AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Vaccines, Serums and Their Use in Proflaxy								
Course Code	MİK528		Couse 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, contraendications, 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	İmmunoloji
2	Veterinary Vaccines and Diagnostics, Volume 41
3	Veterinary Immunology: An Introduction, 7º 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 Medicine) Master)*	
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
6	Department has the ability to donate theoretical and practical knowledge about postgraduate students in the are of microbiology.
7	Graduate students has the ability to perform 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	5
P2	5	5	4	5	5
P3	5	4	4	5	4
P4	4	4	5	4	4
P5	4	5	5	4	5
P6	5	3	4	5	4
P7	4	5	5	4	5