



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Agricultural Mechanization							
Course Code		TAB106		Course Level		Short Cycle (Associate's Degree)			
ECTS Credit	3	Workload	75 (Hours)	Theory	2	Practice	1	Laboratory	0
Objectives of the Course		Development of mechanization in agriculture, energy and agriculture; engines, tractors, tillage equipment and machines, sowing, planting, fertilizing and maintenance machinery, irrigation equipment, agricultural machines of war, harvest-threshing machines, agricultural machinery management issues to inform students.							
Course Content		Concepts related to agricultural mechanization, energy sources in agriculture, thermal engines, farm tractors, tillage machines, sowing machines, fertilizing machines, plant protection machinery							
Work Placement		Students have to complete their internship and properties within the required thirty work days time. The required rules are describes at the Adnan Menderes University, Sultanhisar Vocational School, Student Internship Instructions.							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Discussion, Individual Study, Problem Solving					
Name of Lecturer(s)		Ins. Muammer ERDEN							

Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Final Examination	1	100

Recommended or Required Reading

1	Lecturers Lesson Notes
2	KESKİN, R. ve D. ERDOĞAN, 1984. Tarımsal Mekanizasyon. Ankara Üniversitesi, Ziraat Fakültesi Yayınları: 927, Yardımcı Ders Kitabı: 262, 325 s., Ankara.
3	Textbook, articles and so on. all such literatures related with lesson.

Week	Weekly Detailed Course Contents	
1	Theoretical	Course Description, Situation of Turkey's Agriculture and Mechanization, mechanization Benefits
2	Theoretical	Energy, Internal Combustion Engines
3	Theoretical	Internal Combustion Engines
4	Theoretical	Tractors
5	Theoretical	Soil Tillage Tools - Machines (The Importance of Tillage, mouldboard Plows)
6	Theoretical	Soil Tillage Tools - Machines (Disc Ploughs, Harrows, Cultivator)
7	Theoretical	Soil Tillage Tools - Machines (Rollers, Harrows, Soil Mill)
8	Theoretical	Soil Tillage Tools - Machines
9	Theoretical	Seed Machines (Sowing methods, Sowing Machines)
10	Theoretical	Seed Machines (Sowing Precision Machines, Marker Settings)
11	Theoretical	Planting Machines
12	Theoretical	Fertilizing Machines
13	Theoretical	Plant Protection Machinery
14	Theoretical	Harvesting Machinery
15	Theoretical	Technological Developments in agriculture
	Practice	Practice exam
16	Final Exam	Final Exam

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	2	28
Lecture - Practice	14	0	1	14
Studio Work	14	1	0	14



Final Examination	1	18	1	19
Total Workload (Hours)				75
[Total Workload (Hours) / 25*] = ECTS				3
*25 hour workload is accepted as 1 ECTS				

Learning Outcomes

1	Learn the concepts related to agricultural mechanization
2	Learn the properties of energy sources in agriculture
3	Learn the working methods of thermal engines
4	Recognize the agricultural tractors and be able to connect with agricultural machine
5	Learn the soil processing machines
6	Learn the general characteristics of sowing methods and sowing machines
7	Learn the general characteristics of fertilizing machines
8	Learn the general characteristics of plant protection machines
9	Perform mathematical operations

Programme Outcomes (Plant Protection)

1	To be able to learn about systematics, morphological, biological, ecological and epidemiological information about diseases, pests and weeds that cause the loss of the crop at every stage of production,
2	To be able to become familiar with agricultural management control methods and their use in control of plant diseases, pests and weeds in cultivated agricultural crops,
3	To be able to diagnose and identify plant diseases, insect, mite or nematode pests or weeds that cause economical losses in stored crops and products,
4	To be able to use pesticides safely and effectively and informed about their hazardous non-target effects on the environment and human health.
5	To be able to learn plant protection products and their practice in organic agriculture,
6	To be able to evaluate the information obtained throughout the learning process with cause-effect relations, to be able to collect data and transfer the results to practice, and to predict where, when and why to use the information
7	To be able to comply with professional, cultural, social ethic rules in his / her field and to be entrepreneurial
8	To be able to have conscious of the universality of social rights, social justice, quality and cultural values, environment protection, occupational health and safety issues
9	To be able to use information and communication technologies together with the required computer software of his / her field
10	To be able to have the necessary background and qualifications to work in public and private agriculture sectors, to be able to conduct a study independently / as a team member and to be able to comply with the relevant legislation

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

	L1	L2	L3	L4	L5	L6	L7	L8	L9
P1	1	1	1	1	1	1	1	2	1
P2	4	4	2	2	3	2	2	5	3
P3	1	1	1	1	1	1	1	3	3
P4	1	2	1	2	2	1	1	5	1
P5	1	1	1	4	4	3	3	3	1
P6	1	1	1	1	1	3	1	5	2
P7	1	1	1	2	2	3	1	3	1
P8	1	2	2	2	2	1	1	4	1
P9	1	1	3	1	2	5	1	2	4
P10	3	2	2	2	2	2	3	5	3

