SYLLABUS The cycle of instruction 2019-2025			
Module/course name:	PARASITOLOGY	**Module code**	LK.3.C.007
Faculty:	Faculty of Medicine MUL		
Major:	Medical		
Specialty:			
Level of study:	I (Bachelor studies) □ II (Master studies) □ integrated Master studies **X** Doctoral studies□		
Mode of study :	full-time **X**		
Year of study:	I □II X III □ IV □ V □ VI □	Semester :	1□ 2 □ 3□ 4 X5□ 6□ 7□ 8□ 9□ 10 □ 11 □ 12 □
Module/course type:	obligatory **X** elective □		
Language of instruction:	Polish □ English X		

Form of education	**Hours**
Lecture	**5**
Seminar	
Laboratory class	**10**
E-learning	
Practical class	
Internship	
Other	
TOTAL	**15**

Student's work input (participation in class, preparation, evaluation, etc.)	**Student's hourly workload**
1. In class	**15**
2. Student's own work including: 1 Peparation for class 2 Preparation for partials and finals	**10**
Summary of the student's workload	**25**
ECTS points for module/course	**1**

Educational objectives:

The aim of the course is to acquaint students with risks posed to human health by parasites inhabiting different climatic zones and with the basic symptoms of parasitic diseases, and their epidemiology. Furthermore, the course is focused on interactions in the parasite-host system and the impact of various factors on the course of human infestation, methods for diagnosis of parasitic diseases in their different stages, and principles of prophylaxis.

The matrix of learning outcomes for module/ subject with reference to verification methods of the intended educational outcomes and forms of instruction:

Learning outcome code	A student who has obtained a credit for the module/course has the knowledge/skill to:	Methods of verifying the achievement of the intended learning outcomes:	Form of instruction * provide the symbol
(C. W 13)	knows the epidemiology of parasitic infections with respect to their geographical range of occurrence;	Multiple choice test	Lab class, Lectures
(C.W 14)	knows the effect of abiotic and biotic (parasites) environmental factors on human body and human population and their entrance paths to the human body; can describe the consequences of human body exposure to various biological factors and the principles of prophylaxis;	Multiple choice test	Lab class, Lectures
(C.W 16)	knows the invasive for humans forms or development stages of some parasitic protozoans, helminths and arthropods , with respect to geographical range of their existence;	Multiple choice test	Lab class, Lectures
(C.W 17)	can discuss the functioning of parasite-host system and knows basic symptoms caused by invasion of parasites;	Presentation	Lab class, Lectures
(C. W 18)	recognizes symptoms of iatrogenic infections, their paths of spread, and infectious agent responsible for changes in respective organs;	Multiple choice test	Lab class, Lectures
(C.W 19)	knows and understands the basics of parasitological diagnostics;	Multiple choice test	Lab class, Lectures
(C.U6)	assesses environmental hazards and uses basic methods allowing to find the presence of harmful biological factors in the biosphere;	Multiple choice test	Lab class

(C.U7)	recognizes the most common human parasites on the basis of their structure, life cycles and disease symptoms;	Multiple choice test	Lab class
(C. U9)	can make a preparation and identify pathogens under a microscope;	Multiple choice test	Lab class
(C.U 12)	analyses the reactive, defense and adaptation response and control disorders caused by an etiological factor;	Multiple choice test	Lab class
K 01	capability of team work	Direct assessment by the teacher	Lab class
K 02	capability of active involvement in classes	Direct assessment by the teacher	Lab class
K 03	capability of preparation for classes	Direct assessment by the teacher	Lab class

EXAMPLES OF METHODS VERIFICATION OF ACHIEVEMENT OF INTENDED LEARNING OUTCOMES

In terms of knowledge: Oral exam (*non-standardized, standardized, traditional, problem-focused*);
Written exam – student generates/recognized the answer (*essay, report; structured short-answer questions /SSQ/; multiple choice questions /MCQ/; multiple response questions /MRQ/; matching test; true/false test; open cloze test*)

In terms of skills: Practical exam; Objective Structured Clinical Exam /OSCE/; Mini-CEX (mini – clinical examination) ; Implementation of assigned tasks; Project, presentation

In terms of social competences:
Reflective essay; extended observation by a supervisor/tutor; 360-degree assessment (feedback from teachers, peers, patients, other co-workers); Self-assessment (including a portfolio)

Course content: (use keywords referring to the content of each class following the intended learning outcomes):

Lectures:
1. Symptoms and laboratory diagnosis in parasitic diseases- infestations caused by Protozoans
2. Symptoms and laboratory diagnosis in parasitic diseases- infestations caused by Helminths
3. Symptoms and laboratory diagnosis in parasitic diseases- infestations caused by Nematoda
4. Arthropods as vectors of infectious diseases
5. Immunology of parasite-host interactions

Laboratory classes: 2h
1. Parasitic Protozoans – morphological and biological traits as well as pathogenicity
2. Trematoda and Cestodes – morphological and biological traits as well as pathogenicity
3. Parasitic Nematodes - morphological and biological traits as well as pathogenicity
4. Parasitic Arthropods. Medical, epidemiological, and sanitary importance
5. Final test

Obligatory literature:

1. E. A. Zaibig (ed.) 2011. Clinical Parasitology. A Practical Approach. 2nd Edition

Complementary literature:

1. Buczek A (ed.) 2011. Parasitology for medical students, Koliber, Lublin

2. Bogitsh B., Carter C., Oeltmann T. (eds.) 2012. Human Parasitology. 4th Edition

Conditions for obtaining a credit for the subject:

Methods of evaluation: The overall course grade will be determined by the results of partial exams, which verify if the student acquired the knowledge, of the information as stated in the syllabus. A passing score confirms the satisfactory fulfilment of course requirements and is based on student's class attendance and mid-semester grades.

Exams

- Questions for the exams will be drawn from reading, lecture, and lab.
- Partial tests include open and multiple choice questions
- Final exam includes multiple choice questions
- The use of electronic devices with electronic databases is not permitted during partials and final exam

- **Comprehensive Final Exam**
- A comprehensive final exam for all lecture and lab topics.
- Final exam takes place during the end-of-term examination sessions.

Grading scale:

The grading scale is listed below:

95-100%	5.0 (very good)
90-94%	4.5 (better than good)
80-89%	4.0 (good)
70-79%	3.5 (quite good)
60-69%	3.0 (satisfactory)
<60%	2.0 (unsatisfactory)

In case of retake, the grading scale is listed below:

95-100%	5.0 (very good)
90-94%	4.5 (better than good)
85-89%	4.0 (good)
80-84%	3.5 (quite good)
70-79%	3.0 (satisfactory)
<70%	2.0 (unsatisfactory)

Attendance: Attendance is required. Student must participate in lab sessions according to the schedule. All excused absences from class must be reported. Participation performance will not be penalized for excused absences. In t case of absences with excuse in the form of seminars, labs or practical classes, the content of classes the student missed shall be made up according to the schedule given by the instructor.

Tardiness: Students are expected to arrive at class on time. Students that arrive after class begins will not be permitted in the classroom until the break. 2 tardiness will be considered 1 complete absence.

Uniforms: Students will be in uniform the first day of class. Students are expected to attend class in white lab coat and lab shoes or shoe covers (otherwise student will not be able to participate in the lab). Students are not permitted to wear heavy outside coats or jackets to any lab.

- Using mobile phones during the labs is **forbidden.**

Requirements for didactic aids (multimedia projector, movie camera, etc.)

Laboratory, multimedia projector, microscopic slides, macroscopic preparations

The name and address of the department/clinic where the course is taught (module/course); contact details (phone number/ email address):

Chair and Department of Biology and Parasitology, tel. (81) 4486060 katarzyna.bartosik@umlub.pl

Names of the author/authors of this syllabus:

Katarzyna Bartosik

Names of the teacher/teachers conducting classes:

Prof. Alicja Buczek, PhD Habilitated Katarzyna Bartosik, PhD Grzegorz Kania, PhD Zbigniew Zając, MD Paweł Błaszkiewicz

Signature of the head of the department/clinic

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Dean's signature

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Date of submission: