5
**25 hour workload is accepted as 1 ECTS*				

Learning Outcomes	
1	to teach to layout of laboratory
2	routine to apply what they learn
3	Recognize the materials used in biochemistry laboratory
4	To have knowledge about safety in laboratory
5	To have knowledge about the maintenance of laboratory instruments

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	L4	L5
P1	3		3	3
P2	4		4	4
P3	4			
P4		4	4	4
P8	3			
P12	3	4	4	4
P15	4			
P17	4		4	4
P18		3	3	3