



AYDIN ADNAN MENDERES UNIVERSITY
KOÇARLI VOCATIONAL SCHOOL
MECHANICAL AND METAL TECHNOLOGY
AGRICULTURAL MACHINERY
COURSE INFORMATION FORM

Course Title	Principles of Plant Protection								
Course Code	TAM235			Course Level		Short Cycle (Associate's Degree)			
ECTS Credit	2	Workload	50 (Hours)	Theory	1	Practice	2	Laboratory	0
Objectives of the Course	Insects, animal pests, weeds and diseases of plants cause over considerable losses. Therefore, it is aimed to describe the general features of these creatures, and to determine methods of control.								
Course Content	Insects, nematodes, mites, general characteristics, life styles, development, reproduction and relationships with the environment, pest management, the importance of plant diseases, disease agents, the formation of plant diseases and their symptoms, weeds damage, Control methods of plant pathogens and weeds.								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Demonstration								
Name of Lecturer(s)									

Assessment Methods and Criteria

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

Recommended or Required Reading

1	Kansu, A., 1994. Genel Entomoloji. Altıncı Baskı. Kıvanç Basımevi ANKARA, 426s..
2	Demirsoy, A., 1992. Yaşamın Temel Kuralları/ Entomoloji. Meteksan A.Ş. ANKARA, 941s.
3	Öncüler, C., 1987. Genel Entomoloji. Öğrenci Ders Notu, VAN.
4	Öncüler, C., Durmuşoğlu E., 2008. Tarımsal Zararlılarla Savaş Yöntemleri ve İlaçları. Genişletilmiş 6. baskı. A.D.Ü. yayınları, no: 28. 472 s.
5	Agrios, G. N., 1997. Plant Pathology. Fourth Edition. Academic Press. San Diego. USA. 635 p.
6	Döken, M.T., E.Demirci ve H.Zengin, 2005. Fitopatoloji. Atatürk Üniversitesi, Ziraat Fakültesi No:314, ERZURUM 227 s.
7	Çınar, A., 1988. Genel Fitopatoloji. Çukurova Üniversitesi. Ziraat Fakültesi No: 68, ADANA.
8	Bora, T., Özaktan, H., 1998. Bitki Hastalıklarıyla Biyolojik Savaş. Ege Üniversitesi Ziraat Fakültesi , İZMİR, 205s.

Week	Weekly Detailed Course Contents	
1	Theoretical	General description of plant protection General features of plant pests and animal organisms, their biology, damage types
	Practice	Forms of damage on the recognition of animal organisms on plants
	Preparation Work	Preparation of materials about the topic
2	Theoretical	General characterization, biology and damage of Nematoda Phylum General characterization, biology and damage of Acarina subclasses
	Practice	Examination of nematodes and mites damage on plants
	Preparation Work	Preparation of materials about the topic
3	Theoretical	Systematic of the insects
	Practice	Examination of insects
	Preparation Work	Preparation of materials about the topic
4	Theoretical	General characterization, biology, damage and benefit of Insecta classes
	Practice	Examination of insects
	Preparation Work	Preparation of materials about the topic
5	Theoretical	Morphology of insects, Head, thorax, abdomen and their extremities of insects
	Practice	Examination of insects
	Preparation Work	Preparation of materials about the topic
6	Theoretical	Reproduction and development of insects
	Practice	Examination of insects
	Preparation Work	Preparation of materials about the topic
7	Theoretical	Control methods of pest



7	Practice	Show the methods of control
	Preparation Work	Preparation of materials about the topic
8	Intermediate Exam	Midterm Exam
9	Theoretical	Causes of plant diseases Abiotic plant diseases factors
	Practice	Examination of the plants in the field
	Preparation Work	Preparation of materials about the topic
10	Theoretical	Causes of plant diseases Biotic plant diseases factors
	Practice	Inspection on plants
	Preparation Work	Preparation of materials about the topic
11	Theoretical	Formation and the definition of plant diseases
	Practice	Review of the development of the disease on the plants
	Preparation Work	Preparation of materials about the topic
12	Theoretical	Development of disease
	Practice	Review of the development of the disease on the plants
	Preparation Work	Preparation of materials about the topic
13	Theoretical	Disease symptoms, Control methods of diseases
	Practice	Show the methods of control
	Preparation Work	Preparation of materials about the topic
14	Theoretical	Determination of weeds, production losses caused by weeds
	Practice	Examination of the weeds in the field
	Preparation Work	Preparation of materials about the topic
15	Theoretical	Methods of Weed Control
	Practice	Show the methods of control
	Preparation Work	Preparation of materials about the topic
16	Final Exam	Final Exam

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	1	14
Lecture - Practice	12	0	2	24
Midterm Examination	1	4	1	5
Final Examination	1	6	1	7
Total Workload (Hours)				50
[Total Workload (Hours) / 25*] = ECTS				2

*25 hour workload is accepted as 1 ECTS

Learning Outcomes

1	To be able to determine the harmful and beneficial concepts in Plant protection
2	To be able to recognize the animal pests which are belong to Nematoda, Annelida, Mollusca, Arthropoda (Arachnida, Insecta), Chordata Phylum's
3	To be able to obtain the concept of disease in plants, to gain information on which factors cause diseases and problems created by weeds in plants
4	To be able to obtain the main concept of pests, disease and weed control methods

Programme Outcomes (Agricultural Machinery)

1	To be able to comprehend social, cultural and societal responsibility and keep up with national and international up contemporary issues and developments.
2	To be able to be bounded to the Atatürk nationalism, adopted to the national, ethic, spiritual and cultural value of the Turkish Nation, opened to the universal and modern development, adopted the richness, deep seated and productive properties of the Turkish language, having language sympathy and awareness, having reading pleasure and habit and having sufficient foreign language for their vocational necessities, In the directions of the Atatürk Principles and Revolutions,
3	To be able to recognize the basic computer hardware and operating systems , knowledge of internet usage being able to prepare documents, electronic tables and presentation by using office programs.
4	To be able to be aware of ethic responsibility and vocational profession and to have consciousness of a lifelong learning concept
5	To be able to know current vocational issues and to have skill to define and interpret them.



6	To be able to be aware of the universal and social dimensional effects in engineering solutions, and to be able to have knowledge about entrepreneurship and newfangledness.
7	To recognize the materials which used for preparation of agricultural machinery and have skill for the choosing the appropriate material.
8	To be able to acquire the skill of using the necessary tools and equipments which are used in the production and maintenance of agricultural machinery.
9	To be able to prepare the agricultural tools and machineries, to determine the breakdowns and to do periodic maintenance and repairs.
10	To be able to comprehend the picture of the agricultural tools and machinery and their fabrication, and have the skill to draw them via computer.
11	To be able to assemble and to combine machinery pieces by using demountable and nondetachable junction methods.
12	To be able to have the skill of resistance calculations of the agricultural tool and machinery on computer.
13	To be able to test and control the suitability of new machines and mechanic equipment to the definite standards and technical properties.
14	To be able to have general knowledge of agricultural production.
15	To be able to have knowledge of basic sciences.

Contribution of Learning Outcomes to Programme Outcomes 1:Very Low, 2:Low, 3:Medium, 4:High, 5:Very High

	L1	L2	L3	L4
P1	3	1	1	3
P2	2	2	2	2
P3	2	3	3	3
P4	3	2	2	4
P5	3	3	3	5
P6				1
P7				1
P8				1
P14	5	5	5	5
P15				1

