STANDARD TEST METHODS FOR TEXTILES

1	Course Title:	STANDARD TEST METHODS FOR TEXTILES
2	Course Code:	TEK4127
3	Type of Course:	Optional
4	Level of Course:	First Cycle
5	Year of Study:	4
6	Semester:	7
7	ECTS Credits Allocated:	3.00
8	Theoretical (hour/week):	2.00
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. MEHMET ORHAN
15	Course Lecturers:	Yok
16	Contact information of the Course Coordinator:	morhan@uludag.edu.tr Tel. +90.0.224.294 20 64 Adres: Bursa Uludağ Üniversitesi Mühendislik Fakültesi Tekstil Mühendisliği Bölümü 16059 Nilüfer Bursa, Türkiye.
17	Website:	
18	Objective of the Course:	The general objective in this course is to give knowledge about the quality control tests, basic principles, standards, machines and devices, applications, and uses of the standard test methods for textiles.
19	Contribution of the Course to Professional Development:	Students will learn about the quality control tests applied to textiles.
20	Learning Outcomes:	
	1	The student will be able to define and explain the basic principles, approaches, and concepts of the quality control testing methods for textiles.
	2	The student will be able to explain the running principles of test devices and to recognize the basic parts of them.
	3	The student will be able to compare the test devices and standard test methods.
	4	The student will be able to use and run accurately with devices.
	5	The student will be able to evaluate the data by statistically and mathematically.
	6	The student will be able to select which standard method would be appropriate for any textile sample.
	7	
	8	
	9	
	10	
21	Course Content:	

	Course Content:	
Week	Theoretical	Practice

1	Introduction, Quality Control, Standards and Standardization, Laboratory Test Conditions and Conditioning Procedures, Effect of Moisture on Physical Property	
2	Classifications of Test Methods and Standards for Textiles, The Tests and Standards for Fibers and Yarns.	
3	Detection of Foreign Materials, Measurement of Unevenness, Length, Thickness, Strength, Humidity, Twist.	
4	Tests and Standards for Fabrics, Measurement of Weight, Thickness, Thread Density and Count , Bending Strength, Wrinkles Strength, Air Permeability, Tensile, Burst, and Tear Strength.	
5	Measurement of Seam Strength, Seam Slippage, Abrasion Resistance, Pilling, Dimensional Stability and Surface Changes After Washing, Detection of Fabric pH.	
6	Instruments and Standards for Color Fastness, Measurement of Color Fastness against Light, Friction and Abrasion, Hot Press, and Weather Conditions.	
7	Measurement of Color Fastness against Washing, Water, Sea Water, Perspiration, and Dry Cleaning.	
8	Evaluation of Fabric Handle, Kawabata Evaluation System.	
9	FAST Evaluation System, Shirley Bending Test.	
10	Measurement of Water-repellency and Water-proof Property, Spray Method, Bundesmann Method, Hydrostatic Pressure Method.	
11	Measurement of the Oil Repellency and Soil-repellency.	
12	Testing of Wrinkle Property, Measurement of Wrinkle Recovery Angle (WRA), Testing of Crease Recovery	
13	Testing of Flame Retardant, Horizontal and Vertical Burning Test Method, Cigarette Test Method.	
14	The Limiting Oxygen Index (LOI) Test Method, Testing of Antimicrobial Property.	

22	Textbooks, References and/or Other Materials:	1.Orhan M., Lecture Notes, 2021. 2.ASTM Standards and Technical Documents. 3.AATCC Standard, AATCC Manual and Test Methods. 4.International Organization for Standardization Test Methods. 5.European Committee for Standardization Test Methods. 6.Turkish Standard Institutions Test Methods.
23	Assesment	

TERM LEARNING ACTIVITIES	**NUMBER**	**WEIGHT**
Midterm Exam	1	40.00
Quiz	0	0.00
Home work-project	0	0.00
Final Exam	1	60.00
Total	2	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	It is done with written exams (Midterm and Final).

24 ECTS / WORK LOAD TABLE

Activites	Number	Duration (hour)	Total Work Load (hour)
Theoretical	14	2.00	28.00
Practicals/Labs	0	0.00	0.00
Self study and preperation	14	3.00	42.00
Homeworks	0	0.00	0.00
Projects	0	0.00	0.00
Field Studies	0	0.00	0.00
Midterm exams	1	10.00	10.00
Others	0	0.00	0.00
Final Exams	1	10.00	10.00
Total Work Load			90.00
Total work load/ 30 hr			3.00
ECTS Credit of the Course			3.00

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	3	0	2	0	0	0	0	0	0	0	0	0	0	0	4
ÖK2	3	3	0	2	0	0	0	0	0	0	0	0	0	0	0	4
ÖK3	3	4	2	3	3	3	0	0	0	0	2	2	2	2	0	4
ÖK4	2	3	0	4	3	0	2	0	0	0	0	0	0	0	0	4
ÖK5	0	3	0	2	4	0	2	2	0	0	0	0	0	0	0	4
ÖK6	3	4	0	2	3	3	0	0	0	0	3	3	3	3	0	4

LO: Learning Objectives PQ: Program Qualifications

Contribution Level:	1 very low	2 low	3 Medium	4 High	5 Very High