GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	STANDARDIZATION AND MANAGEMENT OF CORROSION, PG_00060324		
Field of study	Materials Engineering		
Date of commencement of studies	October 2023	Academic year of realisation of subject	2025/2026
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	2.0
Learning profile	general academic profile	Assessment form	assessment
Conducting unit	Department of Corrosion and Electrochemistry -> Faculty of Chemistry -> Faculties of Gdańsk University of Technology		
Name and surname of lecturer (lecturers)	Subject supervisor	dr hab. inż. Andrzej Miszczyk	
	Teachers	dr hab. inż. Andrzej Miszczyk	

Lesson types

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

eNauczanie source address: https://enauczanie.pg.edu.pl/2025/course/view.php?id=4826

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	30.0	50

Subject objectives

The aim of the course is to familiarize students with the acquisition of specialized and, indirectly, general knowledge, including economics, through access to databases, journals, and standards. This will be accomplished using corrosion problems as an example. The exchange of specialized information through publishing articles, searching for necessary information in databases and journals, membership in industry associations, etc. will be discussed. The standard structure of a scientific article, thesis, and report will be presented as a standardized form of knowledge exchange. The need to enhance one's knowledge and personal competencies through continuous learning will be emphasized.

Learning outcomes

Course outcome	Subject outcome	Method of verification
[K6_K01] Understands the need to improve professional and personal competencies; is conscious of own limitations and knows when to turn to experts, properly establishes priorities helping to accomplish tasks defined by oneself or others.	The student is aware of the fact that he or she must improve his or her knowledge and professional and personal competences, and is also able to assess the need to turn to experts when the priority is to complete a specific task.	[SK5] Assessment of ability to solve problems that arise in practice
[K6_W09] Has general knowledge of humanities, social or economic sciences, covering their basics and applications.	The student is interested in in the humanities and has general knowledge, especially in the humanities and economics, and tries to learn their basics and practical usefulness.	[SW1] Assessment of factual knowledge
[K6_W10] Has base knowledge of management, including quality management and running a business.	The student has basic knowledge of management, including quality management, knows the relevant standards and is able to use them for this purpose, and has knowledge of the principles of running a business.	[SW3] Assessment of knowledge contained in written work and projects
[K6_U03] Can critically analyze and evaluate the functioning – particularly in the context of materials engineering –existing technical solutions, particularly equipment, objects, systems, processes.	The student is able to critically evaluate existing solutions and analyze their performance, also in terms of their material solutions.	[SU3] Assessment of ability to use knowledge gained from the subject

Subject contents

Course content – lecture
The global knowledge exchange system: the role of scientific and technical journals, databases, standards, and industry associations. The role of libraries and accessing databases through libraries. The structure of a scientific article, thesis, report, and report. The definition of a standard, its usefulness, and methods of application. Practical use of standards to solve corrosion problems. Familiarization with key corrosion standards.

Prerequisites and co-requisites

Corrosion Basics.
Introductory Library Training.

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
test	60.0%	60.0%
project	100.0%	40.0%

Recommended reading

Basic literature	Scholarly Pathways, Knowledge Transfer and Knowledge Exchange in Academia, 2020 Standards, websites of standardization organizations ISO, ASTM, PKN.
Supplementary literature	websites of corrosion organizations around the world
eResources addresses	Basic https://www.iso.org/home.html - 322 The International Organization for Standardization (ISO) is an independent, non-governmental institution of national standards bodies that develops voluntary, international standards for products, systems and services to ensure their quality, safety and efficiency. https://www.pkn.pl/polskie-normy - Website of the Polish Committee for Standardization Supplementary https://psk.org.pl/ - website of the Polish Corrosion Association

Example issues/ example questions/ tasks being completed

Provide a definition of a standard. Name five global standards organizations. Describe the structure of a typical scientific article. Name five journals on corrosion. Name scientific databases. Provide the number and name of the standard regarding steel structure coatings.

Practical activites within the subject

Not applicable

Document generated electronically. Does not require a seal or signature.