



**MODULE / SYLLABUS**  
EDUCATION CYCLE 2024-2027

<b>Module/subject name:</b>	<b>MICROBIOLOGY AND PARASITOLOGY</b>		
<b>Direction:</b>	<b>NURSING</b>		
<b>Level of study*:</b>	<b>I degree (bