



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Nutritional Diseases of Ruminants							
Course Code		VHB621		Course Level		Third Cycle (Doctorate Degree)			
ECTS Credit	6	Workload	147 (<i>Hours</i>)	Theory	2	Practice	0	Laboratory	0
Objectives of the Course		Teaching theoretical and practical informations about nutritional diseases of ruminants and raising experts knowing about these subjects. Providing the ability of application of theoretical and practical information in the field.							
Course Content		Ration suggestions for helping the recovery of sick animals in treatment period. Basic information about nutrition related disease of ruminants.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Discussion, Individual Study, Problem Solving					
Name of Lecturer(s)									

Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	28
Final Examination	1	60
Assignment	5	12

Recommended or Required Reading

1	Payne JM (1989) Metabolic and Nutritional Diseases of Cattle, Blackwell Scientific Publications, London.
2	Umucalı HD., Gülşen, N. (2005) Çiftlik Hayvanlarında Beslenme Hastalıkları, S.Ü. Basımevi.
3	Cheeke, P.R. (1999) Applied Animal Nutrition: Feeds and Feeding, Prentice Hall International, USA.

Week	Weekly Detailed Course Contents	
1	Theoretical	Importance of nutritional diseases
2	Theoretical	Ketosis, etiology, precautions, prevention methods, rations suggestions.
3	Theoretical	Acidosis, etiology, precautions, prevention methods, rations suggestions.
4	Theoretical	Hypocalcemia, etiology, precautions, prevention methods, rations suggestions.
5	Theoretical	Swayback, etiology, precautions, prevention methods, rations suggestions.
6	Theoretical	Fatty cow syndrome, etiology, precautions, prevention methods, rations suggestions.
7	Theoretical	Rashitis-Osteoporosis, etiology, precautions, prevention methods, rations suggestions.
8	Intermediate Exam	Midterm exam
9	Theoretical	Urolithiasis etiology, precautions, prevention methods, rations suggestions.
10	Theoretical	Tympani, etiology, precautions, prevention methods, rations suggestions.
11	Theoretical	Muscular dystrophy etiology, precautions, prevention methods, rations suggestions.
12	Theoretical	Vitamin deficiencies, etiology, precautions, prevention methods, rations suggestions.
13	Theoretical	Mineral deficiencies (copper and zinc deficiencies) etiology, precautions, prevention methods, rations suggestions.
15	Theoretical	Homework presentation
16	Final Exam	Final exam

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	2	28
Assignment	5	4	1	25
Reading	14	0	5	70
Midterm Examination	1	8	2	10



Final Examination	1	12	2	14
Total Workload (Hours)				147
[Total Workload (Hours) / 25*] = ECTS				6
*25 hour workload is accepted as 1 ECTS				

Learning Outcomes

1	Gaining recent knowledge of the nutritional diseases of ruminants.
2	Gaining ability of giving information about common nutritional diseases of ruminants seen in the field and their effects on loss in quality and quantity of production.
3	To gain optimum nutrition conditions
4	Introduction of the factors of reproductive disorders
5	Learning factors that help manufacturers

Programme Outcomes (Animal Nutrition and Nutritional Diseases (Veterinary Medicine) Doctorate)

1	Knows information about importance of forage and concentrates in basic animal nutrition for protecting animal health in scientific and technological animal production.
2	Have ability to formulate economical and full-satisfactory rations with considering product quality and health. May inform animal producers about practical/appropriate feeding methods.
3	Can adapt to recent scientific and technological developments in animal nutrition easier and produce proper strategies against to problems on this field.
4	Knows the properties of feeds used in proper and economical rations formulated due to needs of animal species.
5	Can give information to animal producers about properties of common feedstuffs used in Turkey
6	Knows organoleptic, physical diagnostic and chemical analysis methods used in determining feed quality.
7	Have information about processing and the effects of processing on animal yield.
8	Can identify the term "feed hygiene" and have information about the usage availability of contaminated feedstuffs.
9	Can apply the informations related to feed additives in a proper way.
10	Understands the results and factors decreasing production.
11	Knows the nutrition related diseases and their solution recommendations which may be applied in feeding or formulating feeds for preventing nutritonal diseases.
12	Knows about the availability level of feedstuffs after consumed and can perform digestibility trials.
13	Knows the definition of stress, stress sources and effects on health and production level of animals.
14	Have sufficient information on classification, activation and fermentation of rumen microorganisms plus carbohydrate, lipid and protein digestibility.
15	Knows the factors effecting feed intake and negative factors in feedstuffs and prevention of them.
16	Comments on feeding behaviours and related yield parameters.
17	Have information on basic terms related to feed legislation, feeds used in animal nutrition and their legal regulations.
18	Have information about biotechnological research conducted on feeds and animal nutrition.
19	Knows the effects of nutrition on food quality, fertility, immunity and parasite enfestations.

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

	L1	L2
P3	5	5
P10	5	5
P11	5	5

