



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Farm Electrification							
Course Code		ZTM527		Couse Level		Second Cycle (Master's Degree)			
ECTS Credit	8	Workload	204 (Hours)	Theory	3	Practice	0	Laboratory	0
Objectives of the Course		The aim of the course is to educate the students about electricity aplication in farm.							
Course Content		In this course, the concepts and principles of electricity generation and transmission, basic electrical engineering, electric motors and usage fields in farm, lighting, heating, cooling, ventilation, safety and issues related to internal and external installation are addressed.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Discussion, Project Based Study, 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	Tarımsal Elektrifikasyon, Prof. Dr. Güngör YAVUZCAN, A. Ü. Ziraat Fakültesi Yayınları:1168, 1990
2	Tarımsal Elektrifikasyon, Prof. Dr. A. Kadir Yağcıoğlu, E.Ü. Ziraat fakültesi Yayın No:488, 1996

Week	Weekly Detailed Course Contents	
1	Theoretical	The definition and scope of agricultural electrification
	Preparation Work	Research
2	Theoretical	Electric power generation, power transmission principles
	Preparation Work	Research
3	Theoretical	Basic Electrotechnics
	Preparation Work	Research
4	Theoretical	Basic Electrotechnics
	Preparation Work	Research
5	Theoretical	Basic Electrotechnics
	Preparation Work	Research
6	Theoretical	Electric motors and usage in agriculture
	Preparation Work	Research
7	Theoretical	Electric motors and usage in agriculture
	Preparation Work	Research
8	Intermediate Exam	Mid Term Exam
9	Theoretical	Electrical Lighting
	Preparation Work	Research
10	Theoretical	Electrical Heating
	Preparation Work	Research
11	Theoretical	Electrical cooling applications
	Preparation Work	Research
12	Theoretical	
	Preparation Work	Research
13	Theoretical	Types of outdoor installation
	Preparation Work	Research
14	Theoretical	Types of indoor installation
	Preparation Work	Research
15	Theoretical	Safety precautions for working with electricity



15	Preparation Work	Research
16	Final Exam	Final Exam

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	4	2	84
Lecture - Practice	14	0	2	28
Assignment	14	0	2	28
Term Project	1	0	20	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	Learning the basic concepts of agricultural electrification issues
2	Getting knowledge about basic electrical and electronic
3	Calculation of basic electrical and electronic systems. Ability of applying and analyzing in agriculture
4	The ability to make the calculation and design related in agricultural electrification
5	The ability to make the calculation and design related in agricultural electrification

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

