

GDAŃSK UNIVERSITY

Subject card

Subject name and code	STANDARDIZATION AND MANAGEMENT OF CORROSION, PG_00039726									
Field of study	Materials Engineering, Materials Engineering, Materials Engineering									
Date of commencement of studies	October 2021		Academic year of realisation of subject			2023/2024				
Education level	first-cycle studies		Subject group			Optional subject group Subject group related to scientific research in the field of study				
Mode of study	Full-time studies		Mode of delivery			at the university				
Year of study	3		Language of instruction			Polish Polish				
Semester of study	6		ECTS credits			1.0				
Learning profile	general academic profile		Assessment form			assessment				
Conducting unit	Department of Electr	ochemistry, Co	rrosion and Materials Engineering -> Faculty of Chemistry							
Name and surname	Subject supervisor		dr hab. inż. Andrzej Miszczyk		′k					
of lecturer (lecturers)	ecturers) Teachers									
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Projec	t	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 classes include plan	n didactic led in study	Participation in consultation hours		Self-study		SUM		
	Number of study 15 hours			1.0		9.0		25		
Subject objectives	Getting to know the standards and how to use them in engineering practice. Standardization organizations in the world and in Poland. Sources of knowledge about corrosion: scientific journals, databases, books, standards, industry publications. Writing technical reports, theses and reports - requirements and standardization.									
Learning outcomes	Course outcome		Subject outcome			Method of verification				
	K6_W10		The student has elementary knowledge of management and running a business, in particular quality management.			[SW1] Assessment of factual knowledge				
	К6_К01		The student is aware of the need to improve his/her professional competences, understands his/her limitations and the need to cooperate with experts, and is able to define priorities when implementing tasks.			[SK5] Assessment of ability to solve problems that arise in practice [SK1] Assessment of group work skills				
	K6_U03		The student has the ability to analyze the functioning of a specific technical solution in terms of its connection with materials engineering, this applies primarily to devices, objects, systems and processes.			[SU3] Assessment of ability to use knowledge gained from the subject [SU2] Assessment of ability to analyse information [SU1] Assessment of task fulfilment				
	K6_W09		The student has basic knowledge necessary to understand the social, economic, legal and other non-technical conditions of engineering activities.			[SW1] Assessment of factual knowledge				
Subject contents	Standard - definition, purpose of using standards, need and benefits of standardization. International standardization and corrosion organizations. Association for Materials Protection and Performance (USA), ISO - International Organization for Standardization, EFC - European Corrosion Federation, PSK - Polish Corrosion Association. Institutions issuing legal acts and instructions regarding corrosion issues: ASTM - American Society for Standards and Materials, SSPC - Committee for Painting of Steel Structures. Manufacturers of metals and coating products. Contracting companies. International classification of standards. Documentation. Discussion of examples of standards relevant to the field of corrosion and corrosion protection (ISO). Corrosion journals in the world and in Poland. Requirements for technical reports, diploma theses. Databases and how to use them.									

Prerequisites and co-requisites	no entry requirements					
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade			
	team activities	60.0%	30.0%			
	test	60.0%	70.0%			
Recommended reading	Basic literature	web pages of standardization and corrosion organizations on the Internet, corrosion journals available in the database of the Main Library of the Gdańsk University of Technology, texts of standards, company literature (catalogues)				
	Supplementary literature	manufacturers' advertising materials, catalogues, technical sheets				
	eResources addresses	Podstawowe				
		http://www.ampp.org - website of the Association for Materials Protection and Performance (USA)				
		http://pkn.pl - website of the Polish Committee for Standardization				
		Uzupełniające				
		Adresy na platformie eNauczanie:				
Example issues/ example questions/ tasks being completed	Definition of standard. Standardization organizations around the world. Corrosion organizations in the world, Structure of a scientific article. Databases of scientific journals. Marking the cleanliness of surfaces before painting according to the PN-EN ISO 12944 standard.					
Work placement	Not applicable					