



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Renewable Rnergy Sources							
Course Code		FBÖ256		Course Level		First Cycle (Bachelor's Degree)			
ECTS Credit	4	Workload	100 (<i>Hours</i>)	Theory	2	Practice	0	Laboratory	0
Objectives of the Course		The aim of this course is to inform prospective teacher candidates about the energy and energy resources which are an indispensable part of human life and to convey that these subjects are at the beginning of topics that are intensively discussed on the agenda of world and Turkey today as they have been in the past. To educate future prospective teachers, energy is an important factor in economic and societal development of countries and social welfare, so it is necessary to know how necessary it is to turn to renewable energy sources and to give information about the types of renewable energy suitable for our country.							
Course Content		The applications of alternative energy applications such as solar energy, wind energy, natural gas, biofuels and nuclear energy in Turkey and in the world are positive and alternative sources of energy. Discussion of negative aspects.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Discussion, Project Based Study, Individual Study					
Name of Lecturer(s)		Prof. Dilek KARIŞAN KORUCU							

Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	70

Recommended or Required Reading

1	Acaroğlu, M. (2013). Alternative Energy Sources
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Week	Weekly Detailed Course Contents	
1	Theoretical	Introduction to the course: general principles of the course, importance, informing the students about the target, content, process and evaluation
2	Theoretical	2) General information about energy and energy types
3	Theoretical	3) Non-renewable energy sources
4	Theoretical	4) Renewable energy sources
5	Theoretical	5) Nuclear energy
6	Theoretical	6) Solar energy
7	Theoretical	7) Wave energy
8	Intermediate Exam	midterm
9	Theoretical	9) Natural gas
10	Theoretical	10) Geothermal energy
11	Theoretical	11) Hydraulic potential
12	Theoretical	12) Hydrogen
13	Theoretical	13) Biomass-bio diesel-biogas
14	Theoretical	14) Wind energy
15	Theoretical	15) General Evaluation
16	Final Exam	final

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	1	2	42
Assignment	14	1	1	28
Individual Work	12	0	1	12
Midterm Examination	1	6	1	7



Final Examination	1	10	1	11
Total Workload (Hours)				100
[Total Workload (Hours) / 25*] = ECTS				4
*25 hour workload is accepted as 1 ECTS				

Learning Outcomes

1	1) Having general knowledge about energy and energy types
2	2) Knowing non-renewable energy sources
3	3) Knowing alternative energy sources
4	4) Evaluating the positive and negative aspects of renewable energy sources in Turkey
5	Students obtain the ability to analyze new energy issues from an IR perspective.

Programme Outcomes (Science Teacher Education)

1	To be able to gain subject knowledge of profession in theory and practice in the learning process.
2	To be able to gain the competence of using the appropriate approach, strategy, method and technique for the instructional plans to be prepared in the learning process.
3	To be able to gain the skills of the teaching profession in the learning process.
4	To be able to implement teaching profession knowledge, skills, attitudes and habits related to the subject-matter in a real teaching and learning environment in the learning process.
5	To be able to comprehend contemporary approaches of education and the philosophy they are based on.
6	To be able to gain the basic skills such as comprehending, expressing, commenting, evaluating, being aware and enterprising, communicating, acknowledging the individual related to the subject-matter.
7	To be able to become individuals faithful to the Principles and Revolutions of Ataturk, be modern democratic, secular, protecting and developing one's country, being alive to the nation, respecting human rights, preserving the nature, not being discriminatory, giving importance to the traditions and customs, protecting the values
8	To be able to improve oneself in terms of sport, art and culture.
9	To be able to become individuals believing in lifelong learning.
10	To be able to gain the vision of being individuals who keep up with developments in social, economic, technological and scientific areas, who investigate the main reasons of World problems and try to contribute to the solutions of these problems.

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

	L1	L2	L3	L4	L5
P1	5	5	5	5	5
P2	5	5	5	5	4
P3	5	5	4	5	5
P4	4	4	5	5	4
P5	5	5	4	5	5
P6	4	4	5	5	4
P7	5	5	4	4	5
P8	4	4	5	5	4
P9	5	5	4	4	5
P10	4	4	5	5	4

