

BEE PRODUCTS AND FLORAL ORIGINS

1	Course Title:	BEE PRODUCTS AND FLORAL ORIGINS	
2	Course Code:	BIO5122	
3	Type of Course:	Optional	
4	Level of Course:	Second Cycle	
5	Year of Study:	1	
6	Semester:	2	
7	ECTS Credits Allocated:	6.00	
8	Theoretical (hour/week):	3.00	
9	Practice (hour/week):	0.00	
10	Laboratory (hour/week):	0	
11	Prerequisites:	None	
12	Language:	Turkish	
13	Mode of Delivery:	Face to face	
14	Course Coordinator:	Prof. Dr. Aycan Tosunoğlu	
15	Course Lecturers:	-	
16	Contact information of the Course Coordinator:	Bursa Uludağ Üniversitesi Fen-Edebiyat Fakültesi Biyoloji Bölümü, Görükle Kampüsü, Nilüfer/BURSA 16059 aycanbilisik@uludag.edu.tr 0224.2941854	
17	Website:		
18	Objective of the Course:	A detailed understanding of bee products, as a result of honey bee activities, and their properties, honeybee and flora relationship.	
19	Contribution of the Course to Professional Development:	The protective and complementary application method of bee and bee products in the treatment of some diseases is very old, and it will be beneficial for biologists to evaluate bee products, their contents and bee-flora relationship for graduate profession and career development.	
20	Learning Outcomes:		
		1	Having information about the biological properties of bee products.
		2	To understand the relationship between honey bees and flora
		3	To be able to comprehend the relationship between bee products and plants used by bees as a source and the properties of these plants
		4	Having an idea about apitherapy
		5	Having information about law regulations about bee products
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21	Course Content:		
		Course Content:	
Week	Theoretical	Practice	
1	Honey bee colony members and their basic features		

2	Honey, honey formation	
3	Pollen	
4	Propolis	
5	Royal jelly, apilarnyl	
6	Bee venom	
7	Bees wax	
8	Nectariferous plants	
9	Honeydew plants	
10	Pollen plants	
11	Melissopalynological analysis of bee products	
12	Bee products – flora relation	
13	Bee products – health relation	
14	Law regulation	

22	Textbooks, References and/or Other Materials:	E. Crane: Honey. A comprehensive survey, Heinemann, London, 1975. Silici S. Bilimsel Gerçeklerle Apiterapi. Akademisyen Kitabevi, Ankara, 2020. Free, J.B. 1993. Insect pollination of crops. Academic Press, New York. 2nd Edition. Oddo, L.P., Piana, L., Bogdanov, S., Bentabol A., Gotsiou, P., Kerkvliet, J., Martin, P., Morlot, M., Ortiz Valbuena, A., Ruoff, K., Von Der Ohe, K. 2004. Botanical species giving
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Activites		Number	Duration (hour)	Total Work Load (hour)
23	Assesment	14	3.00	42.00
Practicals/Labs		0	0.00	0.00
Self study and preperation		3	10.00	30.00
Homeworks		4	15.00	60.00
Projects		0	0.00	0.00
Home Work-project		1	40.00	40.00
Field Studies		0	0.00	0.00
Midterm exams		0	0.00	0.00
Total		2	100.00	100.00
Others		0	0.00	0.00
Final Exam		1	48.00	48.00
Total Work Load				180.00
Total work load/ 30 hr		100.00		6.00
ECTS Credit of the Course				6.00

Course

24 ECTS / WORK LOAD TABLE

25	CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS															
	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ10	PQ11	PQ12	PQ13	PQ14	PQ15	PQ16
ÖK1	3	0	0	0	0	3	2	0	3	0	0	0	0	0	0	0
ÖK2	3	0	0	0	0	3	2	0	3	0	0	0	0	0	0	0
ÖK3	3	0	0	0	0	3	2	0	3	0	0	0	0	0	0	0

ÖK4	3	0	0	0	0	3	2	0	3	0	0	0	0	0	0	0
ÖK5	3	0	0	0	0	3	2	0	3	0	0	0	0	0	0	0
LO: Learning Objectives PQ: Program Qualifications																
Contribution Level:	1 very low			2 low			3 Medium			4 High			5 Very High			