



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Materials Technology							
Course Code		TAM118		Couse Level		Short Cycle (Associate's Degree)			
ECTS Credit	5	Workload	124 (<i>Hours</i>)	Theory	2	Practice	2	Laboratory	0
Objectives of the Course		To gain the qualifications of the basic manufacturing processes, using hand tools, drills, turning lathes,milling and grinding machines,							
Course Content		The introduction of handtools and basic manual tasks, marking tools and tasks, drill and drilling hole operations, turning lathe and turning operations, milling machine and milling operations, grinding machine and grinding operation.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Demonstration, Discussion, Individual Study, Problem Solving					
Name of Lecturer(s)									

Assessment Methods and Criteria

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

Recommended or Required Reading

1	Manufacturing Operations (İbrahim NEBİLER)
2	Production Methods and Technology (Dr. Mustafa AYDIN, Dr. Mustafa YAŞAR, Dr. Muammer GAVAS, Dr. Yahya ALTUNPARK)
3	Machining Methods (AKKURT , M)
4	Manufacturing Operations Skills (ÇAM, İ)
5	Principles of Machining I-II (ŞAHİN, Y)

Week	Weekly Detailed Course Contents	
1	Theoretical	Measuring control, testing and marking tools, cutting types and principles.
2	Theoretical	Drilling, drill types, tool materials, , drilling processing, calculations of drill speed.
3	Theoretical	
4	Theoretical	Lathe parts and turning types, bearers, bearings, and cutting tools.
5	Theoretical	
6	Theoretical	
7	Theoretical	
8	Intermediate Exam	
9	Theoretical	
10	Theoretical	
11	Theoretical	
12	Theoretical	
13	Theoretical	
14	Theoretical	
15	Theoretical	
16	Theoretical	

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	2	28
Lecture - Practice	14	0	2	28
Assignment	4	4	2	24
Studio Work	6	2	0	12
Midterm Examination	1	15	1	16



Final Examination	1	15	1	16
Total Workload (Hours)				124
[Total Workload (Hours) / 25*] = ECTS				5
*25 hour workload is accepted as 1 ECTS				

Learning Outcomes

1	To be able to do basic operations with hand tools.
2	To be able to do drill holes on the drill bench.
3	To be able to do turning.
4	To be able to do milling.
5	To be able to do grinding.

Programme Outcomes (Agricultural Machinery)

1	To be able to comprehend social, cultural and societal responsibility and keep up with national and international up contemporary issues and developments.
2	To be able to be bounded to the Atatürk nationalism, adopted to the national, ethic, spiritual and cultural value of the Turkish Nation, opened to the universal and modern development, adopted the richness, deep seated and productive properties of the Turkish language, having language sympathy and awareness, having reading pleasure and habit and having sufficient foreign language for their vocational necessities, In the directions of the Atatürk Principles and Revolutions,
3	To be able to recognize the basic computer hardware and operating systems , knowledge of internet usage being able to prepare documents, electronic tables and presentation by using office programs.
4	To be able to be aware of ethic responsibility and vocational profession and to have consciousness of a lifelong learning concept
5	To be able to know current vocational issues and to have skill to define and interpret them.
6	To be able to be aware of the universal and social dimensional effects in engineering solutions, and to be able to have knowledge about entrepreneurship and newfangledness.
7	To recognize the materials which used for preparation of agricultural machinery and have skill for the choosing the appropriate material.
8	To be able to acquire the skill of using the necessary tools and equipments which are used in the production and maintenance of agricultural machinery.
9	To be able to prepare the agricultural tools and machineries, to determine the breakdowns and to do periodic maintenance and repairs.
10	To be able to comprehend the picture of the agricultural tools and machinery and their fabrication , and have the skill to draw them via computer.
11	To be able to assemble and to combine machinery pieces by using demountable and nondetachable junction methods.
12	To be able to have the skill of resistance calculations of the agricultural tool and machinery on computer.
13	To be able to test and control the suitability of new machines and mechanic equipment to the definite standards and technical properties.
14	To be able to have general knowledge of agricultural production.
15	To be able to have knowledge of basic sciences.

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

	L1	L2	L3	L4	L5
P4	1	2	2	2	2
P5	1	2	2	2	1
P6	1	2	2	2	1
P7	1	2	2	2	2
P8	5	5	5	5	5
P9	2	2	2	2	2
P10	1	3	3	3	1
P11	1	3	2	2	1
P13	3	2	2	2	1
P15	1	2	2	2	1

