AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Plant Virus and Viroid Diseases								
Course Code	ZBK530		Couse Level	Second Cycle (Master's Degree)					
ECTS Credit	8	Workload	200 *(Hours)*	Theory	3	Practice	0	Laboratory	0
Objectives of the Course	The purpose of this course is to teach plant virus and viroid disease.								
Course Content	What are differences of virus and viroid. The discovery of viroids and definition of viroid. Natural plant viroid and virus diseases. Nomenclature and classification of viruses and viroids. The groups of plants viruses. The symptoms, host plants, transmission ways, controls, physical and chemical properties of plants viruses and virods are explained.								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Discussion, Case Study								
Name of Lecturer(s)									

Assessment Methods and Criteria		
Method	Quantity	Percentage (%)
Final Examination	1	60
Assignment	1	40

Recommended or Required Reading	
1	Smith K.M.A 1972, Textbook of Plant Virus DiseasesAcademic Pres New York684p
2	Agrios 1998 Plant Pathology Academic Press 563s
3	Diener T.O.1979 Viroids and Viroid Disease 251p
4	Yılmaz M.A,Baloğlu S., Özarslan M,1995 Bitki Virus Hastalıkları Çukurova Üniv. Ders Kitabı No:128 Adana 200s

Week	Weekly Detailed Course Contents	
1	Theoretical	The discovery of viroids
2	Theoretical	Evidence for existence of viroids
3	Theoretical	Bitki viroid :Tomato bunchy top disease, Chrysanthemum chlorotic mottle viroid
4	Theoretical	Natural plant viroid diseases Tomato bunchy top disease, Chrysanthemum chlorotic mottle viroid
5	Theoretical	Potato spindle tuber disease,Citrus exocortis disease, Coconut cadang-cadang disease, Hop stunt disease, cucumber pale fruit
6	Theoretical	Transmission, replication, identification, purification of viroids
7	Intermediate Exam	Midterm
8	Theoretical	Plant virus diseases: Virus disease on citrus
9	Theoretical	Virus disease on grapevine
10	Theoretical	Virus disease on stone fruit crops
11	Theoretical	Virus disease on apple
12	Theoretical	Virus disease on gren plant (vegetable), Virus disease on beans
13	Theoretical	Virus disease on potato , Virus disease on beet and tobacco
14	Theoretical	Virus disease on gramines
15	Final Exam	Final Exam

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	2	2	56
Lecture - Practice	14	3	2	70
Midterm Examination	1	34	1	35
Final Examination	1	38	1	39
			Total Workload (Hours)	200
			[Total Workload (Hours) / 25*] = **ECTS**	8

**25 hour workload is accepted as 1 ECTS*

Learning Outcomes	
1	According to the symptoms of the virus and viroid diseases to learn…
2	Nomenclature and classification of viruses and viroid…
3	Host plants, transmission ways, controls, physical and chemical properties of plants viruses and viroid are explained….
4	
5	

Programme Outcomes *(Plant Protection Master)*	
1	To develop knowledge and abilities that gained during undergraduate education
2	To gain ability to search and pursue current literature
3	To gain ability to plan and write projects that help solving problems in field of study.
4	To gain ability to conduct research, analyze data, evaluate research results scientifically and preapare reports and thesis writing.
5	Students will be able to learn and apply the laboratory test and analysis methods
6	To recognize occupational and ethical responsibility

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	4	4	3
P2	4	3	3	3	4
P3	4	4	4	4	4
P4	3	3	5	4	4
P5	4	3	5	4	4
P6	5	3	4	4	3