



## AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title	Statistics in Microbiology and Epidemiology								
Course Code	MİK632	Course Level			Third Cycle (Doctorate Degree)				
ECTS Credit	2	Workload	48 (Hours)	Theory	2	Practice	0	Laboratory	0
Objectives of the Course	The objective of this course is to give information about statistics in microbiology and epidemiology.								
Course Content	Meaning of statistics and its use in scientific studies. Data, sampling, parameter, character, factor, frequency. Classification of the data. Principles of classification. The determinant measurements of distribution of frequencies (mean variance, standart deviation, standart error, factor for variance). Techniques for table and figure. Theoretical distributions (binom, poison, normal distribution). Analysis of variance. Correlation and regration analysis.								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Demonstration, Discussion, Case Study								
Name of Lecturer(s)	Prof. Süheyla TÜRKYILMAZ								

Assessment Methods and Criteria		
Method	Quantity	Percentage (%)
Assignment	4	20
Quiz	2	20
Midterm Examination	1	20
Final Examination	1	40

Recommended or Required Reading	
1	Immunoloji
2	Veterinary Epidemiology - An Introduction
3	Veterinary Epidemiology

Week	Weekly Detailed Course Contents & Teaching Methods	
1	Theoretical	Meaning of statistics and its use in scientific studies
2	Theoretical	Meaning of statistics and its use in scientific studies
3	Theoretical	Data, sampling, parameter, character, factor, frequency
4	Theoretical	Data, sampling, parameter, character, factor, frequency
5	Theoretical	Classification of the data
6	Theoretical	Classification frequencies
7	Theoretical	The determinant measurements of distribution of frequencies
8	Theoretical	Discussion
9	Theoretical	Techniques for table and figure
10	Theoretical	Techniques for table and figure
11	Theoretical	Theoretical distributions
12	Theoretical	Tests of importance
13	Theoretical	Analysis of variance
14	Theoretical	Correlation and regration analysis

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	2	28
Assignment	4	0	1	4
Laboratory	14	0	0.5	7
Quiz	2	2	0.5	5
Midterm Examination	1	1	1	2



Final Examination	1	1	1	2
Total Workload (Hours)				48
[Total Workload (Hours) / 25*] = ECTS				2
*25 hour workload is accepted as 1 ECTS				

### Learning Outcomes

1	1. Having information about statistics in microbiology and epidemiology
2	2. Having information about evaluating statistical analysis
3	3. To have knowledge about data analysis programs
4	4. To have information about microbiology and programs compatible with epidemiology
5	5. Providing ability to use these informations

### Programme Outcomes (Microbiology (Veterinary Medicine) Doctorate)

1	Department has the ability to identify and apply information about bacteriology, virology, mycology and has the ability to recognize diseases about veterinary medicine.
2	Department has the ability to take the advantage of technology and has the ability to diagnose, treat and prevent the diseases by using appropriate equipments.
3	Department has the ability to analyze the epidemiological compounds of an animal population and has the ability to get precautions.
4	Department has the ability to test or analyze the diseases and has the ability to evaluate the results.
5	Department has the ability to perform, produce and conclude projects for scientific researches.
6	Department has the ability to donate theoretical and practical knowledge about postgraduate students in the are of microbiology.
7	Graduate students has the ability to perform scientific researches.

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

	L1	L2	L3	L4	L5
P1	4	4	4	4	4
P2	4	5	4	4	5
P3	4	5	4	5	5
P4	4	5	5	4	5
P5	5	4	5	5	5
P6	4	4	4	4	4
P7	5	4	5	5	5

