



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Babesia, Theileria							
Course Code		VPR528		Course Level		Second Cycle (Master's Degree)			
ECTS Credit	4	Workload	105 (<i>Hours</i>)	Theory	2	Practice	2	Laboratory	0
Objectives of the Course		The aim of the course is to recognize the symptoms, treatments and control methods of Theileriosis and Babesiosis and to explain the importance of theileriosis and babesiosis in animal husbandry in Turkey.							
Course Content		Economical importance of theileriosis and babesiosis, their symptoms, current status of theileriosis and babesiosis in Turkey, methods used for the diagnosis, treatment and prevention of theileriosis and babesiosis.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Demonstration, Discussion, Case Study, Individual Study, Problem Solving					
Name of Lecturer(s)									

Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	20
Final Examination	1	60
Quiz	2	10
Assignment	1	10

Recommended or Required Reading

1	Yukarı, B.A., (2000) Protozooloji, Akdeniz Üniversitesi Burdur Veteriner Fakültesi Ders Notu, Burdur.
2	Dik, B., Sevinç, F. (2002) Veteriner Protozooloji, Selçuk Üniversitesi Veteriner Fakültesi, Konya.
3	Tüzer, E., Toparlak, M. (1999) Veteriner Protozooloji, İstanbul Üniversitesi Veteriner Fakültesi Ders Notu, İstanbul.
4	Kaufmann, J. (1996) Parasitic Infections of Domestic Animals, Birkhäuser, Switzerland.
5	Peters, W., Pasvol, G. (2002) Tropical Medicine and Parasitology, Mosby International Limited, China.
6	Soulsby, E.J.L. (1986) Helminths, Arthropods and Protozoa of Domesticated Animals, William Cloves Limited, Great Britain.
7	Burgu, A., Karaer, Z. (2005) Parazit Hastalıklarında Tedavi, Türkiye Parazitoloji Derneği, İzmir.
8	Dumanlı, N., Karaer Z. (2010). Veteriner Protozooloji. Medisan Yayınevi, Ankara
9	Dobbelaere, D. A. E., McKeever, D. J. (2002). Theileria. CAB Direct Collection.

Week	Weekly Detailed Course Contents	
1	Theoretical	History and taxonomy of Babesiidae, their importance for Turkey
	Practice	Diagnostic methods for Babesia and Theileria spp
2	Theoretical	Biology and pathogenicity of Babesia spp.
	Practice	Examination of microscopic slides of Babesia spp
3	Theoretical	Immunity in Babesiosis
	Practice	Examination of microscopic slides of Theileria spp.
4	Theoretical	Treatment , protection and control methods for Babesiosis
	Practice	In vitro cell culture for Babesia spp- I
5	Theoretical	Babesia species and diseases they cause in ruminants
	Practice	In vitro cell culture for Babesia spp- II
6	Theoretical	Babesiosis in dogs, cats and swine
	Practice	In vitro culture of Theileria macroschizonts infected cells-
7	Theoretical	Babesiosis in equines and humans
	Practice	In vitro culture of Theileria macroschizonts infected cells-II
8	Intermediate Exam	Midterm exam
9	Theoretical	History and taxonomy of Theileridae, its importance for Turkey
	Practice	Preparation of antigens from Theileria annulata macroschizont cultures for IFAT
10	Theoretical	Biology and pathogenicity of Theileria spp
	Practice	Preparation of Theileria and Babesia piroplasm antigens for IFAT



11	Theoretical	Immunity in Theileriosis
	Practice	Performing IFAT using Theileria and Babesia piroplasm antigens and evaluation of results
12	Theoretical	Treatment, protection and control methods for Theileria spp
	Practice	Performing IFAT using Theileria annulata macroschizont antigens and evaluation of results.
13	Theoretical	Species of Theileria and disease they cause in cattle
	Practice	Diagnosis using PCR -I
14	Theoretical	Species of Theileria and disease they cause in sheep and goats
	Practice	Diagnosis using PCR -II
15	Theoretical	Theileriosis in animal other than ruminants
	Practice	General discussion
16	Final Exam	Final exam
17	Final Exam	Final exam

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	1	1	28
Lecture - Practice	14	1	1	28
Term Project	1	0	4	4
Reading	14	0	1	14
Quiz	2	4	0.5	9
Midterm Examination	1	10	1	11
Final Examination	1	10	1	11
Total Workload (Hours)				105
[Total Workload (Hours) / 25*] = ECTS				4
*25 hour workload is accepted as 1 ECTS				

Learning Outcomes

1	To be able to explain how Theileria ve Babesia species infect the animals, symptoms of theileriosis and babesiosis and economical aspects of the damage caused by these parasites.
2	To be able to recognize the available control methods against these diseases.
3	To be able to apply routine and advanced techniques for the diagnosis of these diseases.
4	To know the ways of transmission of these diseases.
5	To know the treatment methods of these diseases.

Programme Outcomes (Parasitology (Veterinary Medicine) Master)

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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	5	5	5
P2	5	4	4	4	5
P3	3	4	3	5	5
P4	5	4	1	4	5
P5	5	4	2	5	5



P6	4	4	5	3	3
P7	4	3	5	4	4
P8	5	4	5		2
P9	4	2	1	4	4
P10	5	3	5	4	2
P11	4	4	5		
P12	5	5	5		

