AYDIN ADNAN MENDERES UNIVERSITY
GRADUATE SCHOOL OF HEALTH SCIENCES
VETERINARY MICROBIOLOGY
MICROBIOLOGY
MICROBIOLOGY (VETERINARY) MASTER'S WITHOUT THESIS
COURSE INFORMATION FORM

Course Title		Resistance to Antibiotics and Antibiogram Tests							
Course Code		MİK527		Couse Level		Second Cycle (Master's Degree)			
ECTS Credit	5	Workload	125 *(Hours)*	Theory	2	Practice	2	Laboratory	0
Objectives of the Course		The objective of this course is to give information about antibiotic susceptibility tests.							
Course Content		Determination of invitro infective agent sensitivity to antibiotics using dilution and no disc diffusion (dry and wet) techniques. Preparation of bacterial culture to be tested, choosing discs and determination of bacterial inhibition zones using antibiotic sensitivity tests following reproduction. Bacterial resistance to antibiotics. Application techniques of Kirby Bauer Disc diffusion method.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods		Explanation (Presentation), Experiment, Demonstration, Discussion, Case Study							
Name of Lecturer(s)									

Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	20
Final Examination	1	60
Assignment	1	20

Recommended or Required Reading

1	Koneman's Color Atlas and Textbook of Diagnostic Microbiology
2	Bergey's manual of systematic bacteriology
3	Battling Resistance to Antibiotics and Pesticides: An Economic Approach
4	Handbook of Microbiological Media, 4º Edition
5	Temel Mikrobiyoloji

Week	Weekly Detailed Course Contents		
1	Theoretical	Dilution method
2	Theoretical	Disc diffusion method
3	Theoretical	Preparing bacterial culture for test
4	Theoretical	Preparing bacterial culture for test
5	Theoretical	Choosing antibiotic disc
6	Theoretical	Choosing antibiotic disc
7	Theoretical	Evaluation of zone diameter
8	Intermediate Exam	Midterm Examination
9	Theoretical	Evaluation of zone diameter
10	Theoretical	Bacterial resistance to antibiotics
11	Theoretical	Bacterial resistance to antibiotics
12	Theoretical	Application techniques of Kirby Bauer disc diffusion method
13	Theoretical	Application techniques of Kirby Bauer disc diffusion method
14	Theoretical	Application techniques of Kirby Bauer disc diffusion method
15	Theoretical	Discussion

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	2	28
Lecture - Practice	14	0	2	28
Assignment	2	0	3	6
Reading	2	0	25	50
Quiz	1	1	1	2

Midterm Examination	1	4	1	5
Final Examination	1	5	1	6
			Total Workload (Hours)	125
			[Total Workload (Hours) / 25*] = **ECTS**	5

*25 hour workload is accepted as 1 ECTS

Learning Outcomes

1	1. To be able to define antibiotic susceptibility tests
2	2. To be able to prepare bacterial cultures for antibiotic susceptibility tests
3	3. To be able to use th necessary information
4	Disc diffusion tests
5	MIC tests

Programme Outcomes *(Microbiology (Veterinary) Master's Without Thesis)*

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.

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	5	5	5	5	5
P2	5	5	5	5	5
P3	4	3	4	4	4
P4	3	4	5	5	5
P5	5	5	5	4	5