GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	Quality control in chemical technology , PG_00038552		
Field of study	Chemical Technology		
Date of commencement of studies	February 2024	Academic year of realisation of subject	2023/2024
Education level	second-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	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 Polymers Technology -> Faculty of Chemistry		
Name and surname of lecturer (lecturers)	Subject supervisor	dr inż. Ewa Głowińska	
	Teachers	dr inż. Ewa Głowińska	

Lesson types and methods of instruction

Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
Number of study hours	0.0	0.0	15.0	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

The aim of the course is to acquire students the ability to plan and perform the basic characteristics of physicochemical and mechanical properties of specific products in the field of polymers, cosmetics and functional materials according to standards and other regulation in quality control of particular product.

Learning outcomes

Course outcome	Subject outcome	Method of verification
K7_K01	students are able to critically evaluate the test results	[SK2] Assessment of progress of work
K7_K04	students are able to assign specific roles in a team in order to conduct specific research	[SK1] Assessment of group work skills
K7_U05	students have the ability to independently carry out specific research using modern techniques in the field of chemical analysis, physical, mechanical and biological characteristics of a specific product according to the quality control requirements.	[SU4] Assessment of ability to use methods and tools

Subject contents

Product quality control in industry; safety data sheet, technical approval, requirements according to the Pharmacopea, other regulations informing about the quality of the product. Products for self-testing from the group of polymer granulates, including biodegradable ones (e.g. cutlery, cups, medical equipment), polymer packaging (for contact with food, cosmetics, other technical products), polymer products and polymer composites in construction (e.g. insulation boards, pipes, paints) and medicine (dressings, stable and biodegradable implants). Products from the group of pharmaceuticals and selected drugs (anti-bullets, vitamins, ointments). Products from the group of pharmaceuticals and selected drugs (painkillers, vitamins, ointments). Products from the group of cosmetics, detergents and household chemicals (anionic and non-ionic surfactants, creams, shampoos, etc.).

Prerequisites and co-requisites

No requirements

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
obligatory practical workshop	60.0%	50.0%
Final presentation	60.0%	50.0%

Recommended reading	Basic literature	1. Broniewski T., Kapko J., Płaczek W., Thomala J. T.: Metody badań charakterystyczne dla polimerów, WNT, W-wa 1970. 2. Łączyński B.; Tworzywa wielkocząsteczkowe, WNT W-wa 19823. Data sheets, technical approvals in construction (via Internet) Pharmacopea Product information leaflets Industry guidelines
	Supplementary literature	1. Przygocki W.: Metody fizyczne badań polimerów, PWN, W-wa 19904. 2. ASTM, DIN, EU standards https://biotechnologia.pl/kosmetologia/kontrola-jakosci-w-produkcji-kosmetykow,10734
	eResources addresses	Adresy na platformie eNauczanie:
Example issues/ example questions/ tasks being completed	Sample products analyzed: biodegradable filament for FDM 3D printing Paracetamol Anti-dandruff shampoo	
Work placement	Not applicable	