AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Lipid Determination Methods								
Course Code	VBY628		Couse Level	Third Cycle (Doctorate Degree)					
ECTS Credit	5	Workload	125 *(Hours)*	Theory	1	Practice	2	Laboratory	0
Objectives of the Course	What is happening and give them the methods of determination of blood lipids, compared with those who give the ability of theoretical knowledge in clinical biochemistry.								
Course Content	Comparative lipid analysis techniques, clinical significance and interpretation of the determination of phospholipids, total cholesterol determination, showing the presence of glycerol								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Experiment								
Name of Lecturer(s)									

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

Recommended or Required Reading	
1	Clinical Biochemistry

Week	Weekly Detailed Course Contents	
1	Theoretical	Definition of Lipids
	Practice	Presentation of laboratory materials
2	Theoretical	Classification of lipids
	Practice	Preparation of working plan
3	Theoretical	The membrane lipids
	Practice	Tools and equipment used in the preparation
4	Theoretical	Blood lipids
	Practice	Sample preparation
5	Theoretical	Methods of determination of lipid
	Practice	Total lipid analysis(Gravimetric method)
6	Theoretical	Determination of total lipids
	Practice	Total lipid analysis(Turbidometrik method)
7	Practice	Calculations
	Intermediate Exam	Midterm exam
8	Theoretical	Gravimetric method
	Practice	Total lipid analysis(Colorimetrik method)
9	Theoretical	Turbidimetric method
	Practice	Demonstration of glycerine
10	Theoretical	Cholesterol determination methods
	Practice	Cholesterol Analysis (Colorimetrik method)
11	Theoretical	Phospholipid determination methods
	Practice	VLDL, LDL, HDL analysis
12	Theoretical	Esterified fatty acid determination methods
	Practice	Phospholipid analysis
13	Theoretical	Free fatty acid determination methods
	Practice	Esterified fatty acid analysis
14	Theoretical	Serum lipid profile
	Practice	Free fatty acid analysis
15	Theoretical	Quantity of lipoprotein determination methods
	Practice	Check Homework

16	Final Exam	Final Exam

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	1	14
Lecture - Practice	14	0	2	28
Assignment	4	3	1	16
Reading	14	0	2	28
Quiz	2	0	0.5	1
Midterm Examination	1	16	1	17
Final Examination	1	20	1	21
			Total Workload (Hours)	125
			[Total Workload (Hours) / 25*] = **ECTS**	5
**25 hour workload is accepted as 1 ECTS*				

Learning Outcomes	
1	
2	Learn about the methods of determination of lipid
3	Gain the ability to establish and analyze Hypothesis
4	Be informed of the results of the analysis and interpretation of assessment
5	To get acquainted with lipid metabolism disorders

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	5
P3	4	4	4	4	4
P5	4	4	4	4	4

P8	5	5	5	5	5
P17	5	5	5	5	5