



**AYDIN ADNAN MENDERES UNIVERSITY**  
**GRADUATE SCHOOL OF NATURAL AND APPLIED SCIENCES**  
**FIELD CROPS**  
**FIELD CROPS**  
**FIELD CROPS MASTER**  
**COURSE INFORMATION FORM**

Course Title	Organic Fertilizers And Techniques Of Land Application								
Course Code	ZTO511	Course Level		Second Cycle (Master's Degree)					
ECTS Credit	7	Workload	175 (Hours)	Theory	3	Practice	0	Laboratory	0
Objectives of the Course	Animal and plant originated organic materials. Decomposition methods (of there materials) and values as organic manures. Using of natural organic deposit in agriculture (torf and moss). Principles of ecologic agriculture.								
Course Content	Inform the students about the use of various liquid and solid waste as a soil conditioner.								
Work Placement									
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Experiment, Discussion, Case Study, Individual Study, Problem Solving								
Name of Lecturer(s)									

#### Assessment Methods and Criteria

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

#### Recommended or Required Reading

1	Kacar,B.1982. Gübreler ve Gübreleme Tekniği. Gübre Fabrikaları T.A.Ş Yayınları No:1 Ankara.
2	Kacar,B. Ve Katkat,A.V.,1999. Gübreler Ve Gübreleme Tekniği.VİPAŞ A.Ş Bursa.
3	Aydeniz, A., 1992. Gübreler ve Gübreleme
4	Web Sites

Week	Weekly Detailed Course Contents	
1	Theoretical	Fundamentals of organic fertilization
2	Theoretical	Manure fertilizer
3	Theoretical	Farmyard manure
4	Theoretical	Poultry manure
5	Theoretical	Green manuring
6	Theoretical	Compost and Other organic residues
7	Theoretical	Effects of organic fertilizer on physical of soil properties
8	Intermediate Exam	Midterm Exam
9	Theoretical	Effects of organic fertilizer on organic matter contents of soil
10	Theoretical	Effects of organic fertilizer on chemical soil properties
11	Theoretical	Nitrogen, Phosphorus vs. contents of soil
12	Theoretical	Effects of organic fertilizer on Heavy material of contents
13	Theoretical	Economic and social dimensions of organic material using
14	Theoretical	Tea factory waste
15	Theoretical	Presentations of Homework
16	Final Exam	FİNAL EXAM

#### Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	2	28
Lecture - Practice	14	0	2	28
Assignment	1	0	40	40
Term Project	1	0	35	35
Midterm Examination	1	0	14	14



Final Examination	1	0	30	30
			Total Workload (Hours)	175
			[Total Workload (Hours) / 25*] = ECTS	7
*25 hour workload is accepted as 1 ECTS				

### Learning Outcomes

1	To be able to comprehend the municipal and industrial liquid and solid wastes
2	To be able to comprehend the physical, chemical, productivity and morphological properties of wastes
3	To be able to explain which features of soil can be improved and how it can be improved
4	To be able to explain how to use any kind of household and industrial waste to improve soil conditions
5	To be able to apply these materials necessary dose in territories to improve land and soil conditions

### Programme Outcomes (Field Crops Master)

1	To be able to improve and deepen the level of expertise in field crops on the basis of the departments licenses qualifications.
2	To be able to recognize the subjects related to field crops, to be able to solve these and make interpretation.
3	To be able to have the skills of acting independently, to have power to decide and to create.
4	To be able to work in teams between departments
5	To be able to give briefing about latest information of Field Crops in written, oral and visual ways.
6	To be able to take responsibility for developing the new approaches and to formulate a solution facing unforeseen complex situations of applications,
7	To be able to defend the original opinions in both Turkish and in foreign languages by using these languages and communicating effectively.
8	To be able to contribute to science by producing knowledge for the aim of improving quality, efficiency and sustainability
9	To be able to apply breeding methods in order to improve new varieties for Field Crops.
10	To be able to maintain and select the appropriate statistical methods within the framework of the study, evaluation of scientific ethics; to convert the results into a report/dissertation and to offer them by producing scientific publications.

### 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	4	4	4	4	4
P2	4	4	4	4	4
P3	4	4	4	4	4
P4	4	4	4	4	4
P5	4	4	4	4	4
P6	4	4	4	4	4
P7	4	4	4	4	4
P8	4	4	4	4	4
P9	4	4	4	4	4
P10	4	4	4	4	4

