

DISCIPLINE SHEET
PRODUCTS OF PLANT ORIGIN IN COSMETICS
ACADEMIC YEAR
2025–2026

1. STUDY PROGRAM INFORMATION

1.1. Higher education institution	UNIVERSITY OF MEDICINE AND PHARMACY OF CRAIOVA
1.2. Faculty	PHARMACY
1.3. Department	PHARMACY II
1.4. Field of study	HEALTH
1.5. Study cycle	LICENSE
1.6. Study program/Qualification	MEDICAL COSMETICS AND COSMETIC PRODUCT TECHNOLOGY/Bachelor of Cosmetology

2. INFORMATION ABOUT THE DISCIPLINE

2.1. Name of the discipline			PRODUCTS OF PLANT ORIGIN IN COSMETICS					
2.2. Discipline code			CM1208					
2.3. The holder of course activities			Ludovic Everard BEJENARU					
2.4. Academic degree – course activities			Associate Professor, PhD					
2.5. Employment (base norm/associate)			Base norm					
2.6. The holder of seminar activities			Andrei BIȚĂ					
2.7. Academic degree – seminar activities			Lecturer, PhD					
2.8. Employment (base norm/associate)			Base norm					
2.9. Year of study	I	2.10. Semester	II	2.11. Type of discipline (content)	DS	2.12. Student attendance policy	DOB	

3. TOTAL ESTIMATED TIME

3.1. Number of credits							4
3.2. Number of hours per week	course	2	seminar/practical work	3	total		5
3.3. Total hours in the curriculum	course	28	seminar/practical work	42	total		70
3.4. Examinations							3
3.5. Total hours of individual study							47
3.5.1. Study using textbooks, course materials, bibliographies, and notes							20
3.5.2. Additional documentation in the library, on specialized electronic platforms, and in the field							14
3.5.3. Preparation of seminars/practical works, assignments, reports, portfolios, and essays							10
3.5.4. Tutoring							–
3.5.5. Other activities (consultations)							3
3.6. Total hours per semester (1 credit = 30 hours)							120

4. PREREQUISITES

4.1. Curriculum	Students must have knowledge of botany, cell biology, anatomy, physiology, organic chemistry.
4.2. Competences	–

5. CONDITIONS

5.1. For conducting the course	Classroom with audio/video equipment. Preparation of the topic in accordance with the teacher's requirements.
5.2. For conducting the seminary/practical work	Practical work room/online environment.

6. SPECIFIC COMPETENCES ACQUIRED

PROFESSIONAL COMPETENCES	<p>PC1. Knowledge of herbal raw materials from the point of view of origin, distribution, method of production, chemical composition, pharmacological action, transformation into preparations with dermatocosmetological uses.</p> <p>PC2. Consultancy and expertise in the field of plant products with dermatocosmetic applications.</p> <p>PC3. Ability to synthesize and apply the knowledge acquired in order to carry out a competent activity in specialized units, including in the field of the cosmetics industry.</p>
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TRANSVERSAL COMPETENCES	TC1. Autonomy and responsibility: <ul style="list-style-type: none"> the acquisition of moral marks, the formation of professional and civic attitudes, allowing students to be correct, honest, non-conflict, cooperative, available to help people, interested in community development; to know and apply the ethical principles related to specifics of professional qualification; to recognize a problem when it comes out and to provide solutions responsible for solving it.
	TC2. Social interaction: <ul style="list-style-type: none"> to have respect for diversity and multiculturalism; to develop teamwork skills; to communicate orally and in writing the requirements, the way of work, the results obtained; to engage in volunteering, to know the essential issues of the community.
	TC3. Personal and professional development: <ul style="list-style-type: none"> to have openness to lifelong learning; to become aware of the need for individual study as a basis for personal autonomy and professional development; to capitalize optimally and creatively their own potential in the collective activities; to use the information and communication technology.

7.1. DISCIPLINE OBJECTIVES

GENERAL OBJECTIVE OF THE DISCIPLINE
<ul style="list-style-type: none"> Providing informational support to Ist Year students to acquire the concepts and knowledge about plant raw materials of dermatocosmetic interest, in terms of origin, distribution, method of production, chemical composition (active principles), pharmacological action, transformation into preparations with specific uses.
SPECIFIC OBJECTIVES
<ul style="list-style-type: none"> Acquiring knowledge about herbal raw materials of dermatocosmetic interest; Acquiring knowledge regarding the use of plants in products with dermatocosmetic applications; Acquiring skills, abilities and values useful for practice in the field of dermatocosmetology.

