



## AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Vitamins and Methods of Vitamin Determination							
Course Code		VBY505		Course Level		Second Cycle (Master's Degree)			
ECTS Credit	3	Workload	75 (Hours)	Theory	1	Practice	2	Laboratory	0
Objectives of the Course		To give basic information about vitamins and their analyses methods and to teach and apply the vitamin analyses.							
Course Content		Function of vitamins, classifications, deficiency and toxicity, metabolism of some important vitamins, antioxydant vitamins, analyses methods.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Discussion, Individual Study					
Name of Lecturer(s)		Lec. Gamze Sevri EKREN AŞICI							

### Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	60

### Recommended or Required Reading

1	Kaya, N. (1993) Biyokimya, Atatürk Üniversitesi, Erzurum.
2	Murray, R.K. (1993) Harper's Biochemistry, Appleton and Lange, Norwalk
3	Onat, T., Emerk, K. (1997) Biyokimya, Saray, İzmir.

Week	Weekly Detailed Course Contents	
1	Theoretical	General scanning and nomenclature
	Practice	What we know about vitamins?
2	Theoretical	Classification of vitamin
	Practice	Video related with vitamin
3	Theoretical	Vitamin A (Retinol)
	Practice	Determination of VitA and B-karoten
4	Theoretical	Vitamin D (calciferoll)
	Practice	Determination of Vit D
5	Theoretical	Vitamin K (filloquinon)
	Practice	Determination of Vit K
6	Theoretical	Vitamin B1 (Thiamine) ve Vitamin B2 (Riboflavine)
	Practice	Determination of Vit B1
7	Theoretical	Vitamin B5 (Pantothenic acid) ve Vitamin B6 (Pyridoxine)
	Practice	Determination of Vit B2
8	Practice	Midterm evaluation
	Intermediate Exam	Midterm exam
9	Theoretical	Vitamin B12 (cobalamin)
	Practice	Determination of Vit B5
10	Theoretical	Vitamin C (Ascorbic acid)
	Practice	Determination of Vit B6
11	Theoretical	Biotin ve Folic acid
	Practice	Determination of Vit B12
12	Theoretical	Vitamins that coenzyme and theirs metabolism
	Practice	Determination of Vit C
13	Theoretical	Vitamins that effect hormon
	Practice	Determination of Biotin
14	Theoretical	Antioxydant vitamins
	Practice	Determination of Folic acid



15	Theoretical	Vitamin like substances
	Practice	Demonstration
16	Final Exam	Final exam

**Workload Calculation**

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	15	1	1	30
Lecture - Practice	15	1	2	45
Total Workload (Hours)				75
[Total Workload (Hours) / 25*] = <b>ECTS</b>				3

\*25 hour workload is accepted as 1 ECTS

**Learning Outcomes**

1	To be able to respond these questions: What is vitamin? What is the importance for an organism?
2	To be able to classify vitamins.
3	To be able to comprehend the function of vitamins, deficiency and toxicity.
4	To be able to comprehend knowledge about some important vitamin metabolism.
5	To be able to comprehend antioxydant vitamins
6	To be able to comprehend methods of vitamin measuring and to apply these methods.

**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
P2	5	5	5	5	5	5
P3	5	5	5	5	5	5
P4	5	5	5	5	5	5
P6	5	5	5	5	5	5
P7	5	5	5	5	5	5
P8	5	5	5	5	5	5
P9	5	5	5	5	5	5
P11	5	5	5	5	5	5



P13	5	5	5	5	5	5
P14	5	5	5	5	5	5
P15	5	5	5	5	5	5

