

Subject card

Subject name and code	Cosmetics chemistry, PG_00081944						
Field of study	Chemistry						
Date of commencement of studies	October 2025		Academic year of realisation of subject		2026/2027		
Education level	Bachelor's studies		Subject group		Obligatory subject group in the field of study 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	2		Language of instruction		Polish		
Semester of study	4		ECTS credits		2.0		
Learning profile	academic		Assessment form		credit		
Conducting unit							
Name and surname of lecturer (lecturers)	Subject supervisor		dr hab. Beata Grobelna				
	Teachers						
Lesson types	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	0.0	0.0	30.0	0.0	0.0	30
	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	30		5.0		15.0	50
Subject objectives	• developing the ability to independently produce cosmetic products and solve problems during cosmetics production. • familiarizing students with cosmetic terminology and nomenclature. • familiarizing students with the properties of raw materials for the production of cosmetics. • developing the ability to use chemical knowledge to assess the possibility of producing selected cosmetics on an industrial scale and selecting optimal raw materials to obtain a specific product						

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[CHEML3_U04] Plans and performs simple chemical experiments and analyses the results obtained.	she/he makes cosmetic emulsions	[SU6] demonstration of practical skills
	[CHEML3_K08] Formulates opinions in the field of science with caution and criticism in their expression.	meets the Principles of Green Chemistry during the production of cosmetics and household chemicals	[SK1] oral statement/conversation/discussion
	[CHEML3_U01] Identifies, analyses and solves problems in the field of broadly understood chemistry on the basis of the acquired knowledge.	uses basic formulas of stoichiometry and solution concentrations to calculate appropriate amounts of raw materials for the production of cosmetics	[SU5] implementation of a problem task
	[CHEML3_W05] Has basic knowledge of the chemical specialisation studied.	classifies ingredients of cosmetic products into individual groups chemical compounds	[SW4] test/exam - oral or written
	[CHEML3_U02] Performs analyses using experimental methods and draws conclusions based on them.	predicts the results of the conducted syntheses	[SU1] oral statement/conversation/discussion
	[CHEML3_K01] Identifies the level of her/his own knowledge and skills and the need for continuous learning and personal development.	works independently and in a team	[SK8] observation of student's independent or team work
	[CHEML3_K02] Works individually demonstrating initiative and independence of activity and cooperates in a team fulfilling various roles in it.	takes care when handling raw materials for production and analysis cosmetic products	[SK8] observation of student's independent or team work
[CHEML3_U07] Prepares documented elaboration on a specific problem in the field of selected chemical and physical issues.	130 / 5 000 makes her color cosmetics (lipsticks, mascaras, powder, blush), for body wash, hair, and oral care	[SU8] observation of student's independent or team work	
Subject contents	Laboratory exercises: students will use the knowledge acquired during the lecture to master practical skills related to the preparation and production technology of selected cosmetics.		
Prerequisites and co-requisites	A. Formal requirements completed general and inorganic chemistry course. B. Entry requirements identifies and recognizes basic organic and inorganic compounds, applies basic formulas of stoichiometry and concentration of solutions to chemical calculations, independently performs simple chemical experiments.		
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	test	51.0%	70.0%
	raprt	51.0%	30.0%
Recommended reading	Basic literature	1. Zarys Chemii Kosmetycznej Wiesław Malinka 2. Zarys Chemii i Technologii Kosmetyków Janina Marcinkiewicz-Salmonowiczowa 3. Chemia piękna Marcin Mołski 4. Technologia kosmetyków Władysław Brud, 5. Receptura kosmetyczna Ryszard Glinka 6. Receptura kosmetyczna Ryszard Glinka6. "Chemia kosmetyczna" Alina Sionkowska	
	Supplementary literature	Kosmetologia i farmakologia skóry M.C.Martini,	
	eResources addresses		
Example issues/ example questions/ tasks being completed	1. What is the phenomenon of syneresis and what are its consequences? 2. List the stages of lipstick production.		
Work placement	Not applicable		