

GDAŃSK UNIVERSITY

Subject card

Subject name and code	Diploma Thesis, PG_00052338								
Field of study	Chemical Technology								
Date of commencement of studies	October 2020		Academic year of realisation of subject		2023/2024				
Education level	first-cycle studies		Subject group						
Mode of study	Full-time studies		Mode of delivery			at the university			
Year of study	4		Language of instruction			Polish The vast majority of literature is available only in English			
Semester of study	7		ECTS credits			10.0			
Learning profile	general academic profile		Assessment form			assessment			
Conducting unit	Department of Analytical Chemistry -> Faculty of Chemistry								
Name and surname	Subject supervisor		dr inż. Bartłomiej Cieślik						
of lecturer (lecturers)	Teachers								
Lesson types and methods	Lesson type	Lecture	Tutorial	Laboratory	oratory Project		Seminar	SUM	
of instruction	Number of study hours	0.0	0.0	0.0 0.0			0.0	0	
	E-learning hours included: 0.0								
Learning activity and number of study hours	Learning activity	g activity Participation in classes include plan		Participation in consultation hours		Self-study		SUM	
	Number of study 0 hours			15.0		235.0		250	
Subject objectives	The aim of the course is to familiarize the student with the methods of theoretical work and performing a literature review necessary to complete the diploma thesis								
Learning outcomes	Course outcome		Subject outcome			Method of verification			
	K6_W12		The student consciously uses definitions and nomenclature specific to the topic being discussed, knowing their meaning and using them in the appropriate context, also translating definitions from English into Polish in a proper manner			[SW3] Assessment of knowledge contained in written work and projects [SW1] Assessment of factual knowledge			
	K6_K01		The student is aware of the progress he has made in conducting research and creating a literature review and is able to indicate in what aspects his knowledge of the described topic has developed			[SK2] Assessment of progress of work			
	K6_U01		The student is able to analyze literature, both in Polish and English and is able to present collected information in a synthetic way as part of the literature review			[SU1] Assessment of task fulfilment [SU2] Assessment of ability to analyse information			
	K6_K05		The student is able to plan, conduct, and present the results of the thesis in a popular format and is able to share basic thoughts regarding his or her work			[SK4] Assessment of communication skills, including language correctness [SK2] Assessment of progress of work			
Subject contents	As part of the course, the student conducts a literature review directly related to the topic of the diploma thesis being prepared. Based on the knowledge gathered during the literature review, the student prepares the content of the diploma thesis, consulting it on an ongoing basis with the supervisor. The work takes into account the results of research carried out in the diploma laboratory.								
Prerequisites and co-requisites	The student must have basic knowledge of using databases and preparing popular science texts								

Assessment methods	Subject passing criteria	Passing threshold	Percentage of the final grade				
and criteria	Assessment of the quality of a complete diploma thesis	60.0%	100.0%				
Recommended reading	Basic literature	Cieślik, B.M., Świerczek, L., Konieczka, P., 2018. Analytical and legislative challenges of sewage sludge processing and management. Monatshefte für Chemie - Chem. Mon. 149, 16351645. https://doi.org/ 10.1007/s00706-018-2255-2					
		Świerczek, L., Cieślik, B.M., Konieczka, P., 2021. Challenges and opportunities related to the use of sewage sludge ash in cement-based building materials A review. J. Clean. Prod. 287. https://doi.org/10.1016/ j.jclepro.2020.125054					
		Świerczek, L., Cieślik, B.M., Konieczka, P., 2018. The potential of raw sewage sludge in construction industry A review. J. Clean. Prod. 200, 342356. https://doi.org/10.1016/j.jclepro.2018.07.188					
	Supplementary literature	Cieślik, B., Konieczka, P., 2017. A review of phosphorus recovery methods at various steps of wastewater treatment and sewage sludge management. The concept of no solid waste generation and analytical methods. J. Clean. Prod. https://doi.org/10.1016/j.jclepro.2016.11.116					
		Cieślik, B.M., Namieśnik, J., Konieczka, P., 2015. Review of sewage sludge management: Standards, regulations and analytical methods. J. Clean. Prod. 90, 115. https://doi.org/10.1016/j.jclepro.2014.11.031					
		Cieślik, B.M., Zając, M., Gałuszka, A., Konieczka, P., 2018. Comprehensive stabilization of all streams of solid residues formed during sewage sludge thermal treatment Case study. J. Clean. Prod. 178, 757767. https://doi.org/10.1016/j.jclepro.2018.01.069					
	eResources addresses	Uzupełniające Adresy na platformie eNauczanie:					
Example issues/ example questions/ tasks being completed	- Preparation of a literature review						
	- Preparation of literature data in tabular or other graphic form						
	- Drawing constructive conclusions based on the collected data						
Work placement	Not applicable						