

Subject card

Subject name and code	Nomenclature of Organic Compounds, PG_00188300						
Field of study	Nazewnictwo związków organicznych (Wykład)						
Date of commencement of studies	October 2026		Academic year of realisation of subject		2027/2028		
Education level	Bachelor's studies		Subject group		Obligatory subject group in the field of study		
Mode of study	full-time studies		Mode of delivery		at the university		
Year of study	2		Language of instruction		Polish		
Semester of study	3		ECTS credits		2.0		
Learning profile	academic		Assessment form		credit		
Conducting unit	Laboratory of Medical Chemistry -> Department of Biomedical Chemistry -> Faculty of Chemistry -> Rector						
Name and surname of lecturer (lecturers)	Subject supervisor		dr Marta Orlikowska				
	Teachers						
Lesson types	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	30.0	0.0	0.0	0.0	0.0	30
	E-learning hours included: 0.0						
Learning activity and number of study hours	Learning activity	Participation in didactic classes included in study plan		Participation in consultation hours		Self-study	SUM
	Number of study hours	30		5.0		15.0	50
Subject objectives	The aim of this course is to familiarize students with the principles of systematic and customary nomenclature of organic compounds and to prepare them to independently create and interpret names consistent with current IUPAC recommendations. Students will learn how to correctly write chemical structures based on systematic names and how to correctly create compound names based on given structures. Upon completion of the course, students will be able to consciously and precisely use chemical nomenclature in the context of forensic analysis and the interpretation of material evidence.						

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[AKRL3_W01] The graduate knows and understands, at an advanced level, the laws and theories in the field of chemistry, as well as the basics of biology, mathematics and law constituting general knowledge in the scientific disciplines forming the theoretical foundations relevant to the study program.	Student knows and understands the principles of systematic and customary nomenclature of organic compounds, consistent with current IUPAC recommendations. Student understands the importance of unambiguous chemical identification in laboratory documentation, toxicology reports, and expert opinions.	[SW4] test/egzamin - ustny lub pisemny
	[AKRL3_W03] The graduate knows and understands the structure and chemical properties of compounds relevant in forensic examinations.	Student knows the nomenclature and classification of compounds important in forensic analysis (e.g. controlled substances, drugs, precursors, toxins, explosives).	[SW4] test/egzamin - ustny lub pisemny
	[AKRL3_K01] The graduate is ready to critically evaluate their own knowledge, understand its importance for solving cognitive and practical problems, and to seek expert opinions when necessary.	Student is ready to critically evaluate their own knowledge of chemical nomenclature and its importance in solving practical problems, especially in forensic analysis. Student understands the importance of precise nomenclature for the reliability of forensic opinions and expertise, as well as professional responsibility. Student is ready to seek expert advice in situations requiring specialized interpretation of names of complex, non-standard, or ambiguous compounds.	[SK4] test/egzamin - ustny lub pisemny
Subject contents	Introduction to the nomenclature of organic compounds (naming systems: common, semisystematic, and systematic names; basic principles of IUPAC nomenclature); The structure of organic compound names (numbering of atoms in a chain, principles of priority, identification of the parent functional group); Principles of naming individual functional groups; Principles of naming polyfunctional compounds (functional group hierarchy); Stereochemistry in the naming of organic compounds. Use of nomenclature in the scientific literature and databases (e.g., CAS, PubChem).		
Prerequisites and co-requisites	Student should have basic knowledge of organic chemistry, including types of bonds and hybridization, functional groups and classes of organic compounds, concepts of isomerism (structural and spatial) and absolute configuration.		
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	written exam with closed and open questions (tasks)	51.0%	100.0%
Recommended reading	Basic literature	L.G. Wade Organic Chemistry IUPAC Brief Guide to the Nomenclature of Organic Chemistry, 2014	
	Supplementary literature	J. McMurry Organic Chemistry IUPAC Nomenclature of Organic Chemistry: IUPAC Recommendations and Preferred Names, 2013	
	eResources addresses		

Example issues/ example questions/ tasks being completed	
Work placement	Not applicable

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