DISCIPLINE SHEET

MEDICAL MYCOLOGY

ACADEMIC YEAR

2026–2027

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	MASTER
1.6. Study program/Qualification	CLINICAL LABORATORY AND DRUG ANALYSIS TECHNIQUES/Biomedical analyses specialist

2. INFORMATION ABOUT THE DISCIPLINE

2.1. Name of the discipline	**MEDICAL MYCOLOGY**						
2.2. Discipline code	LCAM 109						
2.3. The holder of course activities	Andrei BIȚĂ						
2.4. Academic degree – course activities	Lecturer, 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	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						**2**
3.5. Total hours of individual study						**70**
3.5.1. Study using textbooks, course materials, bibliographies, and notes						**30**
3.5.2. Additional documentation in the library, on specialized electronic platforms, and in the field						**20**
3.5.3. Preparation of seminars/practical works, assignments, reports, portfolios, and essays						**15**
3.5.4. Tutoring						**–**
3.5.5. Other activities (consultations)						**5**
3.6. Total hours per semester (1 credit=25 hours)						**100**

4. PREREQUISITES

4.1. Curriculum	–
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. Students should review the theoretical concepts and working methods in the practical work manual before carrying out the work.

6. SPECIFIC COMPETENCES ACQUIRED

PROFESSIONAL COMPETENCES	**PC1.** To know the techniques for harvesting pathological products; morphological examination of fungi to morphologically differentiate fungi. **PC5.** Recognize the diseases caused by fungal agents and to know the significance of epidemiology and antifungal prophylaxis.

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 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. DISCIPLINE OBJECTIVES

GENERAL OBJECTIVE OF THE DISCIPLINE
▪ Acquiring theoretical and practical notions of medical mycology, morphological differentiation of fungi, as well as recognition diseases caused by mycotic agents.
SPECIFIC OBJECTIVES
▪ Acquiring the most complete knowledge regarding medical mycology, as well as drug interactions specific to antifungal treatment.

8. CONTENTS

8.1. Course (content units)	**No. of hours**
1. Definition of general mycology concepts. Fungal agent and host. Mutual relationships between the fungal agent and the host (cellular reactions; tissue reactions; immunity – nonspecific and specific reactions). Clinical manifestations, laboratory diagnosis, treatment, epidemiology, prophylaxis in fungal infections.	4
2. Mycotic agents with superficial and deep localization – *Candida* spp. Importance for medical practice.	2
3. Mycotic agents with superficial and deep localization – *Aspergillus.* Importance for medical practice.	2
4. Mycotic agents with superficial and deep localization – *Trichophyton.* Importance for medical practice.	2
5. Mycotic agents with superficial and deep localization – *Pneumocystis carinii.* Importance for medical practice.	2
6. Mycotic agents with superficial and deep localization – *Epidermophyton* and *Cryptococcus neoformans.*	2
Total	**14**

REFERENCES

1. Anaissie E.J., McGinnis M.R., Pfaller M.A. (2009) *Clinical mycology*, 2nd edition. Churchill Livingstone, Philadelphia.
2. Coleman M. (2024) *The fascinating world of fungi*. Royal Botanic Garden Publishing House, Edinburgh, UK.
3. Coman I., Mareş M. (2000) *Micologie medicală aplicată*. Ed. Junimea, Iaşi.
4. Gheorghe Irina, Dițu Lia-Mara, Mitache Mihaela Magdalena, Avram Ionela. (2019) *Manual de micologie aplicată*. Ed. Universităţii Titu Maiorescu–Ed. Hamangiu, Bucureşti.
5. Junie M., Sasca C.I. (1995) *Protozoologie şi micologie medicală*. Tipografia U.M.F. „Iuliu Haţieganu", Cluj-Napoca.
6. Manolescu M., Roşu L. (2005) *Agenţi parazitari şi micotici implicaţi în patologia oro-faringiană*. Ed. SITECH, Craiova.
7. Mititiuc M. (1995) *Micologie*. Ed. Universităţii Alexandru Ioan Cuza, Iaşi.
8. Rogers Kara (ed). (2011) *Fungi, algae, and protists*. Britannica Educational Publishing–Rosen Educational Services, New York.
9. Roşu L., Slavu C. L., Zlatian O. (2007) *Parazitologie şi micologie*. Ed. Universitaria, Craiova.
10. Ungureanu A. (2004) *Parazitologie medicală*. Ed. SITECH, Craiova.

8.2. Practical works (content units)	**No. of hours**
1. General practical concepts in medical mycology.	2
2. Laboratory diagnosis of superficial and deep mycoses caused by *Candida* spp. Importance for medical practice.	2
3. Laboratory diagnosis of superficial and deep mycoses caused by *Aspergillus.* Importance for medical practice.	2
4. Laboratory diagnosis of mycoses caused by *Trichophyton.* Importance for medical practice.	2
5. Laboratory diagnosis of mycoses caused by *Pneumocystis carinii.* Importance for medical practice.	2
6. Antifungigram.	2

8.2. Practical works (content units)	No. of hours
7. Mycological examination of urogenital secretions. Importance for medical practice.	2
Total	**14**

REFERENCES

1. Anaissie E.J., McGinnis M.R., Pfaller M.A. (2009) *Clinical mycology*, 2nd edition. Churchill Livingstone, Philadelphia.
2. Coleman M. (2024) *The fascinating world of fungi*. Royal Botanic Garden Publishing House, Edinburgh, UK.
3. Coman I., Mareş M. (2000) *Micologie medicală aplicată*. Ed. Junimea, Iaşi.
4. Gheorghe Irina, Dițu Lia-Mara, Mitache Mihaela Magdalena, Avram Ionela. (2019) *Manual de micologie aplicată*. Ed. Universităţii Titu Maiorescu–Ed. Hamangiu, Bucureşti.
5. Manolescu M., Roşu L., Ungureanu A. (1999) *Ghid practic de microbiologie*. Ed. Scorrilo, Craiova.
6. Mareş M. (red). (2007) *Tehnici de laborator în micologia medicală*. Ed. PIM, Iaşi.
7. Mititiuc M. (1995) *Micologie*. Ed. Universităţii Alexandru Ioan Cuza, Iaşi.
8. 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.
9. Rogers Kara (ed). (2011) *Fungi, algae, and protists*. Britannica Educational Publishing–Rosen Educational Services, New York.
10. Ungureanu A. (2005) *Îndrumar practic de parazitologie medicală*. Ed. SITECH, Craiova.

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

▪ The graduate will have knowledge that will allow him to correctly approach the medical mycology problems he may encounter in practice.

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	Written 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	Differentiation of fungi and recognition of diseases caused by mycotic agents.		
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	**No. of hours**	**Place of deployment**	**Period**	**In charge**	**Scheduling of topics**

schedule	2 hours/week	Headquarters of the Discipline	Weekly	Course instructor	Theme of the week

Date of approval: 18th September 2026

Dean,	**Department Director,**	**Discipline Holder,**
Prof. univ. dr. Octavian Croitoru	Prof. univ. dr. Cătălina Gabriela Pisoschi	Şef lucrări univ. dr. Andrei Biţă