



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

Course Title	Microbiological Counting Techniques								
Course Code	MİK532	Course 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 microbiological counting techniques.								
Course Content	The classification of counting methods of bacteria. Direct and indirect methods. Culture methods. The evaluation of the data.								
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	40
Final Examination	1	60

#### Recommended or Required Reading

1	Koneman's Color Atlas and Textbook of Diagnostic Microbiology
2	Bergey's manual of systematic bacteriology
3	Collins and Lyne's Microbiological Methods 8th Edition
4	Temel Mikrobiyoloji

#### Week Weekly Detailed Course Contents

Week	Weekly Detailed Course Contents
1	Theoretical The classification of counting methods of bacteria.
2	Theoretical The classification of counting methods of bacteria.
3	Theoretical The classification of counting methods of bacteria.
4	Theoretical The classification of counting methods of bacteria.
5	Theoretical Direct methods
6	Theoretical Direct methods
7	Theoretical Indirect methods
8	Intermediate Exam Midterm Examination
9	Theoretical Indirect methods
10	Theoretical Culture methods
11	Theoretical Culture methods
12	Theoretical Culture methods
13	Theoretical Evaluation of the data
14	Theoretical Evaluation of the data
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	5	2	14
Reading	1	0	25	25
Quiz	2	5	1	12
Midterm Examination	1	15	1	16



Final Examination	1	1	1	2
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 list microbiological counting techniques
2	To be able to classify microbiological counting techniques
3	To be able to evaluate counting results
4	To be able to know laboratory technics
5	To be able to use technics

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

