


**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>	
MSc seminar		13.3.1308	
<b>Name of unit administrating study</b>			
null			
<b>Studies</b>			
<b>faculty</b>	<b>field of study</b>	<b>type</b>	second tier studies (MA)
Faculty of Chemistry	Chemistry	<b>form</b>	full-time
		<b>specjalty</b>	all
		<b>specialization</b>	all
<b>Teaching staff</b>			
dr hab. Jolanta Kumirska, profesor uczelni			
<b>Forms of classes, the realization and number of hours</b>		<b>ECTS credits</b>	
<b>Forms of classes</b>		8	
Seminar		Classes 60 h	
<b>The realization of activities</b>		30 h in 3 semester	
classroom instruction		30 h in 4 semester	
<b>Number of hours</b>		Tutorial classes 50 h	
Seminar: 60 hours		25 h in 3 semester	
		25 h in 4 semester	
		Student's own work 90 h	
		45 h in 3 semester	
		45 h in 4 semester	
		TOTAL: 200 h - 8 ECTS	
		100 h and 4 ECTS in 3 semester	
		100 h and 4 ECTS in 4 semester	
<b>The academic cycle</b>			
2023/2024 winter semester			
<b>Type of course</b>		<b>Language of instruction</b>	
obligatory		english	
<b>Teaching methods</b>		<b>Form and method of assessment and basic criteria for evaluation or examination requirements</b>	
group work		<b>Final evaluation</b>	
		Graded credit	
		<b>Assessment methods</b>	
		Realization of assignment/final work - project or presentation	
		<b>The basic criteria for evaluation</b>	
		<ul style="list-style-type: none"> <li>preparation and presentation in the form of presentation of a number of issues related to the master thesis,</li> <li>establishment of the final grade based on partial grades received during the semester</li> </ul>	
<b>Method of verifying required learning outcomes</b>			
The method of verifying the acquisition of knowledge: oral presentation and argumentation during the discussion, the student solves problems in writing (reports).			
The method of verifying the acquisition of skills: the student solves problems in writing (reports) or oral (oral answer) in the related field of master thesis.			
The method of verifying the acquisition of social competences: observation of the student's behavior during classes and during consultations.			
<b>Required courses and introductory requirements</b>			
<b>A. Formal requirements</b>			

<p>Knowledge of general, inorganic, and organic chemistry, biochemistry, and mathematics at the first-cycle education. Knowledge of basic issues in the field of quantum chemistry, chemometrics and/or related scientific fields. Specific knowledge and skills in programming in Python and/or R.</p>	
<p><b>B. Prerequisites</b></p> <p>Knowledge of general, inorganic, and organic chemistry, biochemistry, and mathematics at the first-cycle education. Knowledge of basic issues in the field of quantum chemistry, chemometrics and/or related scientific fields. Specific knowledge and skills in programming in Python and/or R.</p>	
<p><b>Aims of education</b></p> <p>Development of in-depth skills in preparing and presenting oral presentations in English, mainly in the field of subjects related to the MA thesis. Preparation for independent collection and processing of scientific information based on literature searches. Knowledge of the principles of preparing and writing substantive and formally correct simple scientific publications, with particular emphasis on the thesis. Monitoring the progress of each student's project work in the framework of the parallel masters' workshop. Preparation for the master's exam.</p>	
<p><b>Course contents</b></p> <p>Rules for searching, collecting and processing scientific information based on various types of literature sources and databases in English. Principles of written preparation and editing of substantive and formally correct simple scientific publications, with particular emphasis on the thesis in the field of exact and natural sciences. Rules for preparing substantive and formally correct oral presentations at the popular science level in English, using multimedia techniques. Multimedia presentations in the thematic field related to broadly understood digital chemistry, with particular emphasis on the physics-based methods and data-based (chemoinformatics) methods, as well as issues related to realized master thesis.</p>	
<p><b>Bibliography of literature</b></p> <p>Literature required to pass the course</p> <p>A.1. Literature used during classes: Books and scientific articles related to the topic of master thesis</p> <p>A.2. Literature for individual studies Books and scientific articles related to the topic of master thesis</p> <p>Extracurricular readings Books and scientific articles related to the topic of master thesis</p>	
<p><b>The learning outcomes (for the field of study and specialization)</b></p> <p>K_W02: has in-depth knowledge in the field of basic chemistry</p> <p>K_W09: classifies specialist IT tools used in statistical evaluation of experiment results</p> <p>K_W12: knows the principles of occupational health and safety to the extent that allows independent work on a research and/or measurement position</p> <p>K_W13: demonstrates knowledge of legal and ethical conditions related to scientific and didactic work</p> <p>K_W14: explains the basic concepts and principles in the field of industrial property and copyright protection and recalls knowledge about the management of intellectual property resources; is able to use patent information</p> <p>K_W15: formulates general principles for creating and developing selected forms of individual entrepreneurship enabling the use of knowledge coming from science</p> <p>K_U07: defines and implements the directions of own further education</p> <p>K_U08: prepares and presents oral presentations in various fields of chemistry in Polish and English, using acquired knowledge and skills as well as basic sources of scientific information</p> <p>K_U10: reads with understanding scientific and popular science chemical texts in English</p> <p>K_K05: understands the need for independent search of information in scientific literature and popular science</p>	<p><b>Knowledge</b></p> <p>Student: demonstrates basic knowledge of legal and ethical conditions related to scientific activities, including protection of intellectual property and copyright, demonstrates general knowledge in the field of broadly understood digital chemistry, with particular emphasis on the physics-based methods and data-based (chemoinformatics) methods, presents expanded knowledge about current development directions and the latest scientific achievements in the field of the topic of master thesis.</p> <p><b>Skills</b></p> <p>Student: demonstrates substantive preparation for the use of chemical literature, demonstrates extended skills in understanding scientific texts in the field of chemistry in English, develops and uses literature on scientific topics related to her/his master thesis, in order to use/present them in the prepared master's thesis, logically and clearly presents the developed topic in the form of an oral presentation with a multimedia presentation, substantively participates in the discussion and shows interest in the subject presented by other speakers.</p> <p><b>Social competence</b></p> <p>Student: maintains criticism in expressing opinions and is open to the opinions of the environment, shows activity in deepening knowledge of the topics related to the master thesis and understands the need to constantly expand knowledge and skills, independently works on exploring English-language literature on the topic of master</p>

magazines	thesis and on related scientific tasks, involves in scientific discussions, demonstrates responsibility for detail and accurate providing scientific information
<b>Contact</b>	
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