



Subject card

Subject name and code	DESIGN OF COSMETIC PRODUCT, PG_00064322						
Field of study	Chemical Technology						
Date of commencement of studies	February 2027		Academic year of realisation of subject			2026/2027	
Education level	second-cycle studies		Subject group			Optional subject group Specialty subject group Subject group related to scientific research in the field of study	
Mode of study	Full-time studies		Mode of delivery			blended-learning	
Year of study	1		Language of instruction			Polish	
Semester of study	1		ECTS credits			4.0	
Learning profile	general academic profile		Assessment form			assessment	
Conducting unit	Department of Biotechnology and Microbiology -> Faculty of Chemistry -> Faculties of Gdańsk University of Technology						
Name and surname of lecturer (lecturers)	Subject supervisor		dr hab. inż. Patrycja Szumała				
	Teachers						
Lesson types	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	15.0	0.0	30.0	15.0	0.0	60
	E-learning hours included: 2.0						
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	60		8.0		32.0	100
Subject objectives	The aim of the course is for students to independently design a cosmetic, including a description on the label and packaging, analyze it in terms of basic physicochemical parameters and stability, and prepare the documentation (report) required before introducing the cosmetic product to the market.						
Learning outcomes	Course outcome		Subject outcome			Method of verification	
	[K7_K03] can interact and work in a group, taking on a variety of roles		understands the need for teamwork in order to create and present their own cosmetic product.			[SK1] Assessment of group work skills	
	[K7_U09] prepares documentation of experiments and technological processes using professional terminology		Is able to prepare the documentation necessary to create a cosmetic safety report			[SU5] Assessment of ability to present the results of task [SU2] Assessment of ability to analyse information	
	[K7_W02] selects appropriate apparatus and materials for the manufacture and processing of consumer goods		has the knowledge necessary to create a cosmetic formula, manufacture a product based on this formula, and correct/improve the composition based on the results of the analysis of basic parameters.			[SW3] Assessment of knowledge contained in written work and projects	

Subject contents	Course content – lecture		
	<ol style="list-style-type: none">1. Principles for the practical selection of base and additional ingredients for selected cosmetic formulations.2. Natural cosmetic ingredient requirements and limitations.3. Cosmetic design principles.4. Cosmetic market launch procedure.5. Cosmetic product documentation.6. Required physicochemical tests and studies.7. Cosmetic product safety assessment.		
	Course content – laboratory		
	<ol style="list-style-type: none">1. Obtaining selected cosmetic products based on prepared qualitative and quantitative recipes2. Producing products in accordance with acceptance forms3. Testing the basic physicochemical parameters of the manufactured products4. Quality control during storage5. Sensory and application analysis of the manufactured products		
Prerequisites and co-requisites	Course content – project		
	<ol style="list-style-type: none">1. Selection of products for production2. Development of qualitative and quantitative formulas for selected cosmetics3. Development of a method for obtaining selected cosmetics4. Development of appropriate packaging and labeling in accordance with legal requirements5. Selection of appropriate parameters as the basis for quality control6. Development of methods for analyzing selected parameters and control conditions7. Development of product documentation		
	Basic knowledge of cosmetic ingredients.		
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	grade from presentation	100.0%	40.0%
	report evaluation	100.0%	60.0%
Recommended reading	Basic literature	Martini C., Kosmetologia i farmakologia skóry, Wydawnictwo Lekarskie PZWL, Warszawa, 2007	
		Barel A., Paye M., Maibach H., Handbook of Cosmetic Science and Technology, wyd. III, Londyn, Informa Health Care, 2009	
		and other cosmetic monographs	
	Supplementary literature	Meryem Uckaya, Fatih Uckaya, Nazan Demir, Yasar Demir; Evaluation of the efficiency and safety in cosmetic products, International Journal of Pharmaceutics 499 (2016) 295300.	
	Huang, Catherine K, and Timothy A Miller. The truth about over-the-counter topical anti-aging products: a comprehensive review. Aesthetic surgery journal vol. 27,4 (2007): 402-12		
	And other scientific publications about cosmetic ingredients		
	eResources addresses		
Example issues/ example questions/ tasks being completed	Development of a recipe for the selected product		
Practical activities within the subject	Not applicable		

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