



## Subject card

Subject name and code	Industrial Safety in Chemical Industry. Ergonomics, PG_00048550						
Field of study	Chemical Technology						
Date of commencement of studies	October 2021		Academic year of realisation of subject		2022/2023		
Education level	first-cycle 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	general academic profile		Assessment form		assessment		
Conducting unit	Department of Analytical Chemistry -> Faculty of Chemistry						
Name and surname of lecturer (lecturers)	Subject supervisor		prof. dr hab. inż. Żaneta Polkowska				
	Teachers		prof. dr hab. inż. Żaneta Polkowska				
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	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		2.0		18.0	50
Subject objectives	Preparing to work in the chemical laboratory. Preparing to work in the chemical industry.						
Learning outcomes	Course outcome		Subject outcome		Method of verification		
	K6_U12		The student is able to apply the principles of occupational health and safety to a specific example		[SU1] Assessment of task fulfilment [SU5] Assessment of ability to present the results of task [SU2] Assessment of ability to analyse information		
	K6_K03		Student has the ability to make decisions on health and safety at work		[SK5] Assessment of ability to solve problems that arise in practice [SK1] Assessment of group work skills		
	K6_W05		The student has knowledge of work safety in the chemical industry and ergonomics		[SW2] Assessment of knowledge contained in presentation [SW1] Assessment of factual knowledge		
Subject contents	Lecture The range of responsibilities and eligibilities of employers, employees and people, who control employees in the area of occupational safety and hygiene. Verification of the conditions at work and certification. Preventive heath protection. Hazardous factors for health in the working environment. Harmful and oppressive factors for health in the working environment. Occupations particularly dangerous. Training of the employees in the area of occupational safety and hygiene. Accidents at work and occupational diseases. Personal protective equipment, protective clothing, working clothing. Emergency first aid. National and international rules and regulations governing occupational safety and hygiene. Safety standards. Safety signs. Occupational safety and risk management. Ergonomics in the occupational safety and hygiene management.						
Prerequisites and co-requisites	No requirements						
Assessment methods and criteria	Subject passing criteria		Passing threshold		Percentage of the final grade		
	Assessment of occurrence		100.0%		50.0%		
	Discussion in class		0.0%		50.0%		

Recommended reading	Basic literature	Wykaz literatury podstawowej: 1. Rączkowski B., BHP w praktyce, oddk Gdańsk, 2008 2. Kubasiak S., BHP w przemyśle chemicznym nieorganicznym, Instytut Wydawniczy CRZZ, 1974 3. Górka E., Ergonomia, Oficyna Wydawnicza Politechniki Warszawskiej, 2007 4. Pawłowska Z., Rzepecki J., Zarządzanie bezpieczeństwem pracy i ryzykiem, Centralny Instytut Ochrony pracy, Państwowy Instytut Badawczy, 2008
	Supplementary literature	Literatura uzupełniająca: 3. Skowroń J., Zapór L., Pośniak M., Szewczyńska M., Lisowski A., Czynniki chemiczne w środowisku pracy, Centralny Instytut Ochrony pracy, Państwowy Instytut Badawczy, 2006 4. Michalik J. S., Poważne awarie chemiczne, Centralny Instytut Ochrony pracy, Państwowy Instytut Badawczy, 2007 5. Michalik J. S., Zapobieganie poważnym awariom przemysłowym, Centralny Instytut Ochrony pracy, Państwowy Instytut Badawczy, 2005 6. Norma PN ISO 18000:2004
	eResources addresses	Adresy na platformie eNauczanie:
Example issues/ example questions/ tasks being completed	<p>Duties and powers of employers, employees and persons managing employees in safety and health at work.</p> <p>Preventative health care.</p> <p>Characteristics of selected hazard.</p> <p>Characteristics of selected factors harmful and disruptive.</p> <p>Accidents at work and occupational diseases.</p> <p>. First aid in emergencies.</p> <p>Signs of safety.</p> <p>Safety management and risk management.</p>	
Work placement	Not applicable	