7.2. LEARNING OUTCOMES

KNOWLEDGE
<ul style="list-style-type: none"> The student/graduate identifies, describes, explains and understands medicinal plant products, bioactive substances from plants and phytopreparations with uses in dermatocosmetology.
SKILLS
<ul style="list-style-type: none"> The student/graduate describes, defines and discusses aspects regarding medicinal plant products and phytopreparations, from the point of view of dermatocosmetic indications.
RESPONSIBILITY AND AUTONOMY
<ul style="list-style-type: none"> The student/graduate recognizes medicinal plants and bioactive substances from plants, justifying their use in dermatocosmetology.

8. CONTENTS

8.1. Course (content units)	No. of hours
1. Carbohydrates. Simple sugars, polyols, sugar acids. Homogeneous polyholosides. Mixed polyholosides (polyuronides).	2
2. Lipids. Lipid raw materials that are used in dermatocosmetology.	2
3. Compounds plant-based nitrates with applications in dermatocosmetology. Piperidine alkaloids. Isoquinoline alkaloids. Quinoline alkaloids. Quinolizidine alkaloids. Imidazole alkaloids. Purine alkaloids. Protoalkaloids. Lectins.	2
4. Aromatic compounds [I]. Phenyl derivatives. Phenylmethane derivatives. Phenylpropane derivatives. Stilbenoids. Coumarins. Flavonoids.	4
5. Aromatic compounds [II]. Lignans. Tannins. Phloroglucinols. Anthracene derivatives.	4
6. Isoprenoids [I]. Essential oils (acyclic monoterpenoids, monocyclic monoterpenoids, bicyclic monoterpenoids, sesquiterpenoids, aromatic derivatives).	6
7. Isoprenoids [II]. Atypical monoterpenoids. Sterols. Steroidal saponins. Triterpene saponins. Carotenoids.	6
8. Resins and balms. Tars. <i>Varia</i> .	2
Total	28
REFERENCES	
<ol style="list-style-type: none"> Bejenaru L.E., Mogoșanu G.D., Biță A., Bejenaru Cornelia, Popescu H. (2025) <i>Farmacognozie generală. Farmacognozie specială: Materii prime naturale cu glucide, lipide, compuși azotați, heterozide, compuși aromatici</i>. Ed. Medicală Universitară, Craiova. Bojor O., Popescu O. (2009) <i>Fitoterapie tradițională și modernă</i>, ediția a V-a revizuită și adăugită. Ed. Fiat Lux, București. Bruneton J. (2016) <i>Pharmacognosie. Phytochimie. Plantes médicinales</i>, 5^e édition, revue et augmentée. Lavoisier TEC & DOC, Paris. 	

4. Istudor Viorica. (1998) *Farmacognozie, Fitochimie, Fitoterapie*. Vol. I, Ed. Medicală, București.
5. Istudor Viorica. (2001) *Farmacognozie, Fitochimie, Fitoterapie*. Vol. II, Ed. Medicală, București.
6. Istudor Viorica. (2005) *Farmacognozie, Fitochimie, Fitoterapie*. Vol. III, Ed. Medicală, București.
7. Locatelli M., Tomczyk M., Dugo Laura, Russo Marina. (2025) *Phytochemicals for health*. 1st edition, Elsevier, London, UK.
8. Mencinicopschi Gh., Bojor O., Ionescu-Călinești Larisa. (2009) *Compendiu de terapie naturală. Nutriție, Fitoterapie, Cosmetică*. Ed. Medicală, București.
9. Mogoșanu G.D., Bejenaru L.E., Biță A., Bejenaru Cornelia, Popescu H. (2025) *Farmacognozie specială: Materii prime naturale cu compuși aromatici, izoprenoide, rășini, balsamuri, gudroane, varia*. Ed. Medicală Universitară, Craiova.
10. Stănescu Ursula (ed), Hăncianu Monica, Cioancă Oana, Aprotosoia Ana Clara, Miron Anca. (2021) *Plante medicinale de la A la Z*, ediția a IV-a, revăzută și adăugită. Ed. Polirom, Iași.

8.2. Practical works (topics/themes)	No. of hours
Macroscopic characters, microscopic analysis, physicochemical properties, extraction, identification, quantitative determination:	
1. Carbohydrates. Simple sugars, polyols, sugar acids. Homogeneous polyholosides. Mixed polyholosides.	3
2. Lipid raw materials that are used in dermatocosmetology.	3
3. Compounds plant-based nitrogen.	3
4. Phenyl derivatives. Phenylmethane derivatives. Phenylpropane derivatives. Coumarins.	3
5. Flavonoids.	3
6. Tannins.	3
7. Anthracene derivatives.	3
8. Essential oils with monoterpenoids.	3
9. Essential oils with sesquiterpenoids.	3
10. Essential oils with aromatic derivatives.	3
11. Triterpene saponins.	3
12. Carotenoids.	3
13. Global chemical analysis of the active principles studied: extraction, separation, identification.	3
14. Practical test of macroscopic, microscopic and phytochemical.	3
Total	42

