



NEAR EAST UNIVERSITY
Faculty of Veterinary Medicine Course Curriculum

1.	Course Name	BEE DISEASES
2.	Course Code	VTE411
3.	Course Type	Compulsory
4.	Course Level	Undergraduate
5.	Year	4
6.	Semester	Fall, 7VETE
7.	ECTS Credits	1
8.	National credits	1
9.	Theoretical Course Hours (hours/week)	1h/week
10.	Practical Course Hours (hours/week)	-
11.	Course Prerequisites	No
12.	Other Topics Recommended for the Course	No
13.	Course Language	English
14.	Course Format	Face to face
15.	Course Coordinator	Dr. Meryem BETMEZOĞLU
16.	Other Lecturers that Give the Course	No
17.	Communication Details of the Coordinator	meryem.betmezoglu@neu.edu.tr
18.	Course Web Address	https://uzem.neu.edu.tr/course/index.php?categoryid=1102
19.	Course Aim	To provide students the skills to know and apply the basic beekeeping and apiculture criteria, to recognize bee diseases and pests, and to diagnose and treat them.
20.	Contribution of the Course to Occupational Development	Students will be able to recognise basic information and diseases related to beekeeping, which is a different branch of livestock, and to comprehend the importance of honey bees for nature.

21.	Course Learning Outcomes	LO1	Learning technical problems and solutions of beekeeping.
		LO2	Performing hive examination and taking anamnesis,
		LO3	Recognising and treating bee diseases,
		LO4	Taking samples from the hive in accordance with suitable techniques and/or examining or sending them to the laboratory
		LO5	Writing prescriptions for bee diseases and knowing preventive medicine.
		LO6	

22.	Course Content	WEEK	THEORETICAL COURSE CONTENT	APPLICATION CONTENT
		1.	Anatomy, morphology, taxonomy, biology and species of the honeybee.	
		2.	Terms of apiculture, equipment, utilization, hive care and approach criteria.	
		3.	Beekeeping-environment relationship, Pollination-Economy	
		4.	Apicultural products (honey, pollen, propolis, apilarnil, sting poison, beeswax, royal jelly)	
		5.	Introduction to bee diseases and their general characteristics	
		6.	Nosema disease (diagnosis-treatment)	
		7.	Varroosis (diagnosis-treatment)	
		8.	American and European foulbroods	
		9.	Bee paralysis, Sac brood, Septicaemia, Dysentery (diagnosis-treatment)	
		10.	Harm of pesticides to bees and the environment	
		11.	Fungal diseases of bees (stone and lime) (diagnosis-treatment)	
		12.	Tracheal mite (A.woodi), Bee louse (B.coeca) and T.clarea (diagnosis-treatment),	
		13.	Other bee pests (wax moth, ant, bear, pesticides, poisoning)	
		14.	Regulations and legal procedures related to beekeeping.	
23.	Course Book, References and/or Other Resources	1. Doğanay A, Aydın L (Ed). Bal Arısı Yetiştiriciliği, Ürünleri, Sağlığı. Dora Yayıncılık, Bursa, 2021.		

24.	Evaluation	SEMESTER WORK	NUMBER	PERCENTAGE OF CONTRIBUTION
		Midterm Exam	1	40%
		Short Exam		
		Homework, Performance		
		End of Year Exam	1	60%
		Total	2	100%
		Evaluation Approaches	Exams are conducted in the form of tests.	

25.	ECTS / Workload Table			Duration	Total Workload
		Activity	NUMBER	[Hours]	[Hours]
		Theoretical Courses	14	1	14
		Applied Courses			
		Extracurricular Lesson Study Time (Preparation, revising)	5	2	10
		Homework, Performance			
		Projects			
		Field Studies	2	2	4
		Midterm Exams	1	1	1
		Other			
		End Of Semester Exams	1	1	1
		Total Workload			30
		Total Workload / 30 hours			30/30
		Course ECTS Credits			1