



## AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Statistical Applications in Veterinary Medicine							
Course Code		VZO506		Course Level		Second Cycle (Master's Degree)			
ECTS Credit	4	Workload	100 ( <i>Hours</i> )	Theory	1	Practice	2	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), Demonstration, Individual Study, Problem Solving					
Name of Lecturer(s)		Prof. Mehmet Kenan TÜRKYILMAZ							

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

### Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	3	42
Assignment	1	0	10	10
Individual Work	1	0	15	15
Midterm Examination	1	15	1	16



Final Examination	1	16	1	17
Total Workload (Hours)				100
[Total Workload (Hours) / 25*] = ECTS				4
*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 Science (Veterinary Medicine) Master)

1	Knows basic principles of animal rearing and breeding.
2	Knows physiological and morphological traits of farm animals. He/she can achieve a successful herd management by means of transferring his/her knowledge to the rural area.
3	Knows management of the animals and can take required measurements in the farm. He/She controls the productivity in the farm and keeps all farm records.
4	Knows selection and culling methods.
5	He/She can involve in all stages of production in the farm. Knows how to establish and manage of farm enterprises. He/She can help to the entrepreneurs who will enter the farm business.
6	He/She can detect and eliminate hereditary defects and problems by using his/her basic genetic knowledge.
7	Knows production traits due to his/her knowledge about hereditary principles. He/She can achieve heifer selection and determine breeding strategies for maximum production.
8	He/She can involve as an expert in scientific researches, breeding programs and judicial issues with his/her knowledge about race determination, parenthood tests, blood groups etc.
9	Knows how to reach resources and knows selection criterions of scientific researches. He/She can systematically present data. Knows statistical concepts and how to can get data, and present those as figures and tables and how to comment them. Knows different statistical methods. He/She can design a topic as a scientific paper.
10	Knows animal behaviours. Knows legal directives about animal welfare and can design some facilities such as housing, feeding, transferring and slaughtering processes according to these directives.

### 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
P9	5	5	5	5	5	5

