TRACTORS - EQUIPMENT MECHANICS

1	Course Title:	TRACTORS - EQUIPMENT MECHANICS
2	Course Code:	BSM6011
3	Type of Course:	Optional
4	Level of Course:	Third 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. Nazmi İzli
15	Course Lecturers:	Yok
16	Contact information of the Course Coordinator:	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:	Principles of selection and application of farm tractors and engines. Operation and principles of internal combustion engines including carburetion, fuel injection, ignition, and lubrication. Power transmission application and efficiency are considered. Lecture, two hours per week;laboratory, two hours per week.
19	Contribution of the Course to Professional Development:	Students who take the course will have the engineering knowledge to evaluate the characteristics of the tractor.
20	Learning Outcomes:	
	1	To learn about the engine, the clutch organs, gear box, differential, axes of the tractor and working principles an the parts of the final reduction.
	2	To learn about steering systems, hydrolic lifting systems, power take off systems in terms of their working principles and parts.
	3	Able to tractor and tipping points of the analysis of static and dynamic forces that are able to determine
	4	Tractor PTO should be aware that variations
	5	Good knowledge of tractor hydraulic lift system, able to make calculations related to the subject
	6	They should know the tractor maintenance and apply it
	7	Tractor should be able to diagnose faults and repair workshop facilities should be able to some of the failures
	8	Tools and equipment to tie the tractor. Be able to use the tractor in the field
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21	Course Content:	
	Course Content:	

Week	Theoretical	Practice
1	The meaning of the tractor, the history and classification of the tractor	
2	Tractor, the main structural elements (engine)	
3	Tractor, the main structural elements (clutch)	
4	Tractor, the main structural elements (gearbaxs)	
5	Tractor, the main structural elements (Differantial and last reductions)	
6	Tractors drive units	
7	Tractor steering system	
8	Hydraulic systems and controls	
9	Hydraulic systems and controls	
10	PTO, front loader, driver's cabin	
11	Mechanics of Tractor, Tractor Determination of Center of Gravity of Place, a tractor in Dormant Forces	
12	Mechanics of Tractor, tractor in a horizontal, inclined tractor in, Lateral slope tractor, a tractor in the still to determine stability.	
13	Environmental Force Determination, Strength and Gait Strength Towing Tractor, Tractor	
14	TRACTOR TESTS: Principles of testing of selection, preliminary preparations for the experiment, the tail shaft power	
15	Rotational properties and the location of the center of gravity	
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21	Materials:	Fakultesi Yayinlari Yayin No:1471, Ders kitabi:436 (200 s).
		Makoto Hoki. Tractors and Their Power Units. An AVI Book.ISBN 0 442 25897 6 (463s)
23	Assesment	

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	10	8.00	80.00
Homeworks	0	0.00	0.00
Projects	0	0.00	0.00
Field Studies	8	4.00	32.00
Midterm exams	0	0.00	0.00
Others	0	0.00	0.00
Final Exams	1	20.00	20.00
Total Work Load			174.00
Total work load/ 30 hr			5.80
ECTS Credit of the Course			6.00

TERM LEARNING ACTIVITIES	NUMBER	WEIGHT
Midterm Exam	0	0.00
Quiz	0	0.00
Home work-project	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

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	2	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	2	2	4	1	1	5	2	2	2	4	0	0	0	0
ÖK6	4	4	2	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**			