



Subject card

Subject name and code	, PG_00059213						
Field of study	Ocean Engineering						
Date of commencement of studies	February 2023	Academic year of realisation of subject			2023/2024		
Education level	second-cycle studies	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	2	ECTS credits			2.0		
Learning profile	general academic profile	Assessment form			assessment		
Conducting unit	Institute of Manufacturing and Materials Technology -> Faculty of Mechanical Engineering and Ship Technology						
Name and surname of lecturer (lecturers)	Subject supervisor	dr inż. Sławomir Szymański					
	Teachers						
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	0.0	0.0	30		
Subject objectives	Acquiring knowledge in the field of threats and methods of safety assessment in the workplace. The ability to determine the degree of risk at the workplace.. The ability to draw up a safety management plan in the workplace						
Learning outcomes	Course outcome	Subject outcome			Method of verification		
	[K7_W71] has general knowledge in humanistic, social, economic or legal sciences, including their fundamentals and applications	The student has knowledge of safety and legal standards on risk assessment and security at the post The student knows how develop a safety plan in the enterprise industrial.			[SW1] Assessment of factual knowledge		
	[K7_K71] is able to explain the need to apply knowledge from humanistic, social, economic or legal sciences in order to function in a social environment	The student is able to assess the threats at the workplace. Student is able to assess the degree of risk on the workplace. The student knows how apply legal norms to creating jobs.			[SK2] Assessment of progress of work		
	[K7_K03] is aware of their social role as a graduate of a technical university, is aware of the importance of adhering to professional ethics and respect of the diversity of views				[SK2] Assessment of progress of work		
	[K7_K01] is aware of the need of constant learning, can critically assess the content, is aware of the meaning of knowledge in solving cognitive and practical problems	The student can do it in the event of an accident implement a protection system employee against the threat.			[SK5] Assessment of ability to solve problems that arise in practice		
	[K7_K02] is aware non-technical aspects and effects of operation as an engineer, its influence on the environment and is aware of the responsibilities for the decisions taken	The student is able to apply knowledge in the field of employee protection against hazards at the workplace			[SK2] Assessment of progress of work		
	[K7_U71] is able to apply knowledge from humanistic, social, economic or legal sciences in order to solve problems	The student is able to apply knowledge in the field of employee protection against hazards at the workplace			[SU1] Assessment of task fulfilment		

Subject contents	Functional safety and work safety. Human error and its consequences in technology and industry. Rules of maintaining safety at work. Methods of occupational risk assessment in industry: methods according to PN-N-18000: three-stage and five-stage, Risk Score method, accident risk assessment procedures Development of a security plan in an industrial enterprise. Management functions in relation to safety in the enterprise: planning, organizing, motivating and controlling. Safety management and quality management in an enterprise. Building a management system work safety in the enterprise. Organizational methods of increasing safety in the enterprise. IT techniques supporting the process of risk assessment, analysis and documentation.		
Prerequisites and co-requisites			
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	test	60.0%	100.0%
Recommended reading	Basic literature	1. Lis T., Nowacki K.: Zarządzanie bezpieczeństwem w zakładzie przemysłowym, Wydawnictwo Politechniki Gliwickiej, Gliwice 2005 2. Karczewski J.T.: Systemy zarządzania bezpieczeństwem pracy. ODDK Gdańsk 2001	
	Supplementary literature	1. Kosiński R., Grabowski A. "Zastosowanie sztucznych komórkowych sieci neuronowych w inteligentnych systemach bezpieczeństwa", CiOP-PIB 2008 2. Strawiński T. "Zapewnienie bezpieczeństwa użytkownika maszyn metodami sterowania", CiOP-PIB 2008 3. Korzeniowski L F. Podstawy nauk o bezpieczeństwie. Zarządzanie bezpieczeństwem, Wyd. Difin, Warszawa 2012	
	eResources addresses		
Example issues/ example questions/ tasks being completed	1. Determine occupational risks using the Risk score method for a selected workplace (e.g. milling machine operator) 2. List the dangers at the selected workplace (e.g. welder's position) 3. List and characterize the basic methods of risk assessment in the position. 4. List and characterize the sources of threats in a selected industry or in a selected process. 5. Characterize the levels and areas of systemic safety management for the selected one position or process.		
Work placement	Not applicable		