AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Anaplasma And The Other Ehrlichia Species								
Course Code	VPR663		Couse Level		Third Cycle (Doctorate Degree)				
ECTS Credit	3	Workload	75 *(Hours)*	Theory	2	Practice	0	Laboratory	0
Objectives of the Course	The objective of this course, the diseases created by Anaplasma species in domestic animals, methods of treatment and prevention of these diseases, Other Ehrlichia species in domestic animals and humans, transmission paths and diagnose, treatment and control methods								
Course Content	Anaplasmosis on domestic animals, clinic of disease, diagnose, treatment and control methods. Other Ehrlichia species in domestic animals, transmission paths and diseases that they cause								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Discussion, Case Study								
Name of Lecturer(s)									

Assessment Methods and Criteria		
Method	Quantity	Percentage (%)
Midterm Examination	1	20
Final Examination	1	60
Quiz	1	10
Assignment	1	10

Recommended or Required Reading	
1	YUKARI, B. A., (2000). Protozooloji. Akdeniz Üniversitesi Burdur Veteriner Fakültesi Ders Notu No:9. Burdur
2	DİK, B., SEVİNÇ, F. (2002). Veteriner Protozooloji. Selçuk Üniversitesi Veteriner Fakültesi. Konya
3	TÜZER, E., TOPARLAK, M. (1999). Veteriner Protozooloji. İstanbul Üniversitesi Veteriner Fakültesi Ders Notu No:105. İstanbul
4	KAUFMANN, J. (1996). Parasitic Infections of Domestic Animals. Birkhäuser. Switzerland
5	PETERS, W., PASVOL, G. (2002). Tropikal 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, Yayın No:19
8	SCHMIDT, G.D. (1985). Foundations of Parasitology
9	DUMANLI, N., KARAER Z. (2010). Veteriner Protozooloji. Medisan Yayınevi, Ankara

Week	**Weekly Detailed Course Contents**	
1	Theoretical	The classification of the species that cause anaplasmosis and ehrlichiosis on domestic animals, general characteristics
	Practice	The methods of diagnose of the species that cause anaplasmosis and ehrlichiosis on domestic animals
2	Theoretical	Morphology, biology and disease caused by species Anaplasma marginale and A.centrale, control methods treatment and prevention of these diseases
	Practice	Microscopic diagnosis of Anaplasma marginale and Anaplasma centrale species
3	Theoretical	Morphology, biology and disease caused by species Anaplasma ovis, control methods treatment and prevention of these diseases
	Practice	Microscopic diagnosis of Anaplasma ovis species
4	Theoretical	Morphology, biology and disease caused by species Anaplasma bovis, control methods treatment and prevention of these diseases
	Practice	Microscopic diagnosis of Anaplasma bovis species
5	Theoretical	Morphology, biology and disease caused by species Anaplasma phagocytophilum, control methods treatment and prevention of these diseases
	Practice	Microscopic diagnosis of Anaplasma phagocytophilum species
6	Theoretical	Morphology, biology and disease caused by species Anaplasma platys, control methods treatment and prevention of these diseases
	Practice	Microscopic diagnosis of Anaplasma platys species
7	Theoretical	Morphology, biology and disease caused by species Ehrlichia canis, control methods treatment and prevention of these diseases

7	Practice	Microscopic diagnosis of Ehrlichia canis species
8	Intermediate Exam	Midterm Examination
9	Theoretical	Morphology, biology and disease caused by species Ehrlichia chaffeensis, control methods treatment and prevention of these diseases
	Practice	Microscopic diagnosis of Ehrlichia chaffeensis species
10	Theoretical	Morphology, biology and disease caused by species Ehrlichia ewingii, control methods treatment and prevention of these diseases
	Practice	Microscopic diagnosis of Ehrlichia ewingii species
11	Theoretical	Morphology, biology and disease caused by species Ehrlichia ovina, control methods treatment and prevention of these diseases
	Practice	Microscopic diagnosis of Ehrlichia ovina species
12	Theoretical	Morphology, biology and disease caused by species Ehrlichia ondrii, control methods treatment and prevention of these diseases
	Practice	Microscopic diagnosis of Ehrlichia ondrii species
13	Theoretical	Morphology, biology and disease caused by species Ehrlichia ruminantum, control methods treatment and prevention of these diseases
	Practice	Microscopic diagnosis of Ehrlichia ruminantum species
14	Theoretical	Diseases caused by Neorickettsia and rickettsia species, the treatment and prevention of these diseases
	Practice	Diagnostic methods with molecular techniques of Anaplasma and Ehrlichia species
15	Theoretical	Discussion
16	Final Exam	Final exam
17	Final Exam	Final exam

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	2	28
Lecture - Practice	14	0	2	28
Assignment	1	2	1	3
Quiz	1	2	1	3
Midterm Examination	1	5	1	6
Final Examination	1	6	1	7
			Total Workload (Hours)	75
			[Total Workload (Hours) / 25*] = **ECTS**	3

**25 hour workload is accepted as 1 ECTS*

Learning Outcomes

1	To have knowledge about the disease anaplasmosis
2	To have knowledge about the disease ehrlichiosis
3	To have knowledge about the important Ehrlichia and Anaplasma species in domestic animals
4	To have knowledge about the methods of control of anaplasmosis and ehrlichiosis
5	To have knowledge about the control methods and treatment of anaplasmosis and ehrlichiosis

Programme Outcomes *(Parasitology (Veterinary Medicine) Doctorate)*

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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	4	4	4	4	5
P3	4	4	4	4	5
P4	3	3	3	4	5
P5	5	5	5	5	5
P6	5	5	5	5	5
P7	2	2	2	5	5
P8	4	4	4	5	5
P9	4	4	4	5	5
P11	4	4	4	5	5