



## AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Detection of Some Organic Substances in Blood							
Course Code		VBY533		Course Level		Second Cycle (Master's Degree)			
ECTS Credit	5	Workload	125 ( <i>Hours</i> )	Theory	1	Practice	2	Laboratory	0
Objectives of the Course		Detection of total cholesterol, LDL, VLDL, HDL, total protein, triglyceride, glucose, albumin, total lipid, some vitamin, urea and uric acid							
Course Content		Detection of total cholesterol, LDL, VLDL, HDL, total protein, triglyceride, glucose, albumin, total lipid, some vitamin, urea and uric acid							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Experiment, Demonstration					
Name of Lecturer(s)		Prof. Serap ÜNÜBOL AYPAK							

### Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Final Examination	1	100

### Recommended or Required Reading

1	Biyokimya Güneş Tıp Kitabevi
2	Biyokimya Leninger
3	Biyokimya Lipinkot

Week	Weekly Detailed Course Contents	
1	Theoretical	Spectrophotometric analysis in biochemistry and the basic working principles
	Practice	The use of spectrophotometers, calibration
2	Theoretical	Preparation of solution
	Practice	to prepare %, molar and normal solution
3	Theoretical	Total cholesterol analysis and its clinical significance
	Practice	cholesterol test
4	Theoretical	LDL analysis and clinical significance
	Practice	LDL test
5	Theoretical	HDL analysis and clinical significance
	Practice	HDLtest
6	Theoretical	Total protein analysis and clinical significance
	Practice	Total protein assay using biuret method
7	Theoretical	Total protein analysis and clinical significance
	Practice	Total protein assay using Lowry method
8	Theoretical	Total protein analysis and clinical significance
	Practice	Total protein assay using Bradford method
9	Practice	Evaluation of midterm axam
	Intermediate Exam	Midterm exam
10	Theoretical	Urea analysis and clinical significance
	Practice	Urea analysis
11	Theoretical	Uric acid analysis and clinical significance
	Practice	Uric acid analysis
12	Theoretical	Triglyceride analysis and clinical significance
	Practice	Triglyceride analysis
13	Theoretical	Total Lipid analysis and clinical significance
	Practice	Total Lipid analysis
14	Theoretical	Glucose analysis and clinical significance
	Practice	Glucose analysis
15	Theoretical	Discussion



15	Practice	General assessment
16	Practice	Evaluation of final exam
	Final Exam	Final exam

**Workload Calculation**

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	15	1	1	30
Lecture - Practice	15	1	2	45
Assignment	1	10	0	10
Midterm Examination	1	20	1	21
Final Examination	1	18	1	19
Total Workload (Hours)				125
[Total Workload (Hours) / 25*] = <b>ECTS</b>				5

\*25 hour workload is accepted as 1 ECTS

**Learning Outcomes**

1	To be able to explain spectrophotometric analysis in biochemistry and the basic working principles
2	To be able to comprehend total cholesterol analysis and its clinical significance
3	To be able to explain LDL, HDL, VLDL analysis and their clinical significance
4	To be able to comprehend total protein analysis and its clinical significance
5	To be able to explain total triglyceride analysis and its clinical significance
6	To be able to comprehend glucose analysis and its clinical significance
7	To be able to comprehend urea and uric acid analysis and its clinical significance
9	To be able to analyze and interpret what have been learnt.

**Programme Outcomes (Biochemistry (Veterinary Medicine) Master)**

1	To be able to tell and describe the interdisciplinary interaction with the associated fields.
2	To be able to express original ideas using his/her higher education knowledge theoretically and practically information and to be able to creat original definations,products,methods improving and questioning these ideas.
3	To be able to manage a free research according to scientific and metodological methods and be able to hypothetically and practically about his/her own field.
4	To be able to compose and interpret the information from different disciplines, and create solution suggestions and scientific information which can contribute to the solution process.
5	To be able to involves in professional organizations and institutions related with the educational background.
6	To be able to take responsibility for individual and group work, and do the assignments in line with the skills.
7	To be able to communicate with the professionals out of the field when it is necessary, and contribute to the solution as a team member.
8	To be able to tell about the production and publishing methods of scientific information.
9	To be able to design the source and the type of information that is needed related with the field and chooses the activities that s/he wants to participate, by using his/her critical thinking abilities that is developed in the education.
10	To be able to use technological devices both for professional and social purposes.
11	To be able to compose and interpret any kind of data related with the field (field observations, produced scientific information etc.) and analyzes and interprets the results according to the aims of the research.
12	To be able to define the environmental health rules and apply them for prevention.
13	To be able to apply the knowledge gained in professional level with the awareness of the needs of the region and the country, and develop a defense capability.
14	To be able to conceptualize the phenomena and the events related with the field; study scientific methods and techniques, interpret results; analyze and hypothesize methods in accordance with the results and design solution or treatment alternatives addressing the problems.
15	To be able to interpret the updates of information in the field by using all kinds of sources (scientific information, legislations etc.), and use when needed.

**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	L9
P2	3	3	3	3	3	3		
P3	3	3	3	3	3	3		
P4	3	3	3	3	3	3		



P7							3	3
P8	3	3	3	3	3	3		
P10							3	3
P11	3	3	3	3	3	3		
P12	3							3
P15	3	3	3	3	3	3		

