



# Pomeranian Medical University in Szczecin

## SYLLABUS of the MODULE (SUBJECT) General Information

<b>Module title: Parasitology</b>	
Module type	Obligatory
Faculty PMU	Faculty of Medicine (the Interfaculty Centre for English-Language Education)
Major	Medicine
Level of study	long-cycle (S2J)
Mode of study	full-time studies
Year of studies, semester	Year 2, semester II
ECTS credits (incl. semester breakdown)	1
Type/s of training	Practical classes (10 h)
Form of assessment*	<input checked="" type="checkbox"/> graded assessment: <ul style="list-style-type: none"> <li><input type="checkbox"/> descriptive</li> <li><input checked="" type="checkbox"/> test</li> <li><input type="checkbox"/> practical</li> <li><input type="checkbox"/> oral</li> </ul> <input type="checkbox"/> non-graded assessment <ul style="list-style-type: none"> <li><input type="checkbox"/> final examination <ul style="list-style-type: none"> <li><input type="checkbox"/> descriptive</li> <li><input type="checkbox"/> test</li> <li><input type="checkbox"/> practical</li> <li><input type="checkbox"/> oral</li> </ul> </li> </ul>
Head of the Department/ Clinic, Unit	Prof. Danuta Kosik-Bogacka, DSc, PhD
Tutor responsible for the module	Karolina Kot PhD, e-mail: karolina.kot@pum.edu.pl
Department's/ Clinic's/ Unit's website	Department of Biology, Parasitology and Pharmaceutical Botany, tel: (091) 466 1672 <a href="https://www.pum.edu.pl/studenci/informacje_z_jednostek/wfbmiml/zaklad_biologii_parazytologii_i_botaniki_farmaceutycznej/">https://www.pum.edu.pl/studenci/informacje_z_jednostek/wfbmiml/zaklad_biologii_parazytologii_i_botaniki_farmaceutycznej/</a>
Language	English

\* replace  into  where applicable

## Detailed information

<b>Module objectives</b>		Increase of knowledge of: <ul style="list-style-type: none"> <li>biology and pathogenicity of human parasites including protozoans, helminthes and arthropods. Arthropods as biological vectors of viruses, bacteria and parasites</li> <li>elements of epidemiology, diagnostic techniques and prophylaxis of parasitic diseases.</li> </ul>
Prerequisite /essential requirements	Knowledge	knowledge of biology, human anatomy and physiology
	Skills	operates optic microscope and is able to take advantage of immersion
	Competences	self-education

Description of the learning outcomes for the subject /module			
No. of learning outcome	Student, who has passed the (subject) knows /is able to /can:	SYMBOL (referring the standards)	Method of verification of learning outcomes*
W01	has sufficient knowledge and understanding of microorganisms - including pathogenic ones that constitute the human microbiome - and invasive forms or developmental stages of selected parasites;	C.W10.	ST
W02	has sufficient knowledge and understanding of epidemiology of infections caused by viruses, bacteria, fungi and prions as well as the one of parasite infections, taking into account the geographical range of their occurrence;	C.W11.	ST
W03	knows and understands pathogenesis and pathophysiology of infections and contagions and the impact of pathogenic factors such as viruses, bacteria, fungi, prions and parasites on the human body and population, with consideration of the methods of their impact, the consequences of exposure to them and the principles of prevention;	C.W.12.	ST
W04	knows and understands the methods used in microbiological and parasitological diagnostics (indications, principles of performance, interpretation of results);	C.W15.	ST
W05	knows and understands the principles of disinfection, sterilization and aseptic procedures;	C.W17.	ST
U01	can identify pathogens under a microscope;	C.U5.	sT, S
U02	is capable of linking images of tissue and organ damage with clinical symptoms of the disease, history and laboratory test results in order to establish the diagnosis in the most common diseases of adults and children;	C.U7	ST
K01	is open for noticing and recognizing one's own limitations, self-assessing the deficits and educational needs;	K.5	ST
K02	is ready for popularising health-promoting behavior;	K.6	ST
K03	is open to use objective sources of information;	K.7	ST

Table presenting LEARNING OUTCOMES in relation to the form of classes							
No. of learning outcome	Learning outcomes	Type of training					
		Lecture	Seminar	Practical classes	Clinical classes	Simulations	E-learning
W01	C.W10.			X			
W02	C.W11.			X			
W03	C.W.12.			X			
W04	C.W15.			X			
W05	C.W17.			X			
U01	C.U5.			X			
U02	C.U7			X			
K01	K.5			X			
K02	K.6			X			
K03	K.7			X			

Table presenting TEACHING PROGRAMME			
No. of a teaching programme	Teaching programme	No. of hours	References to learning outcomes
<b>Summer semester</b>			
<b>Practical classes</b>			
TK01	<b>Protista (part I):</b> <i>Trichomonas vaginalis</i> , <i>Giardia lamblia</i> , <i>Trypanosoma gambiense</i> , <i>T. cruzi</i>	2	W01, W02, W03, W04, W05, U01, U02, K01, K02, K03
TK02	<b>Protista (part II):</b> <i>Entamoeba histolytica</i> , <i>Plasmodium vivax</i> , <i>P. ovale</i> , <i>P. malariae</i> , <i>P. falciparum</i> , <i>P. knowlesi</i> , <i>Toxoplasma gondii</i>	2	W01, W02, W03, W04, W05, U01, U02, K01, K02, K03
TK03	<b>Flatworms:</b> <i>Clonorchis sinensis</i> , <i>Schistosoma haematobium</i> , <i>S. japonicum</i> , <i>S. mansoni</i> ; <i>Taenia saginata</i> , <i>T. solium</i> , <i>Echinococcus granulosus</i> , <i>E. multilocularis</i>	2	W01, W02, W03, W04, W05, U01, U02, K01, K02, K03
TK04	<b>Roundworms=Nematodes:</b> <i>Ascaris lumbricoides</i> , <i>Trichinella spiralis</i> , <i>Enterobius vermicularis</i> , <i>Toxocara canis</i> , <i>Trichuris trichiura</i>	2	W01, W02, W03, W04, W05, U01, U02, K01, K02, K03
TK05	<b>Arthropods</b> <b>Ticks and Mites:</b> <i>Ixodes ricinus</i> , <i>Demodex folliculorum</i> , <i>Sarcoptes scabiei</i> <b>Insects:</b> <i>Pediculus humanus</i> , <i>Pthirus pubis</i> , <i>Cimex lectularius</i>	2	W01, W02, W03, W04, W05, U01, U02, K01, K02, K03

Booklist
Obligatory literature:
1. Bogitsh B.J., Carter C.E., Oeltmann T.N. (2011) Human Parasitology. Forth edition. Academic Press

Supplementary literature:
1. Buczek A. (editor) (2007) "Parasitology for Medical Students" Koliber Publ., Lublin 330 pp. ISBN 83-60497-30-3
2. www.cdc.gov
3. Parasitology atlas available on the ARTEMIS PUM platform.

<b>Student's workload</b>	
Form of student's activity (in-class participation; activeness, produce a report, etc.)	Student's workload [h]
	Tutor
Contact hours with the tutor	10
Time spent on preparation to seminars/ practical classess	10
Time spent on reading recommended literature	5
Time spent on writing report/making project	
Time spent on preparing to colloqium/ entry test	2
Time spent on preparing to exam	
Other: Time spent on preparing to final test	5
Student's workload in total	32
<b>ECTS credits for the subject (in total)</b>	<b>1</b>
<b>Remarks</b>	

\* Selected examples of methods of assessment:

S – practical skills assessment

ST-single-choice test

other...