DISCIPLINE SHEET

PHARMACEUTICAL MYCOLOGY

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	PHARMACY/Pharmacist

2. INFORMATION ABOUT THE DISCIPLINE

2.1. Name of the discipline			**PHARMACEUTICAL MYCOLOGY**				
2.2. Discipline code			FAR2111				
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			–				
2.7. Academic degree – seminar activities			–				
2.8. Employment (base norm/associate)			–				
2.9. Year of study	**II**	2.10. Semester	**III**	2.11. Type of discipline (content)	**DS**	2.12. Student attendance policy	**DOP**

3. TOTAL ESTIMATED TIME

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

4. PREREQUISITES

4.1. Curriculum	Students must have knowledge of plant biology.
4.2. Competences	–

5. CONDITIONS

5.1. For conducting the course	Classroom with audio/video equipment.
5.2. For conducting the seminary/practical work	–

6. SPECIFIC COMPETENCES ACQUIRED

PROFESSIONAL COMPETENCES	**PC1**. Knowledge of mushrooms and lichens of pharmaceutical interest. **PC2**. Consulting and expertise on the pharmaceutical importance of mushrooms, identification of edible mushrooms and toxic fungi.

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 medico-pharmaceutical practice; • 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

The objective of the discipline is to provide the IInd Year students the informational support for:
▪ Understanding the general notions on mushrooms and lichens with pharmaceutical and toxicological importance;
▪ Acquiring of some skills, abilities, and values useful in the pharmaceutical practice.

SPECIFIC OBJECTIVES

▪ Acquiring knowledge about the recognition and identification of mushrooms and lichens of pharmaceutical interest;
▪ Knowing the pharmaceutical importance of mushrooms;
▪ Differentiating the edible mushrooms from the toxic ones.

7.2. LEARNING OUTCOMES

KNOWLEDGE

▪ The student/graduate identifies, describes, explains and understands fungi and lichens of pharmaceutical interest.

SKILLS

▪ The student/graduate describes, defines and discusses aspects of fungi and lichens of pharmaceutical and toxicological interest.

RESPONSIBILITY AND AUTONOMY

▪ The student/graduate integrates information regarding the pharmaceutical importance of mushrooms, the identification of edible and toxic mushrooms.

8. CONTENTS

8.1. Course (content units)	**No. of hours**
1. *Mycophyta*.	1
2. *Phycomycetae*.	1
3. *Ascomycetae*.	3
4. *Basidiomycetae*.	4
5. Mushrooms of pharmaceutical importance.	1
6. Poisonous and hallucinogenic mushrooms.	2
7. *Lichenophyta*.	2
Total	**14**

REFERENCES

1. Bielli E. (ed). (1999) *Ciuperci. Cunoaşterea, recunoaşterea şi căutarea celor mai cunoscute specii de ciuperci*, Ed. All, Bucureşti.
2. Carlile M.J., Watkinson S.K., Gooday G.W. (2001) *The fungi*, 2th edition, Academic Press, London.
3. Coleman M. (2024) *The fascinating world of fungi*, Royal Botanic Garden Publishing House, Edinburgh, UK.
4. Coman I., Mareş M. (2000) *Micologie medicală aplicată*, Ed. Junimea, Iaşi.
5. Gheorghe Irina, Dițu Lia-Mara, Mitache Mihaela Magdalena, Avram Ionela (2019) *Manual de micologie aplicată*, Ed. Universităţii Titu Maiorescu–Ed. Hamangiu, Bucureşti.
6. Lamaison J.L., Polese J.M. (2005) *The great encyclopedia of mushrooms*, Könemann, London.
7. Mititiuc M. (1995) *Micologie*, Ed. Universităţii Alexandru Ioan Cuza, Iaşi.
8. Palade Madelena. (1998) *Botanică farmaceutică*, Ed. Tehnică, Bucureşti.
9. Roberts P., Evans S. (2011) *The book of fungi. A life-size guide to six hundred species from around the world*, The University of Chicago Press, Chicago.
10. Rogers Kara (ed). (2011) *Fungi, algae, and protists*, Britannica Educational Publishing–Rosen Educational Services, New York.

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

The knowledge gained in the Mycology discipline provides support for the understanding of mushrooms and lichens of pharmaceutical interest, as well as the differentiation of edible mushrooms from toxic ones.

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.
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	Verification (written exam). Grades are given on a scale of 1–10. The minimum passing grade is 5.	80%
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 fungi and lichens of pharmaceutical interest.		
Appeals	According to the Student Examination Methodology.		

12. CONSULTATIONS

	No. of hours	Place of deployment	Period	In charge	Scheduling of topics
Consultation schedule	2 hours/week	Headquarters of the Discipline	Weekly	Course instructor	Theme of the week

Date of approval: 26th September 2025

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