	DYEHOUSE LABORATORY PRACTICE AND DYEHOUSE AUTOMATION		
1	Course Title:	DYEHOUSE LABORATORY PRACTICE AND DYEHOUSE AUTOMATION	
2	Course Code:	TEK4209E	
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:	English	
13	Mode of Delivery:	Face to face	
14	Course Coordinator:	Prof. Dr. BEHÇET BECERİR	
15	Course Lecturers:		
16	Contact information of the Course Coordinator:	Prof. Dr. Behçet Becerir Bursa Uludağ Üniv. Mühendislik F. Tekstil Müh. Böl. 16059 Görükle Bursa becerir@uludag.edu.tr Tel: 0090 224 294 20 47	
17	Website:		
18	Objective of the Course:	This course is designed to train students in understanding of dyehouse laboratory activities and usage. The objectives of the course include training the students in understanding dyehouse automation software and hardware.	
19	Contribution of the Course to Professional Development:	The course gives information about the tests performed in textile dyeing laboratories and provides knowledge about dyehouse automation.	
20	Learning Outcomes:		
		1	Know the basic principles and application of laboratory tests
		2	Identify dyehouse establishment and processes
		3	Apply automation applications
		4	Use dyehouse automation
		5	
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21	Course Content:		

	Course Content:	
Week	Theoretical	Practice
1	Dyehouse laboratory organization	
2	Evaluation and testing of dyes	
3	Evaluation and testing of dyes	

4	Chemical and auxiliary tests	
5	Chemical and auxiliary tests	
6	Fastness tests	
7	Physical tests methods of textiles	
8	Process control and quality control	
9	Dyehouse production planning	
10	Dyehouse production planning	
11	Dyehouse production-management and automation system software	
12	Dyehouse production management inspection and automation system	
13	Dyehouse production management inspection and automation system	
14	Dyehouse automation	

22	Textbooks, References and/or Other Materials:	Boyahane Laboratuvarı ve Otomasyon Sistemleri Ders Notları Behçet Becerir, 2006

23	Assesment

TERM LEARNING ACTIVITIES	NUMBER	WEIGHT	

Activites		Number	Duration (hour)	Total Work Load (hour)
Theoretical		14	2.00	28.00
Final Exam	1	60.00		
Practicals/Labs		0	0.00	0.00
Self study and preperation		6	4.00	24.00
Contribution of Term (Year) Learning Activities to		40.00		
Homeworks		0	0.00	0.00
Projects		0	0.00	0.00
Contribution of Final Exam to Success Grade		60.00		
Field Studies		0	0.00	0.00
Midterm exams		1	20.00	20.00
Measurement and Evaluation Techniques Used in the	Exams and question-answer communication in the class			
Others		0	0.00	0.00
Final Exams		1	20.00	20.00

24	**ECTS / WORK LOAD TABLE**			
Total Work Load				92.00
Total work load/ 30 hr				3.07
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	0	5	5	5	5	0	0	0	0	0	0	4	0	0	0	0
ÖK2	0	5	5	5	5	0	0	0	0	0	0	4	0	0	0	0
ÖK3	0	5	5	5	5	0	0	0	0	0	0	4	0	0	0	0
ÖK4	0	5	5	5	5	0	0	0	0	0	0	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