



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Pretreatment of Cellulose							
Course Code		İTN201		Course Level		Short Cycle (Associate's Degree)			
ECTS Credit	7	Workload	175 (<i>Hours</i>)	Theory	2	Practice	1	Laboratory	0
Objectives of the Course		At the end of this course, students will gain competencies to practice process of hydrophile, bleaching and mercerizing to cellulose-based textiles							
Course Content		Be able to make pre-finishing operations of cellulose-based fibers. To understand features of the machines and the chemicals which are used in process							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Experiment, Demonstration					
Name of Lecturer(s)									

Assessment Methods and Criteria

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

Recommended or Required Reading

1	TKAM Tekstil Terbiye Teknolojisi
2	Genel Tekstil Terbiyesi ve Bitim İşlemleri Doç Dr. Süleyman ÇOBAN
3	Lecture notes

Week	Weekly Detailed Course Contents	
1	Theoretical	Raw material input control
	Practice	Raw material input control
	Laboratory	Raw material input control
2	Theoretical	Burning
	Practice	Burning
	Laboratory	Burning
3	Theoretical	Burning
	Practice	Burning
	Laboratory	Burning
4	Theoretical	Calculation of recipe
	Practice	Calculation of recipe
	Laboratory	Calculation of recipe
5	Theoretical	Desizing/Boiling
	Practice	Desizing/Boiling
	Laboratory	Desizing/Boiling
6	Theoretical	Boiling/ Scouring
	Practice	Boiling/ Scouring
	Laboratory	Boiling/ Scouring
7	Theoretical	Bleaching by using hydrogen peroxide
	Practice	Bleaching by using hydrogen peroxide
	Laboratory	Bleaching by using hydrogen peroxide
8	Theoretical	Bleaching by using hydrogen peroxide / sodium hypochlorite
	Practice	Bleaching by using hydrogen peroxide / sodium hypochlorite
	Laboratory	Bleaching by using hydrogen peroxide / sodium hypochlorite
9	Theoretical	Bleaching by using sodium hypochlorite/ Bleaching by doing combination
	Practice	Bleaching by using sodium hypochlorite/ Bleaching by doing combination



9	Laboratory	Bleaching by using sodium hypochlorite/ Bleaching by doing combination
10	Theoretical	Bleaching by doing combination
	Practice	Bleaching by doing combination
	Laboratory	Bleaching by doing combination
11	Theoretical	Optical Bleaching
	Practice	Optical Bleaching
	Laboratory	Optical Bleaching
12	Theoretical	Fabric mercerizing
	Practice	Fabric mercerizing
	Laboratory	Fabric mercerizing
13	Theoretical	Cylinder mercerizing
	Practice	Cylinder mercerizing
	Laboratory	Cylinder mercerizing
14	Theoretical	Yarn and hank mercerizing
	Practice	Yarn and hank mercerizing
	Laboratory	Yarn and hank mercerizing

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	2	28
Lecture - Practice	14	0	1	14
Seminar	5	0	2	10
Project	1	0	10	10
Laboratory	10	0	3	30
Reading	11	0	3	33
Midterm Examination	1	20	0	20
Final Examination	1	30	0	30
Total Workload (Hours)				175
[Total Workload (Hours) / 25*] = ECTS				7

*25 hour workload is accepted as 1 ECTS

Learning Outcomes

1	1. To make preparation of a fabric
2	2. Hydrophile process
3	3. 4. Mercerizing process Bleaching of cellulose-based textiles
4	Do optical whitening.
5	To make desizing operations.

Programme Outcomes (Textile Technology)

1	1. To have basic theoretical and practical knowledge related to the field of textile technology, weaving, finishing process and pattern design. Be able to recognize problems, develop solutions for the problems, designing and having the ability to use theoretical knowledge in practical applications.
2	2. Be able to identify problems, develop solutions to the problems, be able to devise, to have the ability to use theoretical knowledge in practical applications by using acquired the basic knowledge and skills in the field. – Be able to choose technical equipments which are needed for applications in the field and use effectively. - Awareness of the need for life-long learning to follow developments in the textile technology, learning independently and to gain awareness of continuous self-renewal. - Be able to examine the application of production processes in the textile industry. – Be respectful to their own history and to be conscious about the subjects of social responsibility, universal and social and professional ethics.
3	3. To have basic theoretical and practical knowledge related to the field of textile technology, weaving, finishing process and pattern design. To be conscious about the subjects of job security, the information of environmental protection, quality awareness and being conscious of participating in team work.
4	4. Be able to identify problems, develop solutions to the problems, be able to devise, to have the ability to use theoretical knowledge in practical applications by using acquired the basic knowledge and skills in the field. - To be conscious about the subjects of job security, the information of environmental protection, quality awareness and being conscious of participating in team work.
5	5. Be able to examine the application of production processes in the textile industry. Be able to identify problems, to develop solutions to the problems, be able to devise, to have the ability to use theoretical knowledge in practical applications by using acquired the basic knowledge and skills in the field. Be respectful their own history and be conscious about the subjects of social responsibility, universal and social and professional ethics.



6	6. Be able to examine the application of production processes in the textile industry. To be aware solutions and applications of the effects of global and societal context in technician-level; being aware of entrepreneurship and innovation, and to have knowledge of the issues of the age.
7	7. To gain the knowledge and awareness of Ataturk's principles & reforms and using Turkish Language effectively.
8	8. To gain the knowledge about his/her society and to gain a different point of view about the world

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

	L1	L2	L3
P1	3	3	3
P2	5	5	5
P3	5	5	5
P4	5	5	5
P5	5	5	5
P6	3	3	3
P7	4	4	4
P8	3	3	3

