

## CHEMICAL TESTS

1	Course Title:	CHEMICAL TESTS
2	Course Code:	TKSZ201
3	Type of Course:	Compulsory
4	Level of Course:	Short Cycle
5	Year of Study:	2
6	Semester:	3
7	ECTS Credits Allocated:	4.00
8	Theoretical (hour/week):	2.00
9	Practice (hour/week):	2.00
10	Laboratory (hour/week):	0
11	Prerequisites:	-
12	Language:	Turkish
13	Mode of Delivery:	Face to face
14	Course Coordinator:	Prof. Dr. Mehmet Karahan
15	Course Lecturers:	Doç. Dr. Mehmet Karahan Öğr. Gör. Dr. Mürüvvet Mangut Öğr.Gör. Semiha EREN
16	Contact information of the Course Coordinator:	mkarahan@uludag.edu.tr Teknik Bilimler M.Y.O. +902242942367
17	Website:	
18	Objective of the Course:	To study the chemical tests used in textile industry, to be able to analyze the textile materials with various methods, apply the certain chemical tests to textile materials and to gain qualifications of statistically calculation and interpretation of test results.
19	Contribution of the Course to Professional Development:	
20	Learning Outcomes:	
	1	To explain textile laboratory test conditions and effect of these conditions on textile materials.
	2	To explain the qualitative and quantitative test methods.
	3	To be able to distinguish the textile fibers from each other using various analysis methods.
	4	To be able to apply the chemical fiber identify methods.
	5	To be able to calculate the ratios of fibers on mixed textile materials.
	6	To be able to explain the concept and types of color fastness.
	7	To explain the measurement of various fastness methods applied to the textile materials.
	8	To understand the flame retardant concept in textile.
	9	To be able to explain the determination of hydrophility, capillarity and formaldehyde.
	10	To analyze the test results statistically in textile.
21	Course Content:	
	<b>Course Content:</b>	
Week	Theoretical	Practice

1	To give the laboratory test conditions, humidity and moisture factor and their effect on measurements.	To study the textile materials with microscopy analysis.
2	To introduce the qualitative analyze methods.	To study the textile fibers with microcopy analyze.
3	To introduce the quantitative analyze methods.	Fiber identification with burning.
4	To explain the fiber identification methods with qualitative test methods.	Fiber identification with dry distillation.
5	To explain the natural fiber distinguishing methods using by chemical solving methods.	To solve the natural fibers with chemical solving methods.
6	To explain the synthetic fiber distinguishing methods using by chemical solving methods.	To solve the synthetic fibers with chemical solving methods.
7	To explain the binary and triple mixed textile materials.	To identify the binary and triple textile fabrics.
8	Repeating courses and midterm exam I	Answering the exam questions
9	To explain the determination of weight ratios of fibers in binary mixed textile materials using by quantitative methods. To explain the determination of weight ratios of fibers in triple mixed textile materials using by quantitative methods.	To apply the chemical solving method to binary mixed textile materials
10	To give general information about measurement and evaluation of color fastness methods.	Applying of washing, rubbing and light fastness in textile materials.
11	To give general information about the different color fastness.	Applying of washing, rubbing and light fastness in textile materials.

Activites		Number	Duration (hour)	Total Work Load (hour)
13	Repeating courses and midterm exam	14	2.00	28.00
Practicals/Labs		14	2.00	28.00
Self study and preperation		14	2.00	28.00
Homeworks		0	0.00	0.00
Projects		0	0.00	0.00
Field Studies		0	0.00	0.00
Midterm exams		3	16.00	48.00
Others		0	0.00	0.00
Final Exams		1	16.00	16.00
<b>TERM LEARNING ACTIVITIES</b>		<b>NUMBER</b>	<b>WEIGHT</b>	
Total Work Load				140.00
Midterm Exam/ 30 hr		2	40.00	4.00
ECTS Credit of the Course				4.00
Home work-project		0	0.00	
Final Exam		1	60.00	
Total		3	100.00	
Contribution of Term (Year) Learning Activities to Success Grade			40.00	
Contribution of Final Exam to Success Grade			60.00	
Total			100.00	
Measurement and Evaluation Techniques Used in the Course				
24	<b>ECTS / WORK LOAD TABLE</b>			

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	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0
ÖK2	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0
ÖK3	5	0	5	0	0	5	0	0	0	0	0	0	0	0	0	0
ÖK4	5	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0
ÖK5	5	0	5	0	5	5	0	0	0	0	0	0	0	0	0	0
ÖK6	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0
ÖK7	0	0	0	3	3	4	0	0	3	0	0	0	0	0	0	0
ÖK8	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
ÖK9	5	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0
ÖK10	0	0	0	4	4	0	0	0	0	5	0	0	0	0	0	0
LO: Learning Objectives    PQ: Program Qualifications																
Contribution Level:	1 very low			2 low			3 Medium			4 High			5 Very High			