



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Diagnosis and Identification Methods of Viruses							
Course Code		VVR504		Course Level		Second Cycle (Master's Degree)			
ECTS Credit	5	Workload	126 (<i>Hours</i>)	Theory	1	Practice	2	Laboratory	0
Objectives of the Course		The aim of this course; to teach used tests and its methods for diagnosis and identification in serology and virology.							
Course Content		Physically and chemically identification methods using in the virology. Serological methods using in virus identification; neutralisation test, Hemagglutination test, Hemagglutination-Inhibition test, ELISA, Complement-fixation test, Agar-gel immunodiffusion test, plque-reduction test, Single radial haemolysis test, immunofluorescent and immunoperoxydase techniques.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Experiment, Demonstration, Discussion, Individual Study					
Name of Lecturer(s)		Prof. Mehmet Tolga TAN, Prof. Nural EROL							

Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	24
Final Examination	1	60
Quiz	1	8
Term Assignment	1	8

Recommended or Required Reading

1	Playfair J.H.L. and Bancroft B.J. (2004) "Infection and Immunity", 2nd edition, Oxford University Press.
2	MacLachlan N.J. and Dubovi E.J. (2012) "Fenners Veterinary Virology", 4th edition, Academic Press
3	Jerome R.K. (2010) "Lennette's Laboratory Diagnosis of Viral Infections", 4th edition, informa

Week	Weekly Detailed Course Contents	
1	Theoretical	Biosafety Managements
2	Practice	Physically and chemically identification methods using in the virology.
3	Theoretical	Serological methods using in virus identification
4	Practice	Serological methods using in virus identification
5	Theoretical	Neutralization Test
6	Theoretical	Hemagglutination Test
7	Theoretical	Hemagglutination-Inhibition Test
8	Intermediate Exam	Mid-Term Exam
9	Theoretical	Complement-Fixation Test
11	Theoretical	Agar-Gel Immunodiffusion Test
12	Theoretical	Plaque-Reduction Test
13	Theoretical	Single radial Hemolysis Test
14	Theoretical	Immunoperoxidase
15	Final Exam	Final Term Exam

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	1	14
Lecture - Practice	14	0	2	28
Assignment	1	8	0	8
Individual Work	14	1	0	14
Quiz	1	7	1	8
Midterm Examination	1	22	2	24



Final Examination	1	28	2	30
Total Workload (Hours)				126
[Total Workload (Hours) / 25*] = ECTS				5
*25 hour workload is accepted as 1 ECTS				

Learning Outcomes

1	is informed about working in virology labors
2	knows criteria in sampling for the purpose viral diagnosis; determination and selection of suitable materials, sending samples to the virology laboratories, preparation of inoculum from suspected material
3	knows isolation or production, determination, quantification and identification of viruses and diagnostic methods for virus infection
4	is able to apply basic procedures for diagnostic methods in virology lab.
5	The student will have basic knowledge of laboratory and have knowledge about virology laboratory and biosafety

Programme Outcomes (Virology (Veterinary Medicine) Master)

1	To be understood the fundamentals of virology, the relations between animal and human in terms of viruses.
2	To be taught to morphological and chemical structure, diversity, classification, cultivation of viruses and be able to infection of virus, be able to blocked abilities of virus replication.
3	To be informed about epidemiology of viral diseases and the control strategies against to viral diseases.
4	To be taught the cultivation, isolation, identification, quantification of viruses
5	To be informed about etiology, epidemiology, pathogenesis, pathology and diagnosis of viral diseases important for animal health in Turkey.
6	To be taught vaccines and types of vaccines. The new developments of vaccines and applications of vaccines.
7	To be informed about advantages and disadvantages of applications of vaccine., and also complications of result of vaccination or post vaccination
8	Understand basic laboratory knowledge and virology laboratory applications.
9	Understand The Laboratory security and Good Laboratory Practice
10	To be taught the GLP in Virology.
11	Using the obtained scientific data in scientific publications such as reports, thesis, article books and writing criteria in ethical rules.

Contribution of Learning Outcomes to Programme Outcomes 1:Very Low, 2:Low, 3:Medium, 4:High, 5:Very High

	L1	L2	L3	L4	L5
P4		5	5	5	
P8	5		3	4	5
P9				4	5
P10				4	3

