



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Mechanization Practices For Soil-Water Conservation							
Course Code		ZTM618		Course Level		Third Cycle (Doctorate Degree)			
ECTS Credit	7	Workload	180 (<i>Hours</i>)	Theory	3	Practice	0	Laboratory	0
Objectives of the Course		The aim of the course is to inform students about soil tillage farming methods and structural properties of the appropriate combination of machine tool, work quality and operational characteristics of this instrument and the equipment designs, these designs comparative study of the technical and economic aspects, soil and water as a protection for the native form of structural change in manufacturing and the analysis.							
Course Content		Minimum tillage, conventional tillage and general information about the method, stripped, precise method of tillage, ridge planting method, mulching technique, method of mulch tillage, direct drilling technique used in the methods kombinasyonlarının yapısal and functional properties of the machine tool, process steps, technical, temporal and economic evaluation							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Discussion, 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	MWPS, 2000. Conservation Tillage Systems and Management. Iowa State University, ISBN:0-089373-088-2
2	Toprak Amenajmanı. Yeşilsoy, Ş., 1995. Ç.Ü Ziraat Fakültesi Yayınları No:18, ADANA

Week	Weekly Detailed Course Contents	
1	Theoretical	Introduction (Course disposition, general definitions)
	Preparation Work	Research
2	Theoretical	General information about the method of Minimum tillage an conventional tillage
	Preparation Work	Research
3	Theoretical	Stripped tillage method and product-based process chains
	Preparation Work	Research
4	Theoretical	Precision tillage method and product-based process chains
	Preparation Work	Research
5	Theoretical	Ridge planting method and procedure based on the product chains
	Preparation Work	Research
6	Theoretical	Tillage method and product-based processing chains during planting
	Preparation Work	Research
7	Theoretical	Tillage method and product-based processing chains during planting
	Preparation Work	Research
8	Intermediate Exam	Midterm exam
9	Theoretical	Vertical mulching technique
	Preparation Work	Research
10	Theoretical	Mulch tillage method and product-based process chains
	Preparation Work	Research
11	Theoretical	Direct seeding technique and product-based process chains
	Preparation Work	Research
12	Theoretical	Structural features of the machine-equipment combinations used in the methods
	Preparation Work	Research
13	Theoretical	Functional features of the machine-equipment combinations used in the methods
	Preparation Work	Research



14	Theoretical	Technical and temporal evaluation of the methods and the process steps
	Preparation Work	Research
15	Theoretical	Economical evaluation of the methods and the process steps
	Preparation Work	Research
16	Final Exam	Final exam

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	2	2	56
Lecture - Practice	14	0	2	28
Assignment	14	0	3	42
Term Project	1	0	30	30
Midterm Examination	1	10	2	12
Final Examination	1	10	2	12
Total Workload (Hours)				180
[Total Workload (Hours) / 25*] = ECTS				7

*25 hour workload is accepted as 1 ECTS

Learning Outcomes

1	Tillage and no-till farming methods to select the appropriate instrument-machine
2	The ability to analyze the quality and operational characteristics of the equipment business
3	The selection of equipment to analyze the technical and economic
4	To understand the technical details concerning the equipment for the protection of soil and water
5	To understand the technical details concerning the equipment for the protection of soil and water

Programme Outcomes (Agricultural Machinery Doctorate)

1	Identification, formulation and solving the problems in the field of Agricultural Machinery
2	The ability to use modern engineering tools and techniques
3	The ability to use the information, which is obtained by following the scientific and technological developments, in the academic life and practice.
4	The ability to evaluate multi-faced relationship between them by understanding interaction among agricultural technology, soil, plants and animals
5	Professionalism and ethical responsibility
6	The ability to work in disciplinary and multi-disciplinary teams
7	The ability to communicate effectively
8	The ability to do research for accessing information and to use data base and other resources
9	The ability to do analyze and interpret the experimental results and the design of experiment
10	The ability to identify and interpret knowledge of current professional issues and events
11	The ability to get aware the universal and social effects of engineering solutions and applications
12	Accordance with the requirements of science and technology, ability to use scientific knowledge creative

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

	L1	L2	L3	L4
P1	5	5	5	5
P2	5	5	5	5
P3	5	5	5	5
P4	5	5	5	5
P5	4	4	4	4
P6	3	3	3	3
P8	4	4	4	4
P9	5	5	5	5
P10	5	5	5	5
P11	5	5	5	5
P12	5	5	5	5

