



## AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Production Methods Of Haemoparasites In Cell Culture							
Course Code		VPR658		Couese Level		Third Cycle (Doctorate Degree)			
ECTS Credit	4	Workload	100 ( <i>Hours</i> )	Theory	2	Practice	2	Laboratory	0
Objectives of the Course		The objective of this course, introduction of cell culture laboratories, points to be considered in cell culture, cell line in cell culture, cultivation of theileria and babesia parasites							
Course Content		Cell culture of theileria and babesia parasites, Isolation of infected lymphocytes from the blood, schizonts-infected lymphocyte cultures, cell line and incubation, to be considered in cell culture, cell counting and viability examination, storage of cultures							
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	Maramorosch K., Hirumi, H. (1979). Practical tissue culture applications. Academic Press, USA
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Week	Weekly Detailed Course Contents	
1	Theoretical	Points to be considered in cell culture
	Practice	equipment / consumables used in laboratories cell culture
2	Theoretical	Biology of theileria annulata
	Practice	Isolation to be lymphocytes of an infected animal
3	Theoretical	Isolation to be lymphocytes of an infected animal with theileria annulata
	Practice	culturing lymphocyte -infected with Scizont by Obtained from an animal infected with theileria annulata
4	Theoretical	Culturing lymphocytes infected with Schizonts
	Practice	Culturing lymphocyte -infected with Scizont by Obtained from an animal infected with theileria annulata
5	Theoretical	Cell line and incubation in cell culture of theileria annulata
	Practice	Cell line and incubation in cell culture of theileria annulata
6	Theoretical	Count of cells in cell cultures of theileria annulata and live / dead cell discrimination
	Practice	Count of cells in cell cultures of theileria annulata and live / dead cell discrimination
7	Theoretical	Storage of cell cultures of theileria annulata
	Practice	Storage of cell cultures of theileria annulata
8	Intermediate Exam	Midterm Examination
9	Theoretical	Biology of the species Babesia parasites which were cell culturable
	Practice	Modified of cell cultures to babesia
10	Theoretical	Needs to be done for cell culture to babesia
	Practice	Modified of cell cultures to babesia
11	Theoretical	Cell line of cell culture to babesia
	Practice	Cell line of cell culture to babesia
12	Theoretical	Incubation of cell culture to babesia
	Practice	Incubation of cell culture to babesia
13	Theoretical	Storage of cell cultures to babesia
	Practice	Storage of cell cultures to babesia
14	Theoretical	Immunization activities from cell cultures



14	Practice	Immunization activities from cell cultures
15	Theoretical	Discussion
	Practice	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	4	1	5
Quiz	1	4	1	5
Midterm Examination	1	14	1	15
Final Examination	1	18	1	19
Total Workload (Hours)				100
[Total Workload (Hours) / 25*] = <b>ECTS</b>				4

\*25 hour workload is accepted as 1 ECTS

**Learning Outcomes**

1	Equipment / consumables used in laboratories cell culture
2	Isolation of peripheral blood monocytes
3	To have an information about cultivation of Theileria parasites
4	To have an information about cultivation of Babesia parasites
5	Cell line and storage of cultures in cell culture

**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	4
P3	5	5	5	5	5
P4	4	4	4	4	4
P5	5	5	5	5	5
P6	4	4	4	4	4
P7	5	5	5	5	5
P8	4	4	4	4	4
P9	4	4	4	4	4
P11	5	5	5	5	5

