



## AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Organic Fertilizers and Fertilization							
Course Code		OT114		Couse Level		Short Cycle (Associate's Degree)			
ECTS Credit	4	Workload	73 (Hours)	Theory	2	Practice	1	Laboratory	0
Objectives of the Course		This course aims to students, to understand the importance of teaching herbal plant nutrition and fertilization, plant nutrients, information related to the recognition of fertilizer and manure is to see in practice							
Course Content		Presentation of the required elements in plant nutrition, the importance of each plant nutrients, signs of deficiency and excess, organic fertilizers, fertilizing methods							
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	70

### Recommended or Required Reading

1	Kacar, B., Katkat, V., 2006. Bitki besleme. Uludağ Üniv. Yayın No: (Nobel) 849
2	Kacar, B., Katkat, V., 1999. Gübreler ve gübreleme tekniği. Uludağ Üniv. Yayın No: 144.

Week	Weekly Detailed Course Contents	
1	Theoretical	Course presentation, content, importance, rules and requirements.
	Practice	Promotion of organic fertilizer
2	Theoretical	Needed element in plant nutrition
	Practice	Fertilization planning application
3	Theoretical	The importance of nitrogen deficiency and excess symptoms, introduction and information regarding the use of nitrogenous fertilizers
	Practice	In the field, the preparation of the application parcel
4	Theoretical	The importance of phosphorus, excess and deficiency symptoms, introduction and information regarding the use of phosphorus fertilizer
	Practice	Cultivation of ending the parcel, fertilizer application
5	Theoretical	The importance of potassium deficiency and excess symptoms, potassium information about the introduction and use of fertilizers
	Practice	Some organic fertilizers manure as visual recognition
6	Theoretical	The importance of calcium deficiency and excess symptoms, information on the introduction and use of calcium fertilizer
	Practice	Some green manure crops for land monitoring
7	Theoretical	The importance of magnesium deficiency and excess symptoms, magnesium information about the promotion and use of fertilizer
	Practice	Nodule formation observed in leguminous plants
8	Intermediate Exam	Midterm exam
9	Theoretical	The importance of sulfur deficiency and excess symptoms, information on the introduction and use of sulfur fertilizer
	Practice	Application maintenance and observation plots
10	Theoretical	The introduction of manure, the importance of information on the use
	Practice	Application maintenance and observation plots
11	Theoretical	The introduction of green manure, the importance of information on the use
	Practice	Uygulama parselleri bakımı ve gözlemleri
12	Theoretical	Fertilization methods
	Practice	Application parcels harvest
13	Theoretical	Foliar fertilization



13	Practice	Parcel prepare monitoring reports
14	Theoretical	The importance of microelements, deficiency and oversupply problems and fertilizers
	Practice	The importance of microelements, deficiency and oversupply problems and fertilizers
15	Theoretical	Human health and the environment interaction Fertilization
	Practice	Human health and the environment interaction Fertilization
16	Final Exam	FINAL EXAM

### Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	2	28
Lecture - Practice	14	0	1	14
Land Work	7	2	1	21
Midterm Examination	1	4	1	5
Final Examination	1	4	1	5
Total Workload (Hours)				73
[Total Workload (Hours) / 25*] = <b>ECTS</b>				3

\*25 hour workload is accepted as 1 ECTS

### Learning Outcomes

1	Vegetative growth that may arise from the lack of nutrients, yield and quality problems are diagnosed visually
2	In crop production, takes care of the environment and human health
3	Notice the fertilizer-soil interaction
4	Macro and micro plant nutrients, and knows the methods of removing deficiencies
5	Knows and performs soil breeding and soil-plant-water relations

### Programme Outcomes (Organic Agriculture)

1	To have university life, to use computer technology and to have skills for raising of scientific data
2	To produce according to organic agriculture rules
3	To know and apply starter to organic agriculture, and to get product certification
4	To know genetic for organic vegetable and animal species
5	To know and apply organic production principle and regulations and protection of environment
6	Understand and apply production techniques for organic vegetable and animal
7	To understand control methods for diseases and pests in organic agriculture
8	Having knowledge of quality control, preserving and marketing of organic products
9	To having knowledge equipments and methods for new agricultural technologies
10	To have knowledge of professional ethics and responsibility
11	Ability to work in team and individual
12	To communicate orally and in writing
13	To have adopt life-long learning importance and to have follow professional developments

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

	L1	L2	L3	L5
P3	3	2		1
P4	3	3		
P5	2	3	2	
P6	2			
P7	2		4	3
P8				3

