



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Arthropod Vectors							
Course Code		ZBK601		Course Level		Third Cycle (Doctorate Degree)			
ECTS Credit	7	Workload	180 (<i>Hours</i>)	Theory	3	Practice	0	Laboratory	0
Objectives of the Course		The aim of this course is to explain vector arthropods and to emphasize their importance in plant production							
Course Content		Definition and systematics of vectors, transmission mechanisms of diseases by arthropod vectors, role of mouth parts in transmission of the plant diseases, importance of plant tissues vectors feed on, relationships among plant-vectors and diseases and its importance in terms of disease epidemiology							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Demonstration, Discussion, Case Study, Individual Study					
Name of Lecturer(s)		Prof. Hüseyin BASPINAR							

Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	60

Recommended or Required Reading

1	Carter, W., 1962. Insect in Relation to Plant Disease. Interscience Publishers, New York, 705 pp.
2	Maramorosch, K. And Kaprowski, H., 1967. Methods in Virology. Academic Pres, New York, 570 pp.

Week	Weekly Detailed Course Contents	
1	Theoretical	Introduction and basic information on the transmission of the plant diseases by arthropods
2	Theoretical	Transmission of bacterial and fungal plant diseases by arthropod vectors
3	Theoretical	Transmission of plant virus diseases
4	Theoretical	Type of mouth parts of vectors and its importance in disease transmission
5	Theoretical	Feeding behaviour of vectors and importance of specification of feeding on plant tissues in terms of plant disease epidemiology
6	Theoretical	Vector insects and mode of transmission of the plant diseases (Aphididae)
7	Intermediate Exam	Mid-Term Exam
8	Theoretical	Vector insects and mode of transmission of the plant diseases (Cicadellidae)
9	Theoretical	Vector insects and mode of transmission of the plant diseases (Miridae, Aleyrodidae, Coccoidea, Orthoptera, Coleoptera, Thysanoptera)
10	Theoretical	Vector insects and mode of transmission of the plant diseases (Miridae, Aleyrodidae, Coccoidea, Orthoptera, Coleoptera, Thysanoptera)
11	Theoretical	Vector acari and mode of transmission of the plant diseases (Acarina)
12	Theoretical	Effects of the plant diseases on the vectors
13	Theoretical	Ecological evaluation in the transmission of plant diseases
14	Theoretical	Control methods of vectors and importance in terms of the plant disease transmission
15	Theoretical	General review
16	Final Exam	Final Exam

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	2	2	56
Term Project	14	3	2	70
Midterm Examination	1	25	2	27



Final Examination	1	25	2	27
Total Workload (Hours)				180
[Total Workload (Hours) / 25*] = ECTS				7
*25 hour workload is accepted as 1 ECTS				

Learning Outcomes

1	Importance of vectors in plant protection
2	Basic information in terms of epidemiology of diseases vectored by insects
3	Transmission mechanisms of plant diseases
4	Relationships among plant-vectors and diseases and its importance in epidemiology
5	Importance of vectors in plant disease control

Programme Outcomes (Plant Protection Doctorate)

1	Students improve their knowledge and skill previously gained during first cycle and second cycle programs and become a specialist their own discipline
2	Students gain knowledge and experience for using new techniques and equipments in their own discipline.
3	Students gain ability to plan and conduct scientific projects in their own discipline by using current knowledge and techniques, and to collect and analyze data and make inference on the results .
4	Students gain ability to write scientific articles and prepare them for publications and to make oral or poster presentations in scientific meetings.
5	Students gain ability to review scientific articles and projects relevant to their own discipline.
6	Students gain experiences how to get effective position in national and international projects.
7	Students gain experience for participating in and organizing scientific meetings.

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	2	2	2	2	2
P2	3	3	3	3	3
P3	4	3	3	3	4
P4	4	4	4	3	3
P5	2	2	3	3	3
P6	2	2	2	2	2
P7	2	2	2	2	2

