



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Energy Management And Energy Economics							
Course Code		ZTM540		Course Level		Second Cycle (Master's Degree)			
ECTS Credit	8	Workload	200 (Hours)	Theory	3	Practice	0	Laboratory	0
Objectives of the Course		The aim of this course is that information is given to the students about alternative energy resources and about the energy which is an important input in agriculture							
Course Content		In this course, informations are given about general energy. Potentials of general energy of Turkey and the world and potentials of alternative energy resources are exposed. Basic parameters are defined for solar energy, wind energy, hydrolic energy, geothermal energy and biomass energy. Informations are given about applications of alternative energies in agriculture.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), 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	Energy Technology Faculty of Agriculture Publications: 1324 Dr. Güngör YAVUZCAN, 1994
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Week	Weekly Detailed Course Contents	
1	Theoretical	General energy information
2	Theoretical	Potentials of general energy and alternative energy in Turkey and the world
3	Theoretical	Solar energy technology and application possibilities in agriculture
4	Theoretical	Solar energy technology and application possibilities in agriculture
5	Theoretical	Wind energy technology and application possibilities in agriculture
6	Theoretical	Wind energy technology and application possibilities in agriculture
7	Intermediate Exam	Midterm Exam
8	Theoretical	Hydrolic energy technology and application possibilities in agriculture
9	Theoretical	Hydrolic energy technology and application possibilities in agriculture
10	Theoretical	Geothermal energy technology and application possibilities in agriculture
11	Theoretical	Biomass energy technology and application possibilities in agriculture
12	Theoretical	Biomass energy technology and application possibilities in agriculture
13	Theoretical	Optimization of energy
14	Final Exam	Final Exam

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	5	3	112
Assignment	6	5	5	60
Midterm Examination	1	10	4	14
Final Examination	1	10	4	14
Total Workload (Hours)				200
[Total Workload (Hours) / 25*] = ECTS				8

*25 hour workload is accepted as 1 ECTS

Learning Outcomes

1	Learn the general energy information
2	Learn the solar energy technology and application possibilities in agriculture
3	Learn the wind energy technology and application possibilities in agriculture



4	Biomass energy technology and application possibilities in agriculture
5	Hydrolic energy technology and application possibilities in agriculture

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

	L2	L4
P2		4
P3	5	5
P4		4
P5		5
P6	5	
P7	5	5
P8	5	
P9	5	5
P10		5

