DISCIPLINE SHEET

PHYTOTHERAPY

ACADEMIC YEAR

2026–2027

1. STUDY PROGRAM INFORMATION

1.1. Higher education institution	UNIVERSITY OF MEDICINE AND PHARMACY OF CRAIOVA
1.2. Faculty	**MEDICAL ASSISTANCE**
1.3. Department	2
1.4. Field of study	HEALTH
1.5. Study cycle	LICENSE
1.6. Study program/Qualification	NUTRITION AND DIETETICS/Nutritionist and dietitian

2. INFORMATION ABOUT THE DISCIPLINE

2.1. Name of the discipline	**PHYTOTHERAPY**						
2.2. Discipline code	ND2216.2						
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	Ludovic Everard BEJENARU						
2.7. Academic degree – seminar activities	Associate Professor, PhD						
2.8. Employment (base norm/associate)	Base norm						
2.9. Year of study	**II**	2.10. Semester	**IV**	2.11. Type of discipline (content)	**DS**	2.12. Student attendance policy	**DOP**

3. TOTAL ESTIMATED TIME

3.1. Number of credits						**2**
3.2. Number of hours per week	course	1	seminar/practical work	1	total	**2**
3.3. Total hours in the curriculum	course	14	seminar/practical work	14	total	**28**
3.4. Examinations						**3**
3.5. Total hours of individual study						**29**
3.5.1. Study using textbooks, course materials, bibliographies, and notes						**12**
3.5.2. Additional documentation in the library, on specialized electronic platforms, and in the field						**8**
3.5.3. Preparation of seminars/practical works, assignments, reports, portfolios, and essays						**6**
3.5.4. Tutoring						**–**
3.5.5. Other activities (consultations)						**3**
3.6. Total hours per semester (1 credit = 30 hours)						**60**

4. PREREQUISITES

4.1. Curriculum	Students must have knowledge of botany, chemistry, anatomy, and physiology.
4.2. Competences	Students must know medicinal plants from a botanical perspective.

5. CONDITIONS

5.1. For conducting the course	Classroom with audio/video equipment.
5.2. For conducting the seminary/practical work	Practical work room/online environment.

6. SPECIFIC COMPETENCES ACQUIRED

PROFESSIONAL COMPETENCES	**PC1**. Knowledge of the biological effects, methods of obtaining, preserving and administering phytopreparations of nutritional and dietary interest. **PC2**. Consultancy and expertise in the field of phytopreparations with nutritional and dietary role. **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 phytopreparations with nutritional and dietary role industry.

TRANSVERSAL COMPETENCES	**TC1**. Autonomy and responsibility: • 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 the specifics of professional qualification; • to recognize a problem when it comes out and to provide solutions responsible for solving it. **TC2**. Social interaction: • 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: • 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
▪ Providing knowledge regarding phytopreparations used in the field of nutrition and dietetics (obtention, chemical characterization, biological effects, administration, possible adverse effects, contraindications).
SPECIFIC OBJECTIVES
▪ Providing knowledge that allows counseling and educating the client regarding the correct and rational use of phytopreparations with a nutritional and dietary role; ▪ Providing knowledge that allows an objective assessment of the quality and safety of phytopreparations with a nutritional and dietary role existing on the market.

7.2. LEARNING OUTCOMES

KNOWLEDGE
▪ The student/graduate identifies, describes, explains and understands medicinal plant products, bioactive substances and phytopreparations with a nutritional and dietary role.
SKILLS
▪ The student/graduate describes, defines and discusses aspects regarding medicinal plant products and phytopreparations used in the field of nutrition and dietetics from the point of view of obtaining, chemical characterization, biological effects, administration, possible adverse effects, contraindications.
RESPONSIBILITY AND AUTONOMY
▪ The student/graduate integrates information regarding client counseling and education for the correct use of phytopreparations with a nutritional and dietary role.

8. CONTENTS

8.1. Course (content units)	**No. of hours**
1. Introduction and generalities: medicinal plants, plant products, methods of processing medicinal plant products with applications in Dietotherapy.	4
2. Interactions of medicinal plant products with other medicinal products, with applications in Dietotherapy.	1
3. Medicinal plant products – sources of carbohydrates, lipids, proteins with applications in Dietotherapy.	2
4. Plant products with antioxidant properties used as adjuvants in Dietotherapy.	1
5. Adjuvant medicinal plant products in diabetes.	1
6. Medicinal plant products as adjuncts to Dietotherapy in gastrointestinal diseases.	1
7. Medicinal plant products used in diseases hepatobiliary.	1
8. Medicinal plant products that improve the symptoms characteristic of menopause.	1
9. Plant products as sources of vitamins with applications in Dietotherapy.	1
10. Medicinal plant products with sweeteners, with applications in Dietotherapy.	1
Total	**14**

REFERENCES

1. Bejenaru L.E., Mogoşanu G.D., Biţă A., Bejenaru Cornelia, Popescu H. (2026) *Farmacognozie generală. Farmacognozie specială: Materii prime naturale cu glucide, lipide, compuşi azotaţi, heterozide, compuşi aromatici*. Ed. Medicală Universitară, Craiova.
2. Bojor O., Popescu O. (2009) *Fitoterapie tradiţională şi modernă*, ediţia a V-a revizuită şi adăugită. Ed. Fiat Lux, Bucureşti.
3. Bruneton J. (2016) *Pharmacognosie. Phytochimie. Plantes médicinales*, 5e édition, revue et augmentée. Lavoisier TEC & DOC, Paris.

