



## AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Cultured Forages as Roughages							
Course Code		VHB632		Couse Level		Third Cycle (Doctorate Degree)			
ECTS Credit	6	Workload	146 ( <i>Hours</i> )	Theory	1	Practice	2	Laboratory	0
Objectives of the Course		Classification of cultured feed plants. Importance of cultured feed plants in ruminant nutrition. Forages and their economical importance in Turkey and World. Knowing information about technology of cultured feed production.							
Course Content		Importance of cultured feed plants in feeding of different animal species. Effects of cultured feed plants on productivity of different animal species. Cultured feed plants used in Turkey and their negative and positive effects on productivity of animals.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Discussion, Individual Study					
Name of Lecturer(s)									

### Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	28
Final Examination	1	60
Assignment	10	12

### Recommended or Required Reading

1	Ergün, A., Tuncer, Ş.D., Çolpan, İ., Yalçın, S., Yıldız, G., Küçükarsan, M.K., Küçükarsan, S., Şehu, A. (2008) Hayvan Besleme ve Beslenme Hastalıkları, Pozitif Matbaacılık, Ankara.
2	Barnes, RF., Nelson, CJ., Moore, KJ., Collins, M. (2007) Forages, Blackwell Publishing.

Week	Weekly Detailed Course Contents	
1	Theoretical	Recent status of cultured feed plant production in Turkey.
2	Theoretical	Importance of cultured feed plant feeding in ruminant nutrition.
3	Theoretical	Importance of cultured feed plant feeding in horse nutrition.
4	Theoretical	Classification of cultured feed plant.
5	Theoretical	Varieties, nutrient composition, feeding form and amount of alfalfa in animal nutrition.
6	Theoretical	Varieties, nutrient composition, feeding form and amount of sainfoin in animal nutrition.
7	Theoretical	Varieties, nutrient composition, feeding form and amount of vetch in animal nutrition. Negative effects of antinutritional compounds on animal health.
8	Intermediate Exam	Midterm exam
9	Theoretical	Varieties, nutrient composition, feeding form and amount of vetch in animal nutrition.
10	Theoretical	Varieties, nutrient composition, feeding form and amount of beet in animal nutrition.
11	Theoretical	Varieties, nutrient composition, feeding form and amount of sudan grass in animal nutrition.
12	Theoretical	Varieties, nutrient composition, feeding form and amount of corn (for silage) in animal nutrition.
13	Theoretical	Varieties, nutrient composition, feeding form and amount of pea in animal nutrition.
14	Theoretical	Varieties, nutrient composition, feeding form and amount of grasspea in animal nutrition.
15	Theoretical	Homework presentation
16	Final Exam	Final exam

### Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	1	14
Lecture - Practice	15	0	2	30
Assignment	10	2	1	30
Reading	14	0	3	42
Midterm Examination	1	12	1	13



Final Examination	1	16	1	17
Total Workload (Hours)				146
[Total Workload (Hours) / 25*] = ECTS				6
*25 hour workload is accepted as 1 ECTS				

### Learning Outcomes

1	Importance of cultured animal feeds for economical animal production.
2	Kinds of cultured feed plants. Production of high quality cultured feed plants.
3	Use and production of alfalfa, vetch and sainfoin in animal nutrition.
4	Nutritional value of cultured feed plants and their importance in animal physiology.
5	Classification of cultured feed plant.

### 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	L3	L4
P1	5	5	5	5
P3				5
P4		5	5	
P5		5	5	
P6		5	5	

