



## Subject card

Subject name and code	SAFETY AND HEALTH AT WORK, PG_00049192						
Field of study	Chemistry						
Date of commencement of studies	October 2021	Academic year of realisation of subject			2021/2022		
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	1	Language of instruction			Polish		
Semester of study	1	ECTS credits			1.0		
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	15.0	0.0	0.0	0.0	0.0	15
	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	15		5.0		5.0	25
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_W09] has knowledge on chemical management and the concept of sustainable development necessary to conduct the management of chemicals (including dangerous substances) in the industrial plant, knows health and safety issues and ergonomics.		Objectives: To acquire the necessary knowledge of occupational safety and health, environmental protection, safety management systems and ergonomics. To improve skills in: - the use of work organization principles to ensure safe and hygienic working conditions and ergonomics and physiology; - occupational health and safety management.		[SK3] Assessment of ability to organize work [SU3] Assessment of ability to use knowledge gained from the subject [SK1] Assessment of group work skills		
	[K6_U09] can recognize the danger, counteract and work with chemical reagents and basic technical apparatus in accordance with the safety regulations		Student can work with chemical reagents and basic technical equipment in accordance with the principles of safety and health		[SU2] Assessment of ability to analyse information [SU3] Assessment of ability to use knowledge gained from the subject		
	[K6_K07] is aware of his social role as a graduate of a Technical University, especially in presenting information and opinion to the public about the risks and opportunities posed by chemical sciences; undertakes actions to communicate such information in a comprehensible manner		The student is aware of the dangers and opportunities created by the chemical sciences; It shall take steps to provide such information in a comprehensible manner		[SK5] Assessment of ability to solve problems that arise in practice [SK1] Assessment of group work skills		
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 health 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
	tests during lectures	60.0%	100.0%
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. Górski 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		
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		