# AYDIN ADNAN MENDERES UNIVERSITY
# COURSE INFORMATION FORM

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Course Title | Statistical Applications in Veterinary Medicine | | | | | | | | |
| Course Code | VZO506 | | Couse Level | Second Cycle (Master's Degree) | | | | | |
| ECTS Credit | 4 | Workload | 100 *(Hours)* | 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 | Mİdterm 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** *(Veterinary Pharmacology and Toxicology Master)* | |
|---|---|
| 1 | to be able to comprehend expert knowledge on field of pharmacology and toxicology in veterinary medicine |
| 2 | to be able to define expert knowledge on interdisciplinary interaction in pharmacology and toxicology |
| 3 | to be able to formulate ideas to solve complex problems using theoretical and practical information gained throughout the pharmacology and toxicology education |
| 4 | to be able to integrate and interpret information in the area of pharmacology and toxicology with information in different fields and, if the need arises, provides scientific information and solutions to solve problems. |
| 5 | to be able to develop and use strategies in his/her field of expertise in Master's Program of Pharmacology and Toxicology |
| 6 | to be able to comprehend methods of obtained and submitted scientific knowledge |
| 7 | to be able to analyse current information related to his/her field of expertise (scientific information, procedures etc.) and use them when necessary. |
| 8 | to be able to apply technological tools in social relationships of vocational and professional environment. |
| 9 | to be able to review, evaluate and interpret any data (field observations, available scientific information etc.) towards a specific purpose. |
| 10 | to be able to comprehend expert knowledge on the function and basic pharmacological features of pharmacology and sub-branches of science, relationship between the drug and poison, pharmacokinetic, effects of the drugs, the dose-intensity and dose-effect relationship. |
| 11 | to be able to identify expert knowledge on the function and basic toxicological features of poison, classifications and types of poisoning, toxicokinetic, general principles of treatment of poisoning. |
| 12 | to be able to define and use laboratory equipment in a pharmacology and toxicology laboratory. |

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

| | L1 | L2 | L3 | L5 | L6 |
|---|---|---|---|---|---|
| P6 | 5 | 5 | 5 | 5 | 4 |
| P9 | 4 | 4 | 5 | 5 | 5 |