ENERGY USE IN AGRICULTURE

1	Course Title:	ENERGY USE IN AGRICULTURE	
2	Course Code:	BSM5017	
3	Type of Course:	Optional	
4	Level of Course:	Second Cycle	
5	Year of Study:	1	
6	Semester:	1	
7	ECTS Credits Allocated:	6.00	
8	Theoretical (hour/week):	3.00	
9	Practice (hour/week):	0.00	
10	Laboratory (hour/week):	0	
11	Prerequisites:	None	
12	Language:	Turkish	
13	Mode of Delivery:	Face to face	
14	Course Coordinator:	Prof. Dr. ALİ VARDAR	
15	Course Lecturers:	Yok	
16	Contact information of the Course Coordinator:	e-posta : alibas@uludag.edu.tr Telefon: 0 224 2941601 Adres: Bursa Uludağ Üniversitesi, Ziraat Fakültesi, Biyosistem Mühendisliği Bölümü, Görükle Kampüsü, 16059, Nilüfer/BURSA	
17	Website:		
18	Objective of the Course:	Some energy issues is given in more details in this course which is not given in Undergraduate education	
19	Contribution of the Course to Professional Development:	It contributes to the student's understanding of energy issues used in agriculture.	
20	Learning Outcomes:		
		1	To make students aware of the importance of energy for our country and for the world, to inform students about the importance of energy saving.
		2	To teach what alternative energy means and how to make use of alternative energies.
		3	To teach technologies which are used in the production of solar, wind and hydraulic energy?
		4	To teach geothermal energy and the techniques to make use of this energy.
		5	They should know the importance of energy. To teach energies which are produced from organic-rooted substances such as biomass,
		6	To teach biogas and their production technologies.
		7	To teach the production technologies and fuel use capabilities of organic-rooted energy substances such as biodiesel and alcohol, which could be an alternative to petrol fuel.
		8	To teach Nuclear and hydrogen energy and their production technologies
		9	
		10	
21	Course Content:		
	Course Content:		

Week	Theoretical	Practice
1	The definition and classification of energy and statistics of energy.	
2	Solar energy and its technology	
3	Solar energy and its technology	
4	Wind energy and its technology	
5	Wind energy and its technology	
6	Hydraulic energy and technology	
7	Hydraulic energy and technology	
8	Biomass energy and technology	
9	Biomass energy and technology	
10	Geothermal energy and technology	
11	Nuclear energy and technology,	
12	Energy transformation in agricultural products,	
13	Optimization of energy production	
14	Efficiency of energy and energy savings.	

22	Textbooks, References and/or Other Materials:	-Prof. Dr. Kamil ALİBAŞ'ın ders notları 120 sayfa (yayınlanmamış) -Prof. Dr. Güngör YAVUZCAN 1994. Enerji Teknolojisi. A.Ü. Ziraat Fakültesi Yayını. Yayın No:1324, Ders kitabı:383 (117s)
23	Assesment	

TERM LEARNING ACTIVITIES	**NUMBER**	**WEIGHT**
Midterm Exam	0	0.00
Quiz	0	0.00
Homeworks, Performances	0	0.00
Final Exam	1	100.00
Total	1	100.00
Contribution of Term (Year) Learning Activities to Success Grade		0.00
Contribution of Final Exam to Success Grade		100.00
Total		100.00
Measurement and Evaluation Techniques Used in the Course		The effect of the final exam on the course-passing grade is 100%.

24	**ECTS / WORK LOAD TABLE**

Activites	Number	Duration (hour)	Total Work Load (hour)
Theoretical	14	3.00	42.00
Practicals/Labs	0	0.00	0.00
Self study and preperation	12	8.00	96.00
Homeworks, Performances	8	3.00	24.00
Projects	0	0.00	0.00
Field Studies	0	0.00	0.00
Midterm exams	0	0.00	0.00
Others	0	0.00	0.00
Final Exams	1	14.00	14.00
Total Work Load			176.00
Total work load/ 30 hr			5.87
ECTS Credit of the Course			6.00

25	CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS															
	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ10	PQ11	PQ12	PQ13	PQ14	PQ15	PQ16
ÖK1	3	2	2	2	4	1	1	5	2	2	2	4	0	0	0	0
ÖK2	3	2	2	2	4	1	1	5	2	2	2	4	0	0	0	0
ÖK3	3	2	2	3	4	1	1	5	2	2	2	4	0	0	0	0
ÖK4	4	2	2	2	4	1	1	5	2	2	2	4	0	0	0	0
ÖK5	4	2	1	2	4	1	1	5	2	2	2	4	0	0	0	0
ÖK6	4	4	3	3	4	1	1	5	3	3	2	4	0	0	0	0
ÖK7	4	4	3	3	4	1	1	5	3	3	2	4	0	0	0	0
ÖK8	4	4	3	3	4	1	1	5	3	3	2	4	0	0	0	0
LO: Learning Objectives PQ: Program Qualifications																
Contribution Level:	1 very low		2 low		3 Medium			4 High			5 Very High					