



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		The Mechanisation Application of Irrigation Farming							
Course Code		ZTM522		Couse Level		Second Cycle (Master's Degree)			
ECTS Credit	8	Workload	200 (<i>Hours</i>)	Theory	3	Practice	0	Laboratory	0
Objectives of the Course		The importance of the mechanization in irrigated agriculture and manufacturing techniques as compare.							
Course Content		Mechanization system definitions, tool-machine process definitions, methods of soil tillage, planting methods, harvesting operations, and special mechanization applications							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation)					
Name of Lecturer(s)		Prof. İbrahim YALÇIN							

Assessment Methods and Criteria

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

Recommended or Required Reading

1	Ekim, Bakım, Gübreleme Makinaları. 1995. Önal, İ., E.Ü. Ziraat Fak. Yayınları, 490, Bornova-İZMİR.
2	Değişik Toprak İşleme ve Pamuk Ekim Tekniklerini Aydın Yöresi Koşullarına Uygulama Olanakları. 1999. Yalçın, İ., Doktora Tezi, Bornova-İZMİR.

Week	Weekly Detailed Course Contents	
1	Theoretical	Induroduction (Irrigated agriculture, mechanization, Tool-machine, process, system, definitions)
2	Theoretical	Before tillage and seed bed preparation procedures, Conventional tillage method
3	Theoretical	Planting on wheel track, Stripped tillage method, vertical mulching technique
4	Theoretical	Ridge planting method, precision tillage method
5	Theoretical	Planting techniques
6	Theoretical	Non-Tillage technique
7	Intermediate Exam	Midterm exam
8	Theoretical	Cultural practices, harvest and post-harvest operations
9	Theoretical	Mechanization of cotton farming practices
10	Theoretical	Mechanization of cotton farming practices
11	Theoretical	I. Product corn mechanization of farming practices
12	Theoretical	II. Product corn mechanization of farming practices
13	Theoretical	Sunflower farming mechanization applications
14	Theoretical	Comparison of mechanization practices
15	Theoretical	Comparison of mechanization practices
16	Final Exam	Final exam

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	2	2	56
Lecture - Practice	14	2	2	56
Assignment	2	20	20	80
Midterm Examination	1	2	2	4
Final Examination	1	2	2	4
Total Workload (Hours)				200
[Total Workload (Hours) / 25*] = ECTS				8

*25 hour workload is accepted as 1 ECTS



Learning Outcomes

1	Understanding of irrigated agriculture mechanization.
2	Knowledge of soil tillage methods
3	Learning of planting methods.
4	Knowledge of cultural practices and harvesting operations.
5	To be informed about special mechanization applications

Programme Outcomes (Agricultural Machinery Master)

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	4	4	4	4
P2	4	4	4	4
P3	4	4	4	4
P4	4	4	4	4
P5	4	4	4	4
P6	4	4	4	4
P7	4	4	4	4
P8	4	4	4	4
P9	4	4	4	4
P10	4	4	4	4
P11	4	4	4	4
P12	4	4	4	4

