



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Laboratory Rearing of Ticks							
Course Code		VPR671		Course Level		Third Cycle (Doctorate Degree)			
ECTS Credit	3	Workload	76 (Hours)	Theory	2	Practice	2	Laboratory	0
Objectives of the Course		The objective of this course, to identified tick species which transmitting some important diseases to domestic animals and humans, biology of this tick species, facilities are necessary colonization and maintenance under laboratory condition of this tick species , used of laboratory animals in colonization and maintenance under laboratory condition of this tick species, life cycle of this tick species under laboratory condition							
Course Content		Colonization and maintenance of some tick species under laboratory conditions							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Experiment, Demonstration, Discussion					
Name of Lecturer(s)									

Assessment Methods and Criteria

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

Recommended or Required Reading

1	KURTPINAR H. Türkiye Keneleri. Güven Matbaası, Ankara, sayfa, 1 – 96, 1954.
2	Ticks of the Sudan. U.S. Naval Medical Research Unit Cario, Egypt, No: 3, page 1 – 1101+II, 1956.
3	ESTRADA PENA A, BOUATTOUR A, CAMÍCAS JL, WALKER AR. Ticks of Domestic Animals in the Mediterranean Region: a Guide to Identification of Species. Published by University of Zaragoza, Spain, page 1 – 131+VI, 2004
4	WALKER AR, BOUATTOUR A, CAMÍCAS JL, ESTRADA PENA A, HORAK IG, LATIF AA, PEGRAM RG, PRESTON PM. Ticks of Domestic Animals in Africa: A Guide to Identification of Species. Published by Bioscience Reports, Scotland, U.K. page 1 – 221+VI, 2003
5	YUKARI BA. Laboratuvarıda Hyalomma anatolicum excavatum kolonisinin elde edilmesi ve muhafazası üzerinde araştırmalar. Doktora Tezi, Ankara 1992

Week	Weekly Detailed Course Contents	
1	Theoretical	Identified of tick species in Turkey
	Practice	The showing of morphological differences of species in Argasidae and Ixodidae families in the stereo microscope
2	Theoretical	The advantages of rearing of tick species in the laboratory
	Practice	Methods used for the colonization of tick species
3	Theoretical	The maintenance and colonization of tick species
	Practice	The conditions necessary for ensuring the continuity of colonization of ticks species
4	Theoretical	Biology of Hyalomma tick species
	Practice	The identification of Hyalomma tick species
5	Theoretical	The laboratory animals and equipment required for produced under laboratory conditions of ?? Hyalomma tick species
	Practice	The production and care of laboratory animals required for produced under laboratory conditions of ??Hyalomma tick species
6	Theoretical	The maintenance and colonization of Hyalomma excavatum in laboratory conditions
	Practice	The necessary issues for maintenance and colonization of Hyalomma excavatum in laboratory conditions
7	Theoretical	The biology of Hyalomma excavatum in laboratory conditions
	Practice	The identify developmental period of different stages of Hyalomma excavatum
8	Practice	Midterm Exam
	Intermediate Exam	Midterm Exam
9	Theoretical	The colonization of Hyalomma detritum in laboratory conditions



9	Practice	The necessary issues for colonization of <i>Hyalomma detritum</i> in laboratory conditions
10	Theoretical	The biology of <i>Hyalomma detritum</i> in laboratory conditions
	Practice	The identify developmental period of different stages of <i>Hyalomma detritum</i>
11	Theoretical	The colonization of <i>Hyalomma marginatum</i> in laboratory conditions
	Practice	The necessary issues for colonization of <i>Hyalomma marginatum</i> in laboratory conditions
12	Theoretical	The biology of <i>Hyalomma marginatum</i> in laboratory conditions
	Practice	The identify developmental period of different stages of <i>Hyalomma marginatum</i>
13	Theoretical	
	Practice	
14	Theoretical	In vitro methods applied for the colonization of tick ??species
	Practice	Preliminary studies for in vitro methods applied for the colonization of tick ??species
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	1	0	1
Quiz	1	2	0.5	2.5
Midterm Examination	1	6	1	7
Final Examination	1	9	1	10
Total Workload (Hours)				76
[Total Workload (Hours) / 25*] = ECTS				3

*25 hour workload is accepted as 1 ECTS

Learning Outcomes

1	To learn identification and biology of tick species
2	To learn the necessary conditions for colonization of ticks in laboratory
3	To maintain and maintain the colony of tick species adapted to laboratory conditions
4	To learns production of tick-borne diseases in laboratory
5	To learn how to adapt to the laboratory conditions of ticks

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	4	5	5	5
P2	5	5	4	5	5
P3	4	4	4	5	4



P4	4	5	5	5	4
P5	4	2	4	4	4
P6	5	5	5	5	5
P7	5	5	5	5	5
P8	5	5	5	2	5
P9	4	5	5	5	4
P10	5	5	2	3	5
P11	3	5	3	5	3
P12	2	5	2	1	2

