



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Plant Parasitic Nematodes							
Course Code		ZBK627		Course Level		Third Cycle (Doctorate Degree)			
ECTS Credit	7	Workload	174 (<i>Hours</i>)	Theory	2	Practice	2	Laboratory	0
Objectives of the Course		To learn plant parasitic nematodes and have knowledge about their control.							
Course Content		Morphological, anatomical, biological characteristics and natural enemies of plant parasitic nematodes in agricultural areas, relationships between nematodes and soil microorganisms, control methods, studies of nematodes and important plant parasitic nematodes.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Demonstration, Discussion, Individual Study					
Name of Lecturer(s)									

Assessment Methods and Criteria

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

Recommended or Required Reading

1	Shurtleff, M. C. and Averre, C. W., 2000. Diagnosing Plant Diseases Caused by Nematodes. APS Press, 189 pp.
2	Aytan-Ediz, S., 1978. Bitki Paraziti Nematodlar. T.C. Gıda-Tarım ve Hayvancılık Bakanlığı, Zirai Mücadele ve Zirai Karantina Müdürlüğü. Mesleki Eserler Serisi. No: 37, 143 s.

Week	Weekly Detailed Course Contents	
1	Theoretical	General information and systematics of nematodes
2	Theoretical	Morphology and anatomy of nematodes
	Laboratory	Observation on slides
3	Theoretical	Biological features of nematodes
	Practice	Field works
4	Theoretical	Natural enemies of nematodes
	Laboratory	Observation on slides
5	Practice	Field works
6	Theoretical	Control methods of plant parasitic nematodes
	Practice	Investigation on solarization in fields
7	Theoretical	Sampling and analysis methods in nematodes studies
	Practice	Sampling from field
	Laboratory	Analyses studies
8	Intermediate Exam	Midterm Exam
9	Theoretical	Preparation technics in nematodes studies
	Laboratory	Preparation studies of nematodes collected from nature
10	Theoretical	Plant parasitic nematodes of Meloidogyne, Heterodera and Pratylenchus genera
	Laboratory	Observation on slides
11	Theoretical	Plant parasitic nematodes of Helicotylenchus, Aphelenchus and Tylenchulus genera
	Laboratory	Observation on slides
12	Theoretical	Plant parasitic nematodes of Ditylenchus and Anguina genera
	Laboratory	Observation on slides
13	Theoretical	Plant parasitic nematodes of Hemicyclophora, Tylenchorynchus and Dolichodorus genera
	Laboratory	Observation on slides
14	Theoretical	Plant parasitic nematodes of Belonolaimus, Rodopholus and Xyphinema genera
	Laboratory	Observation on slides
15	Theoretical	Plant parasitic nematodes of Longidorus and Trichodorus genera
	Laboratory	Observation on slides



16	Final Exam	Final Exam
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Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	1	2	42
Lecture - Practice	10	1	2	30
Assignment	10	4	1	50
Land Work	4	1	5	24
Reading	10	0	1	10
Midterm Examination	1	8	1	9
Final Examination	1	8	1	9
Total Workload (Hours)				174
[Total Workload (Hours) / 25*] = ECTS				7
*25 hour workload is accepted as 1 ECTS				

Learning Outcomes	
1	To learn morphological, anatomical and biological characteristics of nematodes
2	To learn natural enemies of plant parasitic nematodes
3	To understand relationships between plant parasitic nematodes and soil microorganisms
4	To learn control methods of plant parasitic nematodes
5	To learn preparation and analyses technics of plant parasitic nematodes
6	To have knowledge about important plant parasitic nematode species

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	L6
P1	5	5	5	5	5	5
P2	4	4	3	4	5	3
P3	3	3	3	3	4	4
P4	5	5	5	5	5	5
P5	4	4	4	4	4	3
P6	5	5	4	5	4	4
P7	4	4	4	4	4	4