REFERENCES

1. Biță A., Mogoșanu G.D., Bejenaru L.E., Bejenaru Cornelia. (2020) *Analiza fizico-chimică a produselor naturale medicinale*. Ed. Medicală Universitară, Craiova.
2. Gîrd Cerasela Elena, Duțu Ligia Elena, Popescu Maria Lidia, Pavel Mariana, Iordache Alina Titina, Tudor Ioana. (2008) *Bazele teoretice și practice ale analizei farmacognostice*. Vol. I, Ed. „Curtea Veche”, București.
3. Gîrd Cerasela Elena, Duțu Ligia Elena, Popescu Maria Lidia, Pavel Mariana, Iordache Alina Titina, Tudor Ioana. (2009) *Bazele teoretice și practice ale analizei farmacognostice*. Vol. II, Ed. „Curtea Veche”, București.
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5. Miron Anca, Aprotosoia Ana Clara, Cioancă Oana, Trifan Adriana, Hăncianu Monica. (2020) *Fitopreparate în dermato-cosmetologie*. Ed. „Grigore T. Popa”, Iași.
6. Mencinicopschi Gh., Bojor O., Ionescu-Călinești Larisa. (2009) *Compendiu de terapie naturală. Nutriție, Fitoterapie, Cosmetică*. Ed. Medicală, București.
7. Oniga Iliaora, Benedec Daniela, Hanganu Daniela. (2003) *Analiza produselor naturale medicinale*. Ed. Medicală Universitară „Iuliu Hațieganu”, Cluj-Napoca.
8. Popescu Antoanela, Roncea Florentina, Pavalache Georgeta. (2015) *Principii active și produse vegetale. Aplicații în cosmetologie*. Ed. Ex Ponto, Constanța.
9. Stănescu Ursula Helena (ed), Hăncianu Monica, Gîrd Cerasela Elena. (2020) *Farmacognozie: produse vegetale cu substanțe bioactive*. Ed. Polirom, Iași.
10. Wagner H., Bladt Sabine. (1996) *Plant drug analysis. A thin layer chromatography atlas*. Springer Verlag, Berlin–Heidelberg.

9. CORROBORATING THE DISCIPLINE CONTENT WITH THE EXPECTATIONS OF EPISTEMIC COMMUNITY REPRESENTATIVES, PROFESSIONAL ASSOCIATIONS AND EMPLOYEE REPRESENTATIVES RELATING TO THIS PROGRAM

The content of the syllabus is the result of an evaluation process based on information from graduates and employers. The theoretical and practical knowledge regarding herbal raw materials of dermatocosmetic interest (origin, distribution, method of obtaining, chemical composition, pharmacological action, transformation into preparations with specific uses), acquired through participation in classes and practical work, will allow the graduate to carry out his professional activity both in dermatocosmetic units and in the cosmetic industry.

10. METHODOLOGICAL GUIDELINES

Types of activity	Teaching/learning techniques, materials, resources: lectures, interactive courses, group work, problem-based/project-based learning, etc. Learning, teaching, research, and practical application activities within the discipline are conducted in a blended format.
Course	The following methods are used in combination: lectures, debates, problem-solving.
Practical works	The following methods are used in combination: practical applications, case studies, projects.
Individual study	Before each course and each practical assignment.

11. EVALUATION

Type of activity	Evaluation forms	Evaluation methods	Weight of final grade
Lecture	Formative assessment through tests during the semester Summative assessment during the exam	Oral exam. Grades are given on a scale of 1–10. The minimum passing grade is 5.	60%
Practical work	Formative assessment through tests during the semester Summative assessment in the last week of the semester	Oral exam. Grades are given on a scale of 1–10. The minimum passing grade is 5.	20%
Assessment of stage knowledge	Tests during the semester	Test (written). Grades are given on a scale of 1–10. The minimum passing grade is 5.	10%
Individual performance evaluation	Formative assessment through essays, projects, worksheets, applied discussion	Applied discussion	10%
Minimum performance standard	Identification of the main medicinal herbal products and classes of natural compounds with uses in dermatocosmetology.		
Appeals	According to the Student Examination Methodology.		

12. RECOVERY PROGRAM AND CONSULTATIONS

Absence recovery	No. absences that can recover	Place of deployment	Period	In charge	Scheduling of topics
	3	Official Discipline location	Weekly	All teaching staff	According to the course schedule
Consultation schedule	No. of hours	Place of deployment	Period	In charge	Scheduling of topics
	2 hours/week	Headquarters of the Discipline	Weekly	Course instructors	Theme of the week

Date of approval: 26th September 2025

Dean, Prof. univ. dr. Octavian Croitoru	Department Director, Prof. univ. dr. Cătălina Gabriela Pisoschi	Discipline Holder, Conf. univ. dr. Ludovic Everard Bejenaru
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