AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Scientific Research Methods								
Course Code	VHB653		Couse Level	Third Cycle (Doctorate Degree)					
ECTS Credit	2	Workload	55 *(Hours)*	Theory	2	Practice	0	Laboratory	0
Objectives of the Course	To teach the descriptive statistics, table and graphic preparation, sampling and sampling methods, theoretical distributions, correlation and regression analysis.								
Course Content	The descriptive statistics, table and graphic preparation, sampling and sampling methods, theoretical distributions, correlation and regression analysis								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Discussion, Individual Study, Problem Solving								
Name of Lecturer(s)	Assoc. Prof. Bülent ÖZSOY								

Assessment Methods and Criteria		
Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	60

Recommended or Required Reading	
1	Özdamar, K. (1999): SPSS ile Biyoistatistik. Kaan Kitabevi, Eskişehir.
2	Tekin, M.E. (2010): Örneklerle Bilgisayarda İstatistik. Selçuk Üniversitesi Basımevi, Konya
3	Sümbüloğlu, K, Sümbüloğlu, V. (1990): Biyoistatistik. Hatiboğlu Yayınları:53, Ankara
4	Mrode, R.A. (2005): Linear Models for the Prediction of Animal Breeding Values. CABI publishing, Cambridge, USA.
5	Petrie, A., Watson, P. (1999): Statistics for Veterinary and Animal Science. Blackwell Science Ltd.

Week	Weekly Detailed Course Contents	
1	Theoretical	Description the basic concepts related to statistics
2	Theoretical	Descriptive criteria for the distributions (Arithmetic, harmonic, geometric mean, mode, median, and peak value)
3	Theoretical	Prevalence criteria of distribution (standard deviation, standard error, variance, variation coefficient)
4	Theoretical	The graphic preparation from data set
5	Theoretical	The table preparation from data set
6	Theoretical	Sampling
7	Theoretical	Sampling methods
8	Intermediate Exam	Mİdterm exam
9	Theoretical	Theoretical distributions (binominal distribution)
10	Theoretical	Theoretical distributions (poisson distribution)
11	Theoretical	Theoretical distributions (normal distribution)
12	Theoretical	Standard normal distribution
13	Theoretical	Correlation analysis
14	Theoretical	Regression analysis

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	2	28
Assignment	2	0	5	10
Reading	1	0	5	5
Midterm Examination	1	5	1	6

Final Examination	1	5	1	6
			Total Workload (Hours)	55
			[Total Workload (Hours) / 25*] = **ECTS**	2
**25 hour workload is accepted as 1 ECTS*				

Learning Outcomes	
1	Knows the basic concepts used in statistics, and comment.
2	In the data set, makes comment about the distribution.
3	Makes presentation of the data set with table or graphic.
4	Makes the analysis of the relationships between variables
5	Knows the sampling methods.
6	The many example can be created from the population.

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 nutiritonal 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 preventation 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
P1	5	4	3
P2	5	4	3
P3	5	4	3
P4	5	3	
P5	5		
P6	5		
P7	5		
P8	5		