



## AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title	Diseases Caused By Deficiencies of Vitamins in Animals								
Course Code	V1H544	Course Level		Second Cycle (Master's Degree)					
ECTS Credit	2	Workload	54 (Hours)	Theory	2	Practice	0	Laboratory	0
Objectives of the Course	To explain the etiology, pathogenesis, clinical and laboratory findings, diagnosis, differential diagnosis and treatment associated with vitamin A, E, D3, K, B1, B6, B12, C and H deficiency in animals.								
Course Content	See weekly course topics								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Demonstration, Discussion, Case Study, Individual Study								
Name of Lecturer(s)	Assoc. Prof. Gülten Emek TUNA, Prof. Hüseyin VOYVODA								

### Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Assignment	2	10
Midterm Examination	1	30
Final Examination	1	60

### Recommended or Required Reading

1	C. M. Kahn, S. Line; The Merck Veterinary Manual, 10th Edition. Merck, 2010
2	Bradford P. Smith; Large Animal Internal Medicine, 4th Edition. Mosby, 2009
3	Radostits, Otto M. [and others], eds. Veterinary Medicine: A Textbook of the Diseases of Cattle, Sheep, Pigs, Goats and Horses. 10th ed. WB Saunders, 2007
4	Blowey, R. W., and Weaver, A. David; Color Atlas of Diseases and Disorders of Cattle, 2nd ed. Mosby, 2003
5	Frye TM, Williams SN, Graham TW. Vitamin deficiencies in cattle. Vet Clin North Am Food Anim Pract. 1991 Mar;7(1):217-75.

### Week Weekly Detailed Course Contents & Teaching Methods

Week	Weekly Detailed Course Contents & Teaching Methods	
1	Theoretical	Login vitamin deficiencies
2	Theoretical	Approach to Diagnosis in Vitamin deficiencies
3	Theoretical	Principles of Treatment vitamin deficiencies
4	Theoretical	Hypovitaminosis A
5	Theoretical	Muscular Dystrophy in Calves and Lambs
6	Theoretical	Hypovitaminosis D
7	Theoretical	Hypovitaminosis K, (Mid term exam)
8	Theoretical	Hypovitaminosis K
9	Theoretical	Hiyppothiaminosis
10	Theoretical	Hypovitaminosis B6
11	Theoretical	Hypovitaminosis B12
12	Theoretical	Vitamin C deficiencies
13	Theoretical	Vitamin H deficiencies
14	Theoretical	choline failure

### Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	2	28
Assignment	1	0	5	5
Reading	14	0	1	14
Midterm Examination	1	2	1	3



Final Examination	1	3	1	4
			Total Workload (Hours)	54
			[Total Workload (Hours) / 25*] = ECTS	2
*25 hour workload is accepted as 1 ECTS				

### Learning Outcomes

1	Recognizes the important clinical signs of vitamin deficiency in animals.
2	Evaluates the clinical and laboratory findings and performs the diagnosis
3	Performs the treatment and prophylaxis.
4	Recognizes the diseases that develop due to vitamin deficiencies.
5	Knows the differential diagnosis of vitamin deficiencies.

### Programme Outcomes (Internal Diseases (Veterinary Medicine) Master)

1	Among veterinary medicine master of science sufficiency, increasing and deepening relevant knowledge
2	Developing and deepening theoretical and practical knowledge in the field of use, integrating knowledge from different disciplines for interpretation.
3	For Large and Small Animal Internal Medicine, taking into account the systemic clinical examination, realizing the true diagnosis for interpreting the clinical and laboratory findings, and the need to implement effective and rational treatment for taking prophylactic measures.
4	Learning how to access and evaluate relevant information.
5	Quoting updated novelty relevant to Veterinary Internal Medicine by incrisptive, oral and visually.
6	Planning a relevant research study by use of quantative and qualitative data collection, contiuning by taking care of scientific ethics, and by evaluation of appropriate statistical methods chosen, converting the investigational and project results into report/thesis.
7	Information obtained in accordance with the requirements of the country and the level of expertise of the region for usage of research public and animal health.

### Contribution of Learning Outcomes to Programme Outcomes 1:Very Low, 2:Low, 3:Medium, 4:High, 5:Very High

	L1	L2	L3
P1	4	5	5
P2	4	5	5
P3	4	5	5
P4	4	4	4
P5	3	4	4
P6	3	4	4
P7	4	4	5

