

Module name	Clinical Mycology
Module code	B-BTM.058
ISCED code	<u>0511</u>
Study cycle	I and II°
Semester	Summer semester
Responsible for this module	dr hab. Sylwia Wdowiak-Wróbel, prof. UMCS dr Monika Marek-Kozaczuk e. _____-mail: _____s.wdowiak@poczta.umcs.lublin.pl, monika.kozaczuk@poczta.umcs.lublin.pl tel. (48) 81-537-59-82
Language of instruction	English
Website	-
Prerequisites	Basic knowledge of microbiology, physiology, and immunology
ECTS	4
ECTS points hour equivalents	Contact hours (work with an academic teacher) Lecture – 15 hours; Laboratory – 30 hours. Total number of hours with an academic teacher 45 Non-contact hours (students' own work) – 55 - preparation for the exam: 25 - preparation for labs: 10 - preparation of reports from laboratory classes: 10 - literature search: 10 Total number of ECTS points for the module = 4
Educational outcomes - verification methods	participation in classes and mid-semester written tests (50% + 1 correct answer) presence at lectures written test exam
Description	Lectures: The module covers the knowledge in the area of fungi that cause human diseases. Basic information on the human microbiome and medically important pathogens: A brief historical overview. Mycological concepts. Systematics of pathogenic fungi. Fungal morphology. Structure of the fungal cell and mycelium. Variety of forms of reproduction. Mycotoxins. Review of pathogenic mold and yeast fungi and dermatophytes. Dimorphic fungi. Superficial and deep mycoses with their clinical picture. Defense mechanisms in fungal infections. Factors increasing the risk of developing mycoses. Standards of diagnostic procedures (collection and transport of diagnostic materials, cultivation, isolation, and identification of fungi). Antifungal drugs. Pharmacotherapy of selected mycoses. Laboratory classes: Organization of work in a mycological laboratory; Preparation and storage of mycological media; Testing the mycological purity of various laboratory surfaces; Methods of making preparations and establishing micro-cultures;

	<p>Micro- and macroscopic characteristics of selected representatives of mold fungi Selection of the site and soil sampling for mycological analysis; Characteristics of representatives of yeast-like fungi; Micro- and macroscopic evaluation in selected mycological conditions; Diagnostic tests used to identify yeast-like fungi; Antimycograms; Identification and characterization of dermatophytes</p>
Reading list	<p>Fundamental Medical Mycology Errol Reiss H. Jean Shadomy G. Marshall Lyon III Fungal Pathogenesis: Principles and Clinical Applications Richard Calderone Textbook of Medical Mycology Chander Jagdish Medical Microbiology, Jawetz, Melnick, & Adelberg's,</p>
Educational outcomes	<p>KNOWLEDGE The course provides a basic theoretical and technical study of the molecular biology, pathogenesis, and laboratory identification of fungi that cause human diseases. The student can understand the basic processes taking place in fungal cells at the molecular and cellular levels. He knows the basic concepts and terminology in the field of clinical mycology</p> <p>He has knowledge of the development of knowledge in the field of clinical mycology and the related improvement of research and diagnostic techniques</p> <p>SKILLS The student can operate laboratory equipment used in mycological analyses</p> <p>He performs analyses of biological material, makes assessments and diagnoses, and plans simple analytical and preparative procedures</p> <p>ATTITUDES The student is ready to work in a team and obey the safety rules</p>
Practice	-
Teaching methods	lecture with presentation, laboratory classes, experiments, observations, discussion