



Subject card

Subject name and code	Semester Project III, PG_00068925						
Field of study	Cosmetic technologies						
Date of commencement of studies	October 2025		Academic year of realisation of subject		2026/2027		
Education level	first-cycle studies		Subject group		Obligatory subject group in the field of study 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	2		Language of instruction		Polish		
Semester of study	3		ECTS credits		8.0		
Learning profile	general academic profile		Assessment form		assessment		
Conducting unit	Department of Chemistry Technology and Biotechnology of Food -> Faculty of Chemistry -> Faculties of Gdańsk University of Technology						
Name and surname of lecturer (lecturers)	Subject supervisor		dr inż. Agata Sommer				
	Teachers		dr inż. Agata Sommer dr inż. Szymon Mania dr Karol Parchem dr inż. Antoni Taraszkiewicz dr hab. inż. Edyta Malinowska dr hab. inż. Robert Tylingo dr inż. Izabela Koss-Mikołajczyk dr inż. Adrianna Banach-Kopeć				
Lesson types	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	0.0	0.0	0.0	100.0	0.0	100
	E-learning hours included: 0.0						
	eNauczanie source address: https://enauczanie.pg.edu.pl/2025/course/view.php?id=8394 Moodle ID: 8394 Projekt semestralny III https://enauczanie.pg.edu.pl/2025/course/view.php?id=8394						
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	100		10.0		90.0	200
Subject objectives	The aim of the course is the collaborative implementation of a project involving the preparation, characterization and application of cosmetic raw materials in the development of cosmetic formulations, as well as the evaluation of the properties of the obtained products.						

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[K6_W07] has knowledge of designing experiments while maintaining intellectual property protection and the principles of bioethics and applicable legal regulations	Has the knowledge necessary to plan studies of a cosmetic product, taking into account applicable legal regulations, safety principles and intellectual property protection.	[SW3] Assessment of knowledge contained in written work and projects
	[K6_K01] understands the need to constantly expand knowledge in line with the latest scientific achievements, develop professional competences and teamwork skills	Is ready to work collaboratively in a team, responsibly carry out assigned tasks, and critically evaluate the outcomes of individual and team work.	[SK1] Assessment of group work skills [SK2] Assessment of progress of work [SK3] Assessment of ability to organize work
	[K6_U01] designs experiments in accordance with the state of knowledge and the latest scientific literature, using computer data analysis methods	Is able to plan and conduct studies related to the development and characterization of a cosmetic product, maintain project documentation, and analyse and present the obtained results.	[SU2] Assessment of ability to analyse information [SU4] Assessment of ability to use methods and tools [SU5] Assessment of ability to present the results of task
	[K6_W06] recognizes technological and scientific possibilities and limitations, as well as organizational and economic ones, in cosmetics technology and related fields	Has the knowledge necessary to plan the stages of development and characterization of a cosmetic product and to identify technological and scientific problems related to its preparation and evaluation.	[SW3] Assessment of knowledge contained in written work and projects
Subject contents	Course content – project Implementation of a team project focused on the preparation, characterization and application of cosmetic raw materials. The project includes: selection of raw materials and methods for their preparation or processing; preparation and characterization of the obtained raw materials; evaluation of their properties relevant to cosmetic applications; development of cosmetic mask formulations using selected raw materials; evaluation of the effect of raw material type and properties on the physicochemical, performance and functional properties of the obtained products; analysis and interpretation of experimental results, as well as preparation and presentation of the project results.		
Prerequisites and co-requisites	Completion of the course Cosmetic Raw Materials I. Basic knowledge of cosmetic raw materials, their properties, functions and applications, as well as physical chemistry and data analysis.		
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	Presentation of project results	100.0%	50.0%
	Project report	100.0%	50.0%
Recommended reading	Basic literature	Benson H.A.E., Roberts M.S., Leite-Silva V.R., Walters K. (eds.), <i>Cosmetic Formulation: Principles and Practice</i> , CRC Press, 2019. Phillips G.O., Williams P.A. (eds.), <i>Handbook of Hydrocolloids</i> , 3rd ed., Woodhead Publishing, 2020. Chemat F., Strube J. (eds.), <i>Green Extraction of Natural Products: Theory and Practice</i> , Wiley-VCH, 2015.	
	Supplementary literature	Sakamoto K., Lochhead R.Y., Maibach H.I., Yamashita Y. (eds.), <i>Cosmetic Science and Technology: Theoretical Principles and Applications</i> , Elsevier, 2017. Salvador A., Chisvert A. (eds.), <i>Analysis of Cosmetic Products</i> , 2nd ed., Elsevier, 2018. Jabłońska-Trypuć A., Czerpak R., <i>Roślinne surowce kosmetyczne</i> , 2nd revised and extended ed., MedPharm Polska, 2019. Current research and review articles on the preparation, characterization and application of cosmetic raw materials, indicated by the course instructors.	
	eResources addresses	Basic https://eur-lex.europa.eu/legal-content/PL/TXT/?uri=CELEX:32009R1223 - Regulation (EC) No 1223/2009 on cosmetic products https://single-market-economy.ec.europa.eu/sectors/cosmetics/cosmetic-ingredient-database_en - CosIng – European Commission database of cosmetic ingredients Supplementary https://eur-lex.europa.eu/legal-content/PL/TXT/?uri=CELEX:32013R0655 - Commission Regulation (EU) No 655/2013 – common criteria for the justification of claims used in relation to cosmetic products	
Example issues/ example questions/ tasks being completed	Selection of a cosmetic raw material and a method for its preparation or processing. Development of a procedure for raw material preparation. Selection of methods for characterization of the physicochemical and functional properties of the obtained raw material. Development of a cosmetic mask formulation using the selected raw material. Planning studies to evaluate the effect of the type and properties of the raw material on the properties of the obtained product. Analysis and interpretation of experimental results. Preparation of a project report and presentation of the project results.		
Practical activities within the subject	Not applicable		

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