



## Subject card

Subject name and code	History of discoveries and inventions , PG_00038532						
Field of study	Chemical Technology						
Date of commencement of studies	February 2023	Academic year of realisation of subject			2022/2023		
Education level	second-cycle studies	Subject group			Obligatory subject group in the field of study Humanistic-social subject group		
Mode of study	Full-time studies	Mode of delivery			at the university		
Year of study	1	Language of instruction			Polish		
Semester of study	1	ECTS credits			3.0		
Learning profile	general academic profile	Assessment form			assessment		
Conducting unit	Department of Polymers Technology -> Faculty of Chemistry						
Name and surname of lecturer (lecturers)	Subject supervisor	dr hab. inż. Justyna Kucińska-Lipka					
	Teachers	dr hab. inż. Justyna Kucińska-Lipka dr inż. Aneta Pacyna-Kuchta dr inż. Patrycja Szumała dr inż. Paulina Parcheta-Szwindowska dr inż. Maciej Sienkiewicz dr inż. Marcin Włoch dr hab. inż. Hubert Cieśliński dr inż. Ewa Głowińska dr inż. Konrad Trzeciński					
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	30.0	0.0	0.0	0.0	15.0	45
	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	45	5.0		25.0	75	
Subject objectives	The aim of the course is to familiarize students with discoveries, Nobel prizes and issues related to these discoveries in chronological order in different branches of the science.						
Learning outcomes	Course outcome	Subject outcome			Method of verification		
	K7_K02	can interest the social environment with facts and scientific discoveries			[SK4] Assessment of communication skills, including language correctness		
	K7_K01	can associate the facts of scientific discoveries with their application			[SK4] Assessment of communication skills, including language correctness		
Subject contents	Issues related to the history of optical microscopy , electron and atomic force microscopy , Nobel prizes in this field and discoveries made with regard to these research methods. History of substitute materials and new applications of modern materials. Microorganisms and their detection and the importance for humanity. Inventions in XXI century.						
Prerequisites and co-requisites	The basic chemical and technical knowledge						
Assessment methods and criteria	Subject passing criteria	Passing threshold			Percentage of the final grade		
	Seminar	60.0%			40.0%		
	Lecture	60.0%			60.0%		
Recommended reading	Basic literature	Czasopisma, patenty, biografie					
	Supplementary literature	Encyclopedia					
	eResources addresses						

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