



## AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Plant Protection							
Course Code		BK210		Course Level		First Cycle (Bachelor's Degree)			
ECTS Credit	4	Workload	100 ( <i>Hours</i> )	Theory	2	Practice	2	Laboratory	0
Objectives of the Course		The aim of this introductory course is to gain basic knowledge about plant diseases, pests and weeds, their damages and management of plant diseases, pests and weeds.							
Course Content		The first seven weeks of this course which related with plant pests covers the following topics: General information to identify the agricultural pests belonging to Nematelminthes, Annelida, Mollusca, Arthropoda (Arachnida, Insecta) phylum's and their biology and damage symptoms, control methods for agricultural pests. The second part includes knowledge on significance of plant pathology, the concept of plant disease, the symptoms of diseases, abiotic diseases, biotic diseases (disease triangle, disease cycle, causal organisms) and plant disease management. In this part information on weeds and their control is also given. The laboratory studies are provided during the course period.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Demonstration, Discussion					
Name of Lecturer(s)		Assoc. Prof. Ümit ÖZYILMAZ, Assoc. Prof. Zahide ÖZDEMİR, Lec. Melis YALÇIN, Lec. Sevdije YORGANCI, Prof. Ayhan YILDIZ, Prof. Cafer TURGUT, Prof. Hüseyin BAŞPINAR, Prof. İbrahim ÇAKMAK, Prof. İbrahim GENÇSOYLU, Prof. Ömer ERİNCİK							

### Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	2	40
Final Examination	1	70

### Recommended or Required Reading

1	Agrios, G.N., 2005. Plant pathology. 5 th edition, Elsevier Academic Press, U.S 948 pp.
2	Döken, M.T., Demirci, E., Zengin, H., 2011. Fitopatoloji. Atatürk Üniversitesi, Ziraat Fak. Ofset Tesisi, Erzurum, 8. Baskı, 258 sayfa.
3	Kansu, A., 1982. Genel Entomoloji. Üçüncü Baskı (Gözden geçirilmiş ve genişletilmiş). Ankara Basım Sanayi A.Ş. 326s.

Week	Weekly Detailed Course Contents	
1	Theoretical	Harmful and beneficial concepts in Plant Protection, General characterization, biology and damage of Nematelminthes Phylum
2	Theoretical	General features, biology and damage of Annelida, Mollusca Phylum
3	Theoretical	General characterization of the Phylum Arthropoda, General features, biology and damage of the subclass Acari
4	Theoretical	General features of the class Insecta, their damages and beneficials
5	Theoretical	Characteristics of the external structure of insects
6	Theoretical	Internal structure and functioning of insects
7	Theoretical	Control measurements used for agricultural pest
8	Theoretical	Control measurements used for agricultural pest
9	Theoretical	Disease concept and symptomatology
10	Theoretical	Abiotic diseases
11	Theoretical	Biotic diseases and disease cycle
12	Theoretical	Plant pathogenic viruses, viroids, bacteria and mollicutes
13	Theoretical	Plant pathogenic fungi
14	Theoretical	Disease management
15	Theoretical	Weeds , parasitic plants and their management
16	Final Exam	Final Exam

### Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	2	28
Lecture - Practice	14	0	2	28



Midterm Examination	1	17	1	18
Final Examination	1	25	1	26
Total Workload (Hours)				100
[Total Workload (Hours) / 25*] = ECTS				4
*25 hour workload is accepted as 1 ECTS				

### Learning Outcomes

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### 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	L6	L7	L8
P1	2	1	1	1	1	1	1	1
P2	2	1	2	2	2	2	2	2
P3	2	1	2	2	2	2	2	2
P4	1	1	1	1	1	1	1	1
P5	2	1	2	2	3	3	3	3
P6	2	1	2	2	3	3	3	3
P7	2	1	2	2	3	3	3	3
P8	2	1	2	2	3	3	3	3

