ECOLOGICAL METHODS USED IN ESTIMATION INSECT POPULATIONS

1	Course Title:	ECOLOGICAL METHODS USED IN ESTIMATION INSECT POPULATIONS	
2	Course Code:	BIT5008	
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:		
12	Language:	Turkish	
13	Mode of Delivery:	Face to face	
14	Course Coordinator:	Prof. Dr. ORKUN BARIŞ KOVANCI	
15	Course Lecturers:	Prof.Dr. ORKUN BARIŞ KOVANCI	
16	Contact information of the Course Coordinator:		
17	Website:		
18	Objective of the Course:	The main objective of this course is to introduce basic concepts on insect ecology, the discrepancies between sampled and estimated values and analysis methods. Among other objectives are to explain the importance of the life tables and biological diversty from pest control point of view.	
19	Contribution of the Course to Professional Development:		
20	Learning Outcomes:		
		1	Students will have a solid knowledge of fundamental concepts, controversies in sampled and estimated values, and analysis techniques in population ecology.
		2	To learn how relate the data obtained from insect sampling techniques to insect population growth models.
		3	To have a clearer understanding of the principles and purposes of population models and parameter estimation techniques.
		4	To gain the ability of creating insect life tables and understand the main concepts.
		5	To establish models based on the relationships between the abiotic or biotic factors affecting the insect populations.
		6	Establishing relationship between ecological factors and populations of pests.
		7	Using knowledge about population features of pests in agriculture control.
		8	Creating an article, report and project, and evaluating these.
		9	
		10	
21	Course Content:		
	Course Content:		

Week	Theoretical	Practice
1	Basic terminology of insect population ecology	
2	Insect population ecology	
3	Insect sampling techniques	
4	Environment, Insect distribution and analysis	
5	Biotic and abiotic factors affecting inset populations	
6	Predation, competition and population estimates	
7	Insect conservation biology	
8	Population fluctuations	
9	Methods used in population estimation	
10	Population growth and viability analysis	
11	Metapopulations	
12	The evaluation of insect population dynamics	
13	Insect life tables	
14	Student presentations	

22	Textbooks, References and/or Other Materials:	
23	Assesment	

Activites	Number	Duration (hour)	Total Work Load (hour)
Theoretical	14	3.00	42.00
Practicals/Labs	0	0.00	0.00
Self study and preperation	8	5.00	40.00
Homeworks	1	30.00	30.00
Projects	0	0.00	0.00
Field Studies	6	3.00	18.00
Midterm exams	0	0.00	0.00
Others	0	0.00	0.00
Final Exams	1	50.00	50.00
Total Work Load			180.00
ECTS Credit of the Course			6.00

Quiz 0 0.00
Contribution of Term (Year) Learning Activities to 20.00
Contribution of Final Exam to Success Grade 80.00
Measurement and Evaluation Techniques Used in the
Total work load / 30 h
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	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0
ÖK2	0	2	0	0	0	0	0	5	0	0	0	0	0	0	0	0
ÖK3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK4	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0

ÖK5	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0
ÖK6	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0
ÖK7	5	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0
ÖK8	0	0	0	0	0	0	0	0	5	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**