4. Duke J.A. (2009) *Farmacia verde*. Ed. ALL, Bucureşti.
5. Eşianu Sigrid, Ştefănescu E. Ruxandra. (2016) *Fitoterapie: curs*. University Press, Târgu Mureş.
6. Locatelli M., Tomczyk M., Dugo Laura, Russo Marina. (2025) *Phytochemicals for health*. 1st edition, Elsevier, London, UK.
7. Mencinicopschi Gh., Bojor O., Ionescu-Călineşti Larisa. (2009) *Compendiu de terapie naturală. Nutriţie, Fitoterapie, Cosmetică*. Ed. Medicală, Bucureşti.
8. Mogoşanu G.D., Bejenaru L.E., Biţă A., Bejenaru Cornelia, Popescu H. (2026) *Farmacognozie specială: Materii prime naturale cu compuşi aromatici, izoprenoide, răşini, balsamuri, gudroane, varia*. Ed. Medicală Universitară, Craiova.
9. Stănescu Ursula Helena (ed), Hăncianu Monica, Gîrd Cerasela Elena. (2020) *Farmacognozie: produse vegetale cu substanţe bioactive*. Ed. Polirom, Iaşi.
10. Valnet J. (f.a.) *Tratamentul bolilor prin legume, fructe şi cereale*. Ed. Garamond, Bucureşti.

8.2. Practical works (topics/themes)	**No. of hours**
1. Introduction and generalities: herbal preparations with applications in Dietotherapy.	2
2. General methods of quality assessment phytopreparations.	4
3. Phytopreparations with carbohydrates, lipids, proteins, with applications in Dietotherapy.	1
4. Phytopreparations with antioxidant properties, with applications in Dietotherapy.	1
5. Adjuvant herbal remedies in diabetes.	1
6. Adjuvant herbal remedies in gastrointestinal diseases.	2
7. Adjuvant herbal remedies for diseases hepatobiliary.	1
8. Adjuvant herbal remedies in menopause.	1
9. Phytopreparations as sources of vitamins.	1
Total	**14**

REFERENCES

1. Biţă A., Mogoşanu G.D., Bejenaru L.E., Bejenaru Cornelia. (2020) *Analiza fizico-chimică a produselor naturale medicinale*. Ed. Medicală Universitară, Craiova.
2. Gîrd Cerasela Elena, Duţu Ligia Elena, Popescu Maria Lidia, Pavel Mariana, Iordache Alina Titina, Tudor Ioana. (2008) *Bazele teoretice şi practice ale analizei farmacognostice*. Vol. I, Ed. „Curtea Veche", Bucureşti.
3. Gîrd Cerasela Elena, Duţu Ligia Elena, Popescu Maria Lidia, Pavel Mariana, Iordache Alina Titina, Tudor Ioana. (2009) *Bazele teoretice şi practice ale analizei farmacognostice*. Vol. II, Ed. „Curtea Veche", Bucureşti.
4. Istudor Viorica. (1998) *Farmacognozie, Fitochimie, Fitoterapie*. Vol. I, Ed. Medicală, Bucureşti.
5. Istudor Viorica. (2001) *Farmacognozie, Fitochimie, Fitoterapie*. Vol. II, Ed. Medicală, Bucureşti.
6. Istudor Viorica. (2005) *Farmacognozie, Fitochimie, Fitoterapie*. Vol. III, Ed. Medicală, Bucureşti.
7. Locatelli M., Tomczyk M., Dugo Laura, Russo Marina. (2025) *Phytochemicals for health*. 1st edition, Elsevier, London, UK.
8. Oniga Ilioara, Benedec Daniela, Hanganu Daniela. (2003) *Analiza produselor naturale medicinale*. Ed. Medicală Universitară „Iuliu Haţieganu", Cluj-Napoca.
9. Stănescu Ursula Helena (ed), Hăncianu Monica, Gîrd Cerasela Elena. (2020) *Farmacognozie: produse vegetale cu substanţe bioactive*. Ed. Polirom, Iaşi.
10. Wagner H., Bladt Sabine. (1996) *Plant drug analyis. 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

In order to streamline the contents, to use optimal teaching/learning methods, the subject holder will organize meetings with the Romanian Dietetics Association, as well as with specialized teaching staff from higher education. The concepts studied are in accordance with the regulations in force and are compatible with the activities carried out at national level in the specialty field of Nutrition and Dietetics.

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 plant products and phytopreparations associated with nutrition and dietotherapy.		
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 instructor	Theme of the week

Date of approval: 18th September 2026

Dean,
Prof. univ. dr. Dana Maria Albulescu

Department Director,
Prof. univ. dr. Cătălina Gabriela Pisoschi

Discipline Holder,
Conf. univ. dr. Ludovic Everard Bejenaru