AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Energy Technology								
Course Code	TAP234		Couse Level	Short Cycle (Associate's Degree)					
ECTS Credit	3	Workload	71 *(Hours)*	Theory	3	Practice	0	Laboratory	0
Objectives of the Course	Energy resources have been changed as a result of environmental pollution, urbanization and industrial development. In this course will be given information about the applications of solar energy, wind energy, hydro, biomass and geothermal energies.								
Course Content	Explaining the world and Turkey's overall energy and alternative energy potentials by given general information about energy. The basic parameters are defined by the related calculations are shown of solar energy, wind energy, geothermal energy, hydropower and biomass energy. Information about the energies application areas in agriculture.								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Case Study, Individual Study								
Name of Lecturer(s)									

Assessment Methods and Criteria		
Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	70

Recommended or Required Reading	
1	Lecture notes
2	Hepbaşlı, A., 2010 Enerji Verimliliği ve Yönetim Sistemi Yaklaşımlar ve Uygulamalar, Schneider Electric Enerji Verimliliği Serisi: 1 ISBN: 978-9944-5084-6-9 İstanbul.
3	Acaroğlu, M., 2013 Alternatif Enerji Kaynakları, Nobel Yayın Dağıtım, ISBN: 6053950479

Week	Weekly Detailed Course Contents	
1	Theoretical	General energy knowledge
2	Theoretical	Overall energy and alternative energy potential in Turkey and World
3	Theoretical	Solar energy technology and application areas in agriculture
4	Theoretical	Solar energy technology and application areas in agriculture
5	Theoretical	Wind energy technology and application areas in agriculture
6	Theoretical	Wind energy technology and application areas in agriculture
7	Theoretical	Hydraulic energy technology and application areas in agriculture
8	Intermediate Exam	Mid-term Exam
9	Theoretical	Hydraulic energy technology and application areas in agriculture
10	Theoretical	Geothermal energy technology and application areas in agriculture
11	Theoretical	Geothermal energy technology and application areas in agriculture
12	Theoretical	Biomass energy technology and application areas in agriculture
13	Theoretical	Other energy sources
14	Theoretical	Appropriate use of energy systems
15	Final Exam	Final Exam

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	1	14
Assignment	10	1	1	20
Reading	10	1	1	20
Individual Work	5	1	2	15
Midterm Examination	1	0	1	1

Final Examination	1	0	1	1
			Total Workload (Hours)	71
			[Total Workload (Hours) / 25*] = **ECTS**	3
**25 hour workload is accepted as 1 ECTS*				

Learning Outcomes	
1	Recognizes energy resources.
2	Obtain information on efficient usage of all energy sources.
3	Obtain information on solar energy and application areas.
4	Obtain information on wind energy and application areas.
5	Obtain information on hydrolic energy and application areas.
6	Obtain information on geothermal energy and application areas.
7	Obtain information on biomass energy and application areas.

Programme Outcomes *(Medical and Aromatic Plants)*	
1	Understands the importance of medicinal and aromatic plants in the World and Turkey
2	Learn about the general characteristics of medicinal and aromatic plants. Learn the important issues in cultivation and can apply.
3	Learn about usage technologies about medicinal and aromatic plants and can apply.
4	Inform of producers of medicinal and aromatic plant species in offering, material supply, production process, marketing matter.
5	Know and follow the laws and regulations pertaining to the profession.
6	Learns morphological and anatomical structures of plants.
7	Learns to identify medicinal and aromatic plants.
8	To be able to behave sensitively towards environmental issues at national and global levels and to be able to interpret solution-oriented information; to be able to be an environmentally conscious and entrepreneurial individual
9	To be able to follow, evaluate and implement new developments and applications in the cultivation of medicinal and aromatic plants independently or as a team.

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
P2	2	2					
P3	3	3					
P4	4	3					
P8	5	5	5	5	5	5	5
P9	5	5	5	5	5	5	5