

Course code																																	
Type and description	EC																																
ECTS credit	1																																
Course name	Special Applications of Colorants																																
Course name in Polish	Barwniki i pigmenty do celów specjalnych																																
Language of instruction	English																																
Course level	8 PRK																																
Course coordinator	dr hab. Radosław Podsiadły, prof. uczelni																																
Course instructors	dr hab. Radosław Podsiadły, prof. uczelni																																
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></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></td> </tr> <tr> <td>Assessment criteria (weightage)</td> <td>0,00</td> <td></td> <td></td> <td>100</td> <td></td> <td>0,00</td> <td></td> </tr> </tbody> </table>		Lecture	Tutorials	Laboratory	Project	Seminar	Other	Total of teaching hours during semester	Contact hours	0	0	0	15		0	15	E-learning	No	No	No	No	No	No		Assessment criteria (weightage)	0,00			100		0,00	
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Course objective	Enabling the acquisition of knowledge in the field of dyes and pigments to solve scientific problems arising during the Ph.D. dissertation.																																
Learning outcomes	<p>After the course a PhD student is able to:</p> <ol style="list-style-type: none"> 1. selects the right colorants to solve the scientific problem related to her/his Ph.D. thesis – effects W4 2. plans and performs experiments with the use of the different types of dyes or pigments – effect U4, K1 3. present and interprets the results of his experiments – effects W4, U4, K1 																																
Assessment methods	<p>Effects W4, U4, K1 – presentation</p> <p>The final grade consists of: Project preparation, description and oral presentation - 100%</p>																																
Prerequisites	Fundamental knowledge of physics, chemistry, and spectroscopy																																
Course content with delivery methods	<p>PROJECT</p> <p>An own topic proposed by a student and related to a subject of his Ph.D. thesis.</p>																																
Basic reference materials	<ol style="list-style-type: none"> 1. Industrial Dyes - Chemistry, Properties, Applications - ed. K. Hunger - WILEY-VCH Verlag, Weinheim, 2003. 2. Industrial Organic Pigments - eds W. Herbst, K. Hunger - WILEY-VCH Verlag GmbH & Co. KGaA, Weinheim, 2004 																																
Other reference materials	Scientific articles devoted to the modern application of colorants in analytical, photopolymerization, PTD, etc																																

Average student workload outside classroom	10 h
Comments	
Last update	April 14, 2023