SYNTHETIC THREAD TECHNOLOGY

1	Course Title:	SYNTHETIC THREAD TECHNOLOGY
2	Course Code:	TKSS245
3	Type of Course:	Optional
4	Level of Course:	Short Cycle
5	Year of Study:	2
6	Semester:	3
7	ECTS Credits Allocated:	3.00
8	Theoretical (hour/week):	1.00
9	Practice (hour/week):	2.00
10	Laboratory (hour/week):	0
11	Prerequisites:	NO.
12	Language:	Turkish
13	Mode of Delivery:	Face to face
14	Course Coordinator:	Öğr.Gör. SERMET ÇELİKÇAPA
15	Course Lecturers:	Öğr.Gör.Sermet Çelikçapa.
16	Contact information of the Course Coordinator:	Tel: 2942376 e-mail: sermet@uludag.edu.tr
17	Website:	
18	Objective of the Course:	To be able to recognise synthetic yarn production methods, to be able to explain textured yarn production methods, to be able to cutting and plutting filaments, Synthetic fibers are produced for different purposes will be given to recognize qualifications.
19	Contribution of the Course to Professional Development:	
20	Learning Outcomes:	

	1	To be able to realize natural and synthetic fibers.
	2	To be able to explain to produce polymer fibers.
	3	To be able to list properties of POY, FDY yarn that srectched filament yarns with stretching process.
	4	To be able to make the staple filament,to be able to recognize mixing yarns.
	5	To be able to list the methods of obtaining texturized yarn and textured yarn properties.
	6	To be able to recognize microfibres,to be able to list the properties and applications of microfibers.
	7	To be able to explain the production of bulky yarns, to list the properties and applications of bulky yarns.
	8	To be able to explain the production of elastic fibers,elastic fibers and their use to list properties.
	9	To be able to explain the production of metallic yarns,to be able to list the properties and applications of metallic yarns.

	10	To be able to explain production of bicomponent fibers,to be able to list Bicomponent fibers and their use properties.

21	Course Content:

Course Content:

Week	Theoretical	Practice
1	The history of synthetic yarn, classification of synthetic fibers.	Be distinguished from natural fibers and synthetic yarns.
2	The information about the polymer and fiber structure.	Explanation and application of fibers in which there has been obtained by polymerization reactions.
3	Methods for obtaining synthetic fibers.	Application in the laboratory to obtain chips of synthetic fibers.
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5	LOY yarn, POY yarn, FDY yarn.	Laboratory practice in order to comprehend the effect of tensile properties of filaments of the yarn process.
6	Staple filaments making.	Comparison of continuous filaments with staple filaments.
7	Texturing process.	Introduction of varieties of textured yarn.
8	I.Midterm examination.	I.Midterm examination.
9	Mixing yarns.	Technical trips in environmental companies.
10	Microfibres.	Introduction of microfibres with examples and microfibres in comparison with other fibers.
11	Bulked yarns, elastic yarns.	Introduction of bulky yarns and elastic yarns examples,comparison with other fiber bulk and elastic yarns.
12	Metallic yarns.	Introduction of metallic fibres with examples and metallic fibres in comparison with other fibers.
13	II.Midterm examination.	II.Midterm examination.
14	Bicomponent fibers.	Work in the laboratory to produce bicomponent fibers.

22	Textbooks, References and/or Other Materials:	Chemical Fibers, Prof. Dr. Necdet Seventekin, University of Ege , Synthetic Filament Yarn Production and Texturing Technology, Prof. Dr. Ali Demir,2006. Fiber information, İnci Başer,1992.
23	Assesment	

TERM LEARNING ACTIVITIES	**NUMBER**	**WEIGHT**
Midterm Exam	1	30.00
Quiz	1	20.00
Home work-project	0	0.00
Final Exam	1	50.00
Total	3	100.00
Contribution of Term (Year) Learning Activities to Success Grade		50.00
Contribution of Final Exam to Success Grade		50.00
Total		100.00
Measurement and Evaluation Techniques Used in the Course		

24	**ECTS / WORK LOAD TABLE**

Activites	Number	Duration (hour)	Total Work Load (hour)
Theoretical	14	1.00	14.00
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	1	5.00	5.00
Others	0	0.00	0.00
Final Exams	1	10.00	10.00
Total Work Load			85.00
Total work load/ 30 hr			2.83
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	5	0	4	0	0	5	0	0	0	0	0	0	0	0	0	0
ÖK2	4	5	0	0	0	5	4	0	0	0	0	0	0	0	0	0
ÖK3	0	4	0	0	0	5	4	0	0	5	0	0	0	0	0	0
ÖK4	0	5	0	0	0	0	4	0	0	4	0	0	0	0	0	0
ÖK5	0	5	0	0	0	5	4	0	0	4	0	0	0	0	0	0
ÖK6	5	4	0	0	0	5	4	0	0	0	0	0	0	0	0	0
ÖK7	5	4	0	0	0	5	4	0	0	0	0	0	0	0	0	0
ÖK8	0	4	0	0	0	5	4	0	0	0	0	0	0	0	0	0
ÖK9	5	4	0	0	0	5	4	0	0	0	0	0	0	0	0	0
ÖK10	5	4	0	0	0	5	4	0	0	0	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**