



## AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Honey Bee Products							
Course Code		ZT112		Couse Level		First Cycle (Bachelor's Degree)			
ECTS Credit	2	Workload	52 ( <i>Hours</i> )	Theory	2	Practice	0	Laboratory	0
Objectives of the Course		The aim of this course is teaching the fundamentals of bee products.							
Course Content		Definition of bee products, biological specifications of bee products, production methods and marketing of bee products.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Discussion, Case Study, Individual Study					
Name of Lecturer(s)									

### Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	70

### Recommended or Required Reading

1	The Healing Power of Polen and Other Bee Products From the Beehive: Propolis-Royal Jelly- Honey. Thorsons Publishers Limited, Wellingborough, Northhamptonshire/England.
2	Simics, M. 1994. Bee Venom: Exploring the Healing Power. Apitronic Publishing, 4640 Pendlebury Rd. Richmond, B.C, Canada. 80p.
3	Stein,I. 1989. Royal jelly. The new guide to nature's richest healt food. Thorsons Public. Group , England. P. 81-106.

Week	Weekly Detailed Course Contents	
1	Theoretical	Definition of bee products (honey, polen, royal jelly, bee venoom, propolis, apilarnil)
2	Theoretical	Production of honey and production methods
3	Theoretical	Production of polen and production methods
4	Theoretical	Production of royal jelly and production methods
5	Theoretical	Production of bee venoom and production methods
6	Theoretical	Production of propolis and production methods
7	Theoretical	Production of apilarnil and production methods
8	Intermediate Exam	Midterm exam
9	Theoretical	Report presentations
10	Theoretical	Biological specifications of honey, polen and royal jelly
11	Theoretical	Biological specifications of bee venoom, propolis, apilarnil
12	Theoretical	Factors affecting the quality of bee products
13	Theoretical	Process of bee products and marketing
14	Theoretical	General repetition
15	Theoretical	Report presentations
16	Final Exam	Final Exam

### Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	2	28
Term Project	2	0	0	0
Midterm Examination	1	10	2	12
Final Examination	1	10	2	12
Total Workload (Hours)				52
[Total Workload (Hours) / 25*] = ECTS				2

\*25 hour workload is accepted as 1 ECTS



**Learning Outcomes**

1	Understand the definition of bee products.
2	Understand biological specifications of bee products.
3	Understand the production of bee products and production methods.
4	Understand factors affecting the quality of bee products.
5	Understand the problems on process and marketing of bee products.

**Programme Outcomes (Agricultural Biotechnology)**

1	To be able to develop skills in identifying, modeling and solving problems in agricultural biotechnology
2	To be able to synthesize life and engineering sciences for the effective resource planning of agricultural biotechnology applications
3	To be able to interpret about living organisms structure, metabolic and physiological processes in order to propose biotechnological solutions to the agricultural problems
4	To be able to analyze genomic, metabolomic and proteomic information via bioinformatic tools.
5	To have the ability to analyze collected data and interpret the results.
6	To have the ability of individual working ability and to make independent decisions, to work in inter-disciplinary and interdisciplinary teamwork, to communicate by expressing their ideas orally and in writing, clearly and concisely
7	To have the awareness of professional liabilities and ethics
8	To be able to follow current national and international problems

**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	3	3	3	2	3
P2	3	2	3	4	4
P3	4	3	2	2	2
P4	1	1	1	1	1
P5	2	2	2	2	2
P6	2	2	2	3	3
P7	2	2	2	2	3
P8	2	2	2	2	3

