


**KAPITAŁ LUDZKI**  
 NARODOWA STRATEGIA SPÓJNOŚCI

 Projekt współfinansowany przez  
 Unię Europejską w ramach  
 Europejskiego Funduszu  
 Społecznego

**UNIA EUROPEJSKA**  
 EUROPEJSKI  
 FUNDUSZ SPOŁECZNY


<b>Course title</b>		<b>ECTS code</b>	
B.Sc. laboratory class		13.3.0460	
<b>Name of unit administrating study</b>			
null			
<b>Studies</b>			
<b>faculty</b>	<b>field of study</b>	<b>type</b>	pierwszego stopnia
Wydział Chemii	Chemia	<b>form</b>	stacjonarne
		<b>specjalty</b>	chemia biomedyczna, chemia kosmetyków, analityka i diagnostyka chemiczna, chemia żywności
		<b>specialization</b>	wszystkie
<b>Teaching staff</b>			
<p>dr hab. Jolanta Kumirska, profesor uczelni; dr hab. Jarosław Ruczyński; prof. dr hab. Mariusz Makowski; dr hab. Andrzej Nowacki; dr hab. Magdalena Wysocka, profesor uczelni; prof. UG, dr hab. Agnieszka Chylewska; dr inż. Patrycja Jutrzenka Trzebiatowska; dr hab. Anna Łęgowska, profesor uczelni; prof. dr hab. Adam Prahł; dr hab. Dagmara Strumińska-Parulska, profesor uczelni; prof. dr hab. Piotr Stepnowski; prof. dr hab. Piotr Skowron; dr hab. Beata Grobelna, profesor uczelni; dr Ewa Wieczerzak; dr hab. Leszek Rolbiecki; dr Jaromir Kira; dr hab. Agnieszka Żylicz-Stachula, profesor uczelni; dr Joanna Drzeżdżon; dr Samanta Romanowska; dr hab. Alicja Boryło, profesor uczelni; dr hab. Marek Gołębiowski, profesor uczelni; dr hab. Łukasz Haliński; dr Grzegorz Olszewski; dr inż. Karolina Jagiełło; prof. dr hab. Adam Lesner; dr hab. Anna Białk-Bielińska, profesor uczelni; dr hab. Aleksandra Dąbrowska, profesor uczelni; dr hab. Zbigniew Kaczyński, profesor uczelni; dr Agnieszka Gajewicz-Skrętna; dr inż. Anna Malankowska; prof. UG, dr hab. Monika Paszkiewicz; dr Dorota Zarzeczkańska; dr Natalia Gruba; dr inż. Anna Gołąbiewska; prof. dr hab. Krzysztof Rolka; dr Grzegorz Olszewski; dr Ewa Mulkiwicz; dr hab. inż. Ewelina Grabowska-Musiał</p>			
<b>Forms of classes, the realization and number of hours</b>		<b>ECTS credits</b>	
<b>Forms of classes</b>		4	
Laboratory classes		classes 60 h	
<b>The realization of activities</b>		tutorial classes 5 h	
classroom instruction		student's own work 35 h	
<b>Number of hours</b>		TOTAL: 100 h - 4 ECTS	
Laboratory classes: 60 hours			
<b>The academic cycle</b>			
2024/2025 summer semester			
<b>Type of course</b>		<b>Language of instruction</b>	
obligatory		polish	
<b>Teaching methods</b>		<b>Form and method of assessment and basic criteria for evaluation or examination requirements</b>	
conducting experiments		<b>Final evaluation</b>	
		Graded credit	
		<b>Assessment methods</b>	
		ssignment work – conducting research and presenting results	
		<b>The basic criteria for evaluation</b>	
		According to the UG Study Regulatory;	
		<ul style="list-style-type: none"> <li>• Conditions to obtain a positive grade: min. 51% of possible points, including the preparation of diploma project</li> <li>• Negative grade could be improved based on the preparation and presentation of additional work.</li> </ul>	
<b>Method of verifying required learning outcomes</b>			
<b>Required courses and introductory requirements</b>			
<b>A. Formal requirements</b>			
none			

<b>B. Prerequisites</b>	
Knowledge of basic issues in the field of chemistry and / or related scientific fields	
<b>Aims of education</b>	
<p>To gain competences of correct performing of research in the field of selected specialization and / or topic of the diploma</p> <p>Acquainting with the basic aspects of the construction and operating principle of the used research equipment</p> <p>To gain knowledge in the field of the basic computational methods in the field of selected specialization and / or topic of the diploma</p> <p>Acquiring the ability of critical interpretation of the obtained results.</p> <p>Developing the skills of correct preparation of the diploma project.</p>	
<b>Course contents</b>	
The program contents are varied and adapted to the scope of the chosen specialization and/ or and / or topic of the diploma	
<b>Bibliography of literature</b>	
<p>A. Literature required to pass the course :</p> <p>A.1. Literature used during classes:</p> <p>Books and scientific articles are related to the selected speciality mode and / or to the topic of diploma project</p> <p>A.2. Literature for individual studies:</p> <p>Books and scientific articles are related to the selected speciality mode and / or to the topic of diploma project</p> <p>B. Extracurricular readings</p> <p>Books and scientific articles are related to the selected speciality mode and / or to the topic of diploma project</p>	
<b>The learning outcomes (for the field of study and specialization)</b>	<b>Knowledge</b>
	<b>Skills</b>
	<b>Social competence</b>
	<p>identifies the level of his/her knowledge and skills and understands the need for further education</p> <p>correctly identifies and resolves dilemmas related to this profession</p> <p>shows creativity in independent acting, can work in a team performing different roles taking into account the priorities for achieving the intended aims</p> <p>shows responsibility for the safety of own and other work and the workplace, complies with the rules conducted in emergencies</p>
<b>Contact</b>	
jolanta.kumirska@ug.edu.pl	