BIOMIMETIC APPLICATIONS IN TEXTILES									
1	Course Title:	BIOMIM	BIOMIMETIC APPLICATIONS IN TEXTILES						
2	Course Code:	BYT501	5						
3	Type of Course:	Optional							
4	Level of Course:	Second	Cycle						
5	Year of Study:	1							
6	Semester:	1							
7	ECTS Credits Allocated:	6.00							
8	Theoretical (hour/week):	3.00							
9	Practice (hour/week):	0.00							
10	Laboratory (hour/week):	0							
11	Prerequisites:	None							
12	Language:	Turkish							
13	Mode of Delivery:	Face to t	face						
14	Course Coordinator:	Prof. Dr.	DİLEK KUT						
15	Course Lecturers:	Prof.Dr.Y.Dilek KUT							
16	Contact information of the Course Coordinator:	Prof.Dr.Y.Dilek KUT BUÜ Mühendislik Fakültesi Tekstil Mühendisliği Bölümü dilek@uludag.edu.tr 0224 294 20 49/61							
17	Website:								
18	Objective of the Course:	Biotechnology, to examine theoretically Biomimetics, To examine theoretically Supporting theoretical approaches with textile application examples Developing new approaches							
19	Contribution of the Course to Professional Development:	To raise awareness about the environmental effects of textile production							
20	Learning Outcomes:								
		1	Ability to work in an interdisciplinary field						
		2	Ability to identify and solve engineering problems in biotechnology and biomimetry using the most up-to-date technical and informatics tools.						
		3	Gaining knowledge about sustainability approaches						
		4							
		5							
		6							
		7							
		8							
		9							
		10							
21	Course Content:								
		Co	ourse Content:						
Week	Theoretical		Practice						
1	What is Biotechnology? What are the Fundamentals of Biotechnology?								

	•		LO: L	earr	ning C	Objec	tive	s F	PQ: P	rogra	ım Qu	alifica	tions	5			
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ÖK1	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	
	PG	1 PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ1	PQ11	PQ12	PQ1	PQ14	PQ15	PQ16	
25 CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS																	
ECTS	Fredit o	r the Co	ourse				- - =								6.00		
Total w													6.00				
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Homeworks								0			0.00	0.00			0.00		
Finale	Practicals/Labs							60	60100		3.00		42.00				
Quezoretical 0						0.0	0		0.00			42.00					
Activites						Number			Dura	Duration (hour)			Total Work Load (hour)				
23	Materials: Current Literature and publications																
22	Textbooks, References and/or Other Unpublished lecture notes-Prof.Dr.Y.Dilek KUT																
14	Cone Effect-Breathable surfaces																
13	Morpho Butterfly Wing Effect- Color acquisition without using pigments																
12	Geco Effect-Ensuring the adhesion effect																
11	Shark Skin Effect-reduce to friction and hydrophobic surfaces																
10	Lotus Effect-Self cleaning surfaces																
9	What is the Importance of Biomimetic Approaches in Textile Applications?																
8	What is Biomimetry? What is Nano Technology?																
7	Enzyme use in Denim Fabric						_										
6	Enzyme use in natural fiber biopolishing																
5	Enzyme Use in Bleaching Processes																
4	Enzymatic Desizing and Hydrophilizing Process																
3	Enzyme immobilization																
2	Biotechnology Application Examples in Textile Enzymes and enzyme structures used																

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