AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title		Planning in Mechanization						
Course Code		ZTM506		Couse Level		Second Cycle (Master's Degree)		
ECTS Credit	8	Workload	204 *(Hours)*	Theory	3	Practice	0	Laboratory	0
Objectives of the Course		Agricultural machinery and mechanization systems performance and economic analysis of how the student selection methods and the transfer of technical machinery.						
Course Content		Determination of the appropriate machines to meet basic needs and the needs of mechanization. Selection of appropriate mechanization; mechanization organization, implementation and management of the real business examples of low-cost methods of linear programming and most of the selection and planning work machine.						
Work Placement		N/A						
Planned Learning Activities and Teaching Methods			Explanation (Presentation), Discussion, Case Study, Individual Study, Problem Solving					
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	Mekanizasyon Planlaması Yüksek Lisans Ders Notları. Tarımsal Mekanizasyonda Sistem Analizi. Prof. Dr. Baha Galip Tunalıgil. A.Ü. Ziraat Fak. Yayın No: 111. İş-Etüdü Zühal Akel, MPM Yayınlar:29.

Week	Weekly Detailed Course Contents	
1	Theoretical	Course description Introduction and general information about the
2	Theoretical	The importance of agricultural mechanization and
3	Theoretical	The concept of agricultural mechanization and techniques of planning
4	Theoretical	The system of agricultural planning, location analysis
5	Theoretical	And the use of a linear programming model
6	Theoretical	The case of a business, the use of linear programming
7	Theoretical	The need for an agricultural machinery business planning
8	Intermediate Exam	Midterm Exam
9	Theoretical	Case Studies
10	Theoretical	Determining the optimum product design costs of mechanization
11	Theoretical	dynamic programming
12	Theoretical	The shortest path method
13	Theoretical	Workable concept of time
14	Theoretical	Tractor-machine selection on the basis of energy
15	Theoretical	Overall rating
16	Final Exam	final exam

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	1	4	70
Lecture - Practice	14	1	4	70
Term Project	1	10	10	20
Midterm Examination	1	20	2	22

Final Examination	1	20	2	22
		Total Workload (Hours)		204
		[Total Workload (Hours) / 25*] = **ECTS**		8

*25 hour workload is accepted as 1 ECTS

Learning Outcomes

1	Understand the basic principles of mechanization on the selection and planning techniques.
2	Identifying and analyzing applications suitable mechanization of agricultural operations.
3	And interpret the current state of planning to make business on the basis of mechanization.
4	Economic indicators to make the choice of appropriate mechanization.
5	Economic indicators to make the choice of appropriate mechanization.

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	5	5	3	5
P2	4	5	5	5
P3	4	5	5	5
P4	4	5	5	5
P5			3	2
P6	1	1		2
P8	4	4		4
P9	4	4	4	5
P10				4
P11	2	2		2
P12	5	5	3	5