

Course code																																	
Type and description	EC – Elective Course																																
ECTS credit	1																																
Course name	Physical Chemistry of Finishing and Maintenance of Textile Products																																
Course name in Polish	Fizyko - chemia procesów uszlachetniania i konserwacji włókien i wyrobów włókienniczych																																
Language of instruction	English																																
Course level	8 PRK																																
Course coordinator	DSc, Eng. Zbigniew Draczynski																																
Course instructors	PhD Eng Waldemar Machnowski																																
Delivery methods and course duration	<table border="1"> <thead> <tr> <th></th> <th>Lecture</th> <th>Tutorials</th> <th>Laboratory</th> <th>Project</th> <th>Seminar</th> <th>Other</th> <th>Total of teaching hours during semester</th> </tr> </thead> <tbody> <tr> <td>Contact hours</td> <td>0</td> <td>0</td> <td>0</td> <td>15</td> <td>0</td> <td>0</td> <td>15</td> </tr> <tr> <td>E-learning</td> <td>no</td> <td>no</td> <td>no</td> <td>no</td> <td>no</td> <td>no</td> <td>no</td> </tr> <tr> <td>Assessment criteria (weightage)</td> <td>0</td> <td>0</td> <td>0</td> <td>100%</td> <td>0</td> <td>0</td> <td>100%</td> </tr> </tbody> </table>		Lecture	Tutorials	Laboratory	Project	Seminar	Other	Total of teaching hours during semester	Contact hours	0	0	0	15	0	0	15	E-learning	no	no	no	no	no	no	no	Assessment criteria (weightage)	0	0	0	100%	0	0	100%
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Course objective	The aim of this course is to acquaint the student with physicochemical phenomena occurring in the processes of chemical processing of textile products and electrochemical phenomena in the textile industry and the theory of conservation process																																
Learning outcomes	PhD student after completing the course: 1.can explain the nature of the interactions and phenomena occurring between components of systems used to improve and maintain textile products. 2. can select and apply appropriate analytical methods to control the finishing and washing processes of textiles W4, U4, K1																																
Assessment methods	Methods of verification of learning outcomes effect 1,2. - presentation of the project The final grade consists of: Presentation - 100%																																
Prerequisites																																	
Course content with delivery methods	Learning content - project 1.Physico-chemical characteristics of fibres, refining substances and agents used in textile refining processes. 2) Interaction of the components in the textile refinement processes. - The state of the improvers in the phase surrounding the fiber. - Characteristics of the interactions between the refining agent molecules and fiber-forming polymers.																																
Basic reference materials	1.Lipp-Symonowicz B.: Fizyko-chemiczny aspekt procesu barwienia i rozjaśniania optycznego włókien, PAN - Komisja Włókiennicza, Łódź 2003. 2.Rybicki F. E.: Zjawiska elektrokinetyczne we włókiennictwie,PAN - Komisja Włókiennicza, Łódź 2003																																
Other reference materials	1.H.K. Rouette, Encyclopedia of Textile Finishing, Springer-Verlag Heidelberg, 2001 2. Rybicki F. E., Problemy konserwacji wyrobów włókienniczych, PAN, Łódź, 2008.																																
Average student workload outside classroom	15																																
Comments																																	
Last update	March 2023																																