



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

Course Title	Gram Positive Cocci and Infections								
Course Code	MİK502	Course Level		Second Cycle (Master's Degree)					
ECTS Credit	4	Workload	100 (Hours)	Theory	2	Practice	0	Laboratory	0
Objectives of the Course	The objective of this course is to describe the pathogenicity criteria of Streptococci and Staphylococci species that cause infections and give information about these species.								
Course Content	The properties of pathogenicity criteria of Staphylococcus and Streptococcus species that cause infections in animals. The classification Streptococci according to their enzymatic reactions. The detection of antigenic character of the cell wall. Presence of virulence structures. The role of cell structure of Staphylococci in pathogenesis, the properties of toxin synthesis. Their enzymatic activities and antimicrobial susceptibilities.								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Discussion, Case Study								
Name of Lecturer(s)	Prof. Şükrü KIRKAN								

#### 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	Desk Encyclopedia of Microbiology By Medikando
4	Principles of Bacterial Pathogenesis
5	Color Atlas of Diagnostic Microbiology
6	Veteriner Bakteriyoloji

#### Week Weekly Detailed Course Contents

Week	Weekly Detailed Course Contents	
1	Theoretical	Pathogenicity criteria of Staphylococci
2	Theoretical	Pathogenicity criteria of Streptococci
3	Theoretical	Enzymatical grouping of Streptococci
4	Theoretical	Enzymatical grouping of Staphylococci
5	Theoretical	Determination of antigenic character of cell wall
6	Theoretical	Presence of structures with virulence properties
7	Theoretical	Roles of cell structures of Staphylococci in pathogenesis
8	Intermediate Exam	Midterm Examination
9	Theoretical	Roles of cell structures of Staphylococci in pathogenesis
10	Theoretical	Toxin production properties of Staphylococci
11	Theoretical	Toxin production properties of Staphylococci
12	Theoretical	Enzymatic actions and antibiotic susceptibilities
13	Theoretical	Enzymatic actions and antibiotic susceptibilities
14	Theoretical	Enzymatic actions and antibiotic susceptibilities
15	Theoretical	Discussion

#### Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	2	28
Assignment	4	2	7	36



Laboratory	14	0	2	28
Quiz	2	1	1	4
Midterm Examination	1	1	1	2
Final Examination	1	1	1	2
Total Workload (Hours)				100
[Total Workload (Hours) / 25*] = ECTS				4
*25 hour workload is accepted as 1 ECTS				

### Learning Outcomes

1	1. To be able to define Streptococci and Staphylococci species
2	2. To be able to identify enzymatic groupings of Streptococci
3	3. To be able to explain the roles of cell structures in pathogenesis and toxin production properties of Staphylococci
4	4. To be able to define antibiotic susceptibility of Staphylococcus and Streptococcus species
5	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	4	4	4	4	4
P2	4	4	4	4	4
P3	5	4	5	4	4
P4	4	5	5	5	5
P5	5	5	5	5	5

