



AYDIN ADNAN MENDERES UNIVERSITY
KOÇARLI VOCATIONAL SCHOOL
MECHANICAL AND METAL TECHNOLOGY
AGRICULTURAL MACHINERY
COURSE INFORMATION FORM

Course Title	Harvesting and Threshing Machines								
Course Code	TAM223			Course Level		Short Cycle (Associate's Degree)			
ECTS Credit	3	Workload	100 (Hours)	Theory	2	Practice	2	Laboratory	0
Objectives of the Course	The aim of this lesson is to give the presentation, structural and operational features of harvesting and threshing machines.								
Course Content	Forage harvesting machinery, hay forage harvesting machinery, silage grain harvesting methods, combines threshing machines, cotton pickers, functional harvesting process and introduction of fruit and vegetable harvesters								
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	Evcim, Ü, 1997. Hasat Makineleri . E.Ü.Z.F. Press Course Book 4/3 , İzmir.
2	Güzel, E., 1990. Hasat-Harman İlkeleri ve Makineleri. Ç.Ü.Z.F. Press Number:116, Adana.
3	Sezer, S., Engürülü, B., Çiftçi, Ö., Gölbaşı, M., Başaran, H.Ç. ve Akkurt, M., 2002. Bağ-Bahçe Mekanizasyonu. Republic of Turkey Ministry of Food, Agriculture and Livestock, Ankara Zirai Üretim İşletmesi, Personel ve Makine Eğitim Merkezi Müdürlüğü, ISBN:975-407-190-7, Ankara.

Week	Weekly Detailed Course Contents	
1	Theoretical	Introduction to the class, definitions and general information about lesson
	Practice	Introduction of harvesting and threshing machines
	Preparation Work	Examining course contents
2	Theoretical	Cutting techniques and methods
	Practice	Introduction of harvesting and threshing machines
	Preparation Work	Literature review about the subject
3	Theoretical	Forage shearing machines
	Practice	Introduction of harvesting and threshing machines
	Preparation Work	Literature review about the subject
4	Theoretical	Tedding technique and tedders
	Practice	Introduction of harvesting and threshing machines
	Preparation Work	Literature review about the subject
5	Theoretical	Balers
	Practice	Introduction of harvesting and threshing machines
	Preparation Work	Literature review about the subject
6	Theoretical	Silage machines
	Practice	Introduction of harvesting and threshing machines
	Preparation Work	Literature review about the subject
7	Theoretical	Grain harvest methods and machines
	Practice	Introduction of harvesting and threshing machines
	Preparation Work	Literature review about the subject
8	Intermediate Exam	Midterm exam
9	Theoretical	Combines, functional processes (gathering, cutting, pickup, feeding, threshing, separation, cleaning)
	Practice	Introduction of harvesting and threshing machines
	Preparation Work	Literature review about the subject



10	Theoretical	Combines, functional processes (gathering, cutting, pickup, feeding, threshing, separation, cleaning)
	Practice	Introduction of harvesting and threshing machines
	Preparation Work	Literature review about the subject
11	Theoretical	Cotton pickers
	Practice	Introduction of harvesting and threshing machines
	Preparation Work	Literature review about the subject
12	Theoretical	Sugar beet harvesters and potato harvesters
	Practice	Introduction of harvesting and threshing machines
	Preparation Work	Literature review about the subject
13	Theoretical	Fruit and vegetable harvesting
	Practice	Introduction of harvesting and threshing machines
	Preparation Work	Literature review about the subject
14	Theoretical	Fruit and vegetable harvesting
	Practice	Introduction of harvesting and threshing machines
	Preparation Work	Literature review about the subject
15	Theoretical	Practical exam
	Practice	Explanation of harvesting and threshing machines in the form of questions and answers
	Preparation Work	Practice Exam preparation
16	Final Exam	Final Exam

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	1	2	42
Lecture - Practice	14	0	2	28
Land Work	2	4	0	8
Midterm Examination	1	9	1	10
Final Examination	1	11	1	12
Total Workload (Hours)				100
[Total Workload (Hours) / 25*] = ECTS				4

*25 hour workload is accepted as 1 ECTS

Learning Outcomes

1	To be able to acquire the definition of harvesting and its historical development
2	to be able to obtain the methods of cutting plant materials
3	To be able to have knowledge with respect to selection and operation of harvesting and threshing machinery
4	To be able to reduce product losses

Programme Outcomes (Agricultural Machinery)

1	To be able to comprehend social, cultural and societal responsibility and keep up with national and international up contemporary issues and developments.
2	To be able to be bounded to the Atatürk nationalism, adopted to the national, ethic, spiritual and cultural value of the Turkish Nation, opened to the universal and modern development, adopted the richness, deep seated and productive properties of the Turkish language, having language sympathy and awareness, having reading pleasure and habit and having sufficient foreign language for their vocational necessities, In the directions of the Atatürk Principles and Revolutions,
3	To be able to recognize the basic computer hardware and operating systems , knowledge of internet usage being able to prepare documents, electronic tables and presentation by using office programs.
4	To be able to be aware of ethic responsibility and vocational profession and to have consciousness of a lifelong learning concept
5	To be able to know current vocational issues and to have skill to define and interpret them.
6	To be able to be aware of the universal and social dimensional effects in engineering solutions, and to be able to have knowledge about entrepreneurship and newness.
7	To recognize the materials which used for preparation of agricultural machinery and have skill for the choosing the appropriate material.
8	To be able to acquire the skill of using the necessary tools and equipments which are used in the production and maintenance of agricultural machinery.
9	To be able to prepare the agricultural tools and machineries, to determine the breakdowns and to do periodic maintenance and repairs.



10	To be able to comprehend the picture of the agricultural tools and machinery and their fabrication , and have the skill to draw them via computer.
11	To be able to assemble and to combine machinery pieces by using demountable and nondetachable junction methods.
12	To be able to have the skill of resistance calculations of the agricultural tool and machinery on computer.
13	To be able to test and control the suitability of new machines and mechanic equipment to the definite standards and technical properties.
14	To be able to have general knowledge of agricultural production.
15	To be able to have knowledge of basic sciences.

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

	L1	L2	L3	L4
P4		5	5	4
P5	3	3	4	5
P6	3	4	5	5
P7		5	5	4
P8		5	5	5
P9		5	5	5
P13		3	4	5

