



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Agricultural Mechanization							
Course Code		BSM213		Course Level		First Cycle (Bachelor's Degree)			
ECTS Credit	4	Workload	100 (<i>Hours</i>)	Theory	2	Practice	2	Laboratory	0
Objectives of the Course		The aim of this course, learning the agricultural mechanization system, general features of agricultural equipment and machinery for agricultural production, agricultural tractors and energy resources in agriculture.							
Course Content		Definition of Agricultural Mechanization, Historical Development, Advantages; Agricultural Mechanization in Turkey (Agricultural Structure, Historical Development and Level, Important Factors to Delay of Development); Mechanization System on Agricultural Production, Energy Resources in Agriculture, Farm Tractors (General Feature), Agricultural Equipment and Machinery; Soil Tillage Equipment and Machinery, Fertilizer Distribution Machinery, Sowing and Planting Machinery, Irrigation Mechanization, Crop Protection Machinery, Harvesting and Threshing Machinery.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation)					
Name of Lecturer(s)		Lec. Nurettin TOPUZ, Lec. Yüksel AYDOĞAN, Prof. Cengiz ÖZARSLAN, Prof. İbrahim YALÇIN, Prof. Türker SARAÇOĞLU							

Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	70

Recommended or Required Reading

1	* Mutaf,E., 1984. Tarım Alet ve Makinaları. E.Ü.Z.F. Yayın No: 218, Bornova-İzmir. * Mutaf,E., R.Uçucu, 1980. Tarımsal Mekanizasyon. E.Ü.Z.F. Ders teksiiri, Bornova-İzmir.
2	Keçecioğlu,G., E.Gülsoylu, 2002. Toprak İşleme Makinaları. E.Ü.Z.F. Yayın No: 545, Bornova-İzmir. * Önal,İ., 1995. Ekim, Bakım, Gübreleme Makinaları. E.Ü.Z.F. Yayın No: 490, Bornova-İzmir.
3	ozan, M.; 1997. Tarımsal Mekanizasyon, E.Ü.Z.F. Yayın No: 46/1, Bornova-İzmir, 84 s. * Yağcıoğlu,K., 1993. Bitki Koruma Makinaları. E.Ü.Z.F. Yayın No: 508, Bornova-İzmir

Week	Weekly Detailed Course Contents	
1	Theoretical	Definition of agricultural mechanization, historical development, advantages
2	Theoretical	Agricultural mechanization in turkey (agricultural structure, historical development and level, important factors to delay of development)
3	Theoretical	Mechanization system on agricultural production, energy resources in agriculture Farm tractors (technical feature)
4	Theoretical	Farm tractors (working feature)
5	Theoretical	Soil tillage equipment and machinery (ploughing technics, ploughs, subsoiler)
6	Theoretical	Soil tillage equipment and machinery (cultivator, harrow, roller, rotovator)
7	Intermediate Exam	midterm exam
8	Theoretical	Fertilizer distribution machinery (organic, mineral)
9	Theoretical	Sowing machinery
10	Theoretical	Precision and special sowing, and planting machinery
11	Theoretical	Irrigation mechanization
12	Theoretical	Crop protection machinery
13	Theoretical	Harvesting and threshing machinery (forage harvesting machinery)
14	Final Exam	final exam

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	3	3	84
Midterm Examination	1	0	8	8



Final Examination	1	0	8	8
Total Workload (Hours)				100
[Total Workload (Hours) / 25*] = ECTS				4
*25 hour workload is accepted as 1 ECTS				

Learning Outcomes

1	Understanding the information of the definition of agricultural mechanization, its historical development, benefits, level of agricultural mechanization in Turkey.
2	Understanding agricultural mechanization system.
3	Understanding of the energy resources in agriculture and its use.
4	Soil tillage equipment and machinery (cultivator, harrow, roller, rotovator)
5	Precision and special sowing, and planting machinery

Programme Outcomes (Horticulture)

1	Ability to examine agricultural problems under the light of basic science, mathematics, and agriculture knowledge
2	Ability to plan and apply in different agricultural systems in horticultural crop plants
3	To constitute and realize breeding programmes according to market demands
4	Ability to propagate any kinds of stock materials in horticultural crop plants
5	Ability of transfer of modern technologies to production
6	Ability to have a consciousness of quality in production, storage, and evaluation in horticultural crop plants (To measure, evaluate, and manage different quality parameters)
7	To think analytically of protecting, providing transfer to future, and having responsibility to environment of all plant materials belong to horticultural crop plants area
8	Ability to search, think analytically, reach to knowledge, and obtain solution for solving of agricultural problems (Project, homework, thesis, summer training)
9	Ability to be aware of agricultural problems, to follow them, and to communicate own ideas of these subjects by verbal and written ways (Turkish, social course)
10	To be able to perform in a teamwork
11	Ability to work independently, give decision, and Express own thoughts by occupational-ethic values verbal and written ways in horticultural crop plants
12	Ability to think creatively, innovatively, and analytically, to comprehend the need of lifelong learning, be a part of a related subjects in a web of communication, and to develop by social means

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	5	5	5	5	5
P2	5	5	5	5	5
P5	5	5	5	5	5

