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

Course Title	Preparation of Growth Media and Bacteria Culture								
Course Code	MİK505		Couse Level		Second Cycle (Master's Degree)				
ECTS Credit	4	Workload	99 *(Hours)*	Theory	2	Practice	2	Laboratory	0
Objectives of the Course	The objective of this course is to give information about culture media used for bacterial growth in microbiology.								
Course Content	Preparation of media used for growth of bacteria and the growth of bacteria. Techniques of providing pure cultures. Macroscopical and microscopical properties of bacterial colonies and cultural properties, identification of bacteria according to their biochemical activation and antigenic structures. Dyes used for microbiological staining, simple and special staining methods. Biochemical test to be able to identify pure cultures and the determination of pathogenic properties of pure cultures.								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Experiment, Demonstration, Discussion, Case Study								
Name of Lecturer(s)	Assoc. Prof. Uğur PARIN, Prof. Süheyla TÜRKYILMAZ								

Assessment Methods and Criteria		
Method	Quantity	Percentage (%)
Midterm Examination	1	20
Final Examination	1	60
Quiz	2	10
Assignment	4	10

Recommended or Required Reading	
1	Koneman's Color Atlas and Textbook of Diagnostic Microbiology
2	Bergey's manual of systematic bacteriology
3	Handbook of Microbiological Media, 4º Edition
4	Temel Mikrobiyoloji

Week	Weekly Detailed Course Contents	
1	Theoretical	Identifiaction of culture media used for bacterial growth
2	Theoretical	Growth of bacteria
3	Theoretical	Techniques of obtaining pure culture
4	Theoretical	Macroscopic properties of bacteria
5	Theoretical	Microscopic properties of bacteria
6	Theoretical	Colony properties of bacteria
7	Theoretical	Cultural properties of bacteria
8	Intermediate Exam	Midterm Examination
9	Theoretical	Biochemical properties of bacteria
10	Theoretical	Antigenic properties of bacteria
11	Theoretical	Biochemical tests used in identification of pure cultures
12	Theoretical	Biochemical tests used in identification of pure cultures
13	Theoretical	Pathogenicity determination of pure cultures
14	Theoretical	Pathogenicity determination of pure cultures
15	Theoretical	Discussion

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	2	28
Lecture - Practice	14	0	2	28
Assignment	1	1	1	2

Laboratory	14	0	2	28
Quiz	1	1	1	2
Midterm Examination	1	1	1	2
Final Examination	1	8	1	9
			Total Workload (Hours)	99
			[Total Workload (Hours) / 25*] = **ECTS**	4
**25 hour workload is accepted as 1 ECTS*				

Learning Outcomes	
1	1. To be able to identify culture media used for bacterial growth in microbiology
2	2. To be able to define the process of obtaining bacterial culture
3	3. To be able to name microscopic and macroscopic colony morphologies of bacteria
4	4. To be able to use the necessary information
5	To be able to use the necessary information.

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