AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title		Ectoparasites And Protozoans Of Bees							
Course Code		VPR504		Couse Level		Second Cycle (Master's Degree)			
ECTS Credit	5	Workload	122 *(Hours)*	Theory	2	Practice	0	Laboratory	0
Objectives of the Course		The objective of this course is to give information about ectoparasites and protozoans of bees.							
Course Content		The prevalence, the active identification and the control methods applicable to these factors of ectoparasites and protozoan of bees.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Discussion, Case Study					
Name of Lecturer(s)		Prof. Hasan EREN, Prof. Tülin KARAGENÇ							

Assessment Methods and Criteria		
Method	Quantity	Percentage (%)
Midterm Examination	1	20
Final Examination	1	60
Quiz	2	10
Assignment	4	10

Recommended or Required Reading	
1	Aldemir, OS, Eren, H. (2008) : Bal Arısı Hastalıkları ve Zararlıları, ADÜ. Ders Notları.
2	İnal, Ş, Güçlü, F. (1998) : Arı Yetiştiriciliği ve Hastalıkları, S.Ü.Ders Notları.
3	Şaki, CE. (2000) : Arı Hastalıkları Ders Notları. F.Ü.Ders Notları.
4	Zeybek, H. (1991) : Arısı Hastalıkları ve Zararlıları.Etlik Hayvan Hast. Araş.Enst

Week	Weekly Detailed Course Contents	
1	Theoretical	Ecological importance of bees
2	Theoretical	To know present bee species in the world
3	Theoretical	To know parasitic diseases of bees
4	Theoretical	To know ectoparasitic disease of bees
5	Theoretical	To know ecto acars of bees
6	Theoretical	To learn identification criterions of Varroa and Tropilaelaps species
7	Theoretical	To know endo acars of bees
8	Intermediate Exam	Mid term exam
9	Theoretical	To know insects in diptera class
10	Theoretical	To know protozoon disease of bees
11	Theoretical	To know identification methods of Nosema and Malpighamoeba
12	Theoretical	To know staining technices used by diagnosis of protozoon diseases of bees
13	Theoretical	To know drug using methods against diseases of bees
14	Theoretical	Medical importance of bees
15	Theoretical	To know control methods against actoparasiter and protozoon diseases of bees
16	Final Exam	Final exam
17	Final Exam	Final exam

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	2	28
Assignment	4	4	0	16
Reading	14	0	2	28
Quiz	2	6	0.5	13
Midterm Examination	1	15	1	16

Final Examination	1	20	1	21
			Total Workload (Hours)	122
			[Total Workload (Hours) / 25*] = **ECTS**	5
**25 hour workload is accepted as 1 ECTS*				

Learning Outcomes	
1	To be able to tell about the species of ectoparasites and protozoans of bees.
2	To be able to identify the ectoparasites and protozoans of bees
3	To be able to explain the importance of ectoparasites and protozoan of bees and the control methods and to be able to apply them
4	To know protection of bees from ectoparasites and protozoan infections.
5	To know the treatment of ectoparasitic and protozoan infections of bees.

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	4	5	4	5	5
P2	4	4	5	5	5
P3	4		4	4	4
P4	4	5	5	5	5
P5	4	5	5	5	5
P6	5	2	5	5	5
P7	4	1	5	5	5
P8	3	4	3	3	3
P9	3	2	4	4	4
P10	5	2	5	5	5
P11	5	5	4	4	4
P12	3	5	2	2	2