



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

| | | | | | | | | | |
|--|--|--------------|------------|--------|--------------------------------|----------|---|------------|---|
| Course Title | Vaccines, Serums and Their Use in Proflaxy | | | | | | | | |
| Course Code | MİK528 | Course Level | | | Second Cycle (Master's Degree) | | | | |
| ECTS Credit | 2 | Workload | 50 (Hours) | Theory | 2 | Practice | 0 | Laboratory | 0 |
| Objectives of the Course | The objective of this course is to give information about vaccines and serums. | | | | | | | | |
| Course Content | Classification of vaccines; attenuated vaccines, inactivated vaccines, toxoid vaccines, synthetic peptide vaccines, subunit vaccines, biotechnologic (recombinant DNA) vaccines. Advantages and disadvantages of attenuated vaccines. Advantages and disadvantages of inactivated vaccines. Mixed (polyvalan) vaccines. Techniques for preparing autogenous and mixed vaccines and their application methods. Vaccine for papillomatosis and its immunity. The side effects of vaccines (local and systemic reactions, vaccine infections, contraindications, the use of insufficient immunity). | | | | | | | | |
| Work Placement | N/A | | | | | | | | |
| Planned Learning Activities and Teaching Methods | Explanation (Presentation), 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 | Immunoloji |
| 2 | Veterinary Vaccines and Diagnostics, Volume 41 |
| 3 | Veterinary Immunology: An Introduction, 7 ^o Edition |
| 4 | Handbook of Vertebrate Immunology |
| 5 | Biyoteknoloji |

| Week | Weekly Detailed Course Contents | |
|------|---------------------------------|--|
| 1 | Theoretical | Classification of vaccines |
| 2 | Theoretical | Classification of vaccines |
| 3 | Theoretical | Classification of vaccines |
| 4 | Theoretical | Advantages and disadvantages of attenuated vaccines |
| 5 | Theoretical | Advantages and disadvantages of inactivated vaccines |
| 6 | Theoretical | Mixed (polyvalant/combined) vaccines |
| 7 | Theoretical | Preparation techniques of autogenous vaccines |
| 8 | Intermediate Exam | Midterm Examination |
| 9 | Theoretical | Preparation techniques of autogenous vaccines |
| 10 | Theoretical | Papillomatosis vaccines and its immunity |
| 11 | Theoretical | Side effects of vaccines |
| 12 | Theoretical | Side effects of vaccines |
| 13 | Theoretical | Side effects of vaccines |
| 14 | Theoretical | Side effects of vaccines |
| 15 | Theoretical | Discussion |

Workload Calculation

| Activity | Quantity | Preparation | Duration | Total Workload |
|---------------------|----------|-------------|----------|----------------|
| Lecture - Theory | 14 | 0 | 2 | 28 |
| Assignment | 1 | 0 | 2 | 2 |
| Laboratory | 14 | 0 | 0.5 | 7 |
| Midterm Examination | 1 | 5 | 1 | 6 |



| | | | | |
|---|---|---|---|----|
| Final Examination | 1 | 6 | 1 | 7 |
| Total Workload (Hours) | | | | 50 |
| [Total Workload (Hours) / 25*] = ECTS | | | | 2 |
| *25 hour workload is accepted as 1 ECTS | | | | |

Learning Outcomes

| | |
|---|---|
| 1 | 1. To be able to prepare vaccines and serums |
| 2 | 2. To be able to name the differences between attenuated and inactivated vaccines |
| 3 | 3. To be able to define biotechnological vaccines |
| 4 | 4. To be able to name the complications of vaccines |
| 5 | 5. To be able to use the necessary information |

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

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|---|---|
| 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 | 4 | 5 | 4 |
| P2 | 4 | 5 | 4 | 5 | 4 |
| P3 | 5 | 4 | 5 | 4 | 5 |
| P4 | 5 | 4 | 4 | 5 | 5 |
| P5 | 5 | 5 | 5 | 4 | 4 |

