



## AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Basin Management							
Course Code		ZTO604		Course Level		Third Cycle (Doctorate Degree)			
ECTS Credit	8	Workload	202 (Hours)	Theory	3	Practice	0	Laboratory	0
Objectives of the Course		Soils of Turkey, soil and land management at the basin level, to inform students about sustainable agriculture in terms of agricultural production.							
Course Content		The territory of Turkey in terms of land management, land management issues related to the drought, water economy and soil conservation, watershed units and elements, watershed planning and management, water resources planning, soil compaction, soil exhaustion, land management of salty soils, soil tillage, land consolidation, wrong agricultural practices and their negative impact on land, sustainable and ecological agriculture.							
Work Placement									
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Discussion, 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	Taysun, A., 1989. Toprak ve Su Korunumu. E. Ü. Zir. Fak. Yay. No: 92-III.
2	Çanga, M. R., 1996. Toprak ve Su Koruma. A. Ü. Zir. Fak. Yayınları No:1386 Ders Kitabı No:400, Ankara.
3	Newson, M. (1997) Land, Water and Development: Sustainable Management of River Basin Systems. London,Routledge, UK.

Week	Weekly Detailed Course Contents	
1	Theoretical	General information on basin management, yield-moisture and yield-plant nutrient relations
	Preparation Work	Literature review
2	Theoretical	Overview of the territory of Turkey as element of land management
	Preparation Work	Literature review
3	Theoretical	Soil mellowness; soil mellowness in soil consistency, soil physical situation in terms of soil mellowness, soil mellowness measurements.
	Preparation Work	Literature review
4	Theoretical	Soil tillage; the aims of soil tillage
	Preparation Work	Literature review
5	Theoretical	Seed bed preparation; ideal qualities of a seed bed, cultivation for the seed bed preparation
	Preparation Work	Literature review
6	Theoretical	Cultivation; the aims of cultivation
	Preparation Work	Literature review
7	Theoretical	The compaction problem in tillage
	Preparation Work	Literature review
8	Intermediate Exam	Midterm exam
9	Theoretical	Soil tillage tools
	Preparation Work	Literature review
10	Theoretical	Semi-arid soil management in our regions and the water conservation and crop production
	Preparation Work	Literature review
11	Theoretical	Soil exhaustion
	Preparation Work	Literature review
12	Theoretical	Sustainable agriculture
	Preparation Work	Literature review
13	Theoretical	Sustainable land management
	Preparation Work	Literature review



14	Theoretical	The benefits of irrigation development and implementation of land consolidation projects
	Preparation Work	Literature review
15	Theoretical	Problematic soils in terms of agricultural production, saline and alkaline soil management
	Preparation Work	Literature review
16	Final Exam	Final exam

**Workload Calculation**

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	3	42
Assignment	2	0	20	40
Reading	6	0	10	60
Midterm Examination	1	0	25	25
Final Examination	1	0	35	35
Total Workload (Hours)				202
[Total Workload (Hours) / 25*] = <b>ECTS</b>				8
*25 hour workload is accepted as 1 ECTS				

**Learning Outcomes**

1	Information about soils of Turkey
2	Methods of soil conservation practices and planning
3	The most appropriate ways to apply the cultivation techniques
4	Practicing sustainable agriculture techniques in the field
5	Searching literature about subject

**Programme Outcomes (Soil Doctorate)**

1	To be able to apply the theoretical information achieved during the graduate study
2	To be able to collect data by scientific means, to evaluate and interpret
3	To be able to update himself continuously
4	To be able to assess the convenient analytical methods during the process of the scientific study
5	To be able to put forth solutions to soil use and plant development

**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	3	3	4	5	5
P3	3	3	4	4	4
P4	2	3	5	5	5
P5	3	3	4	4	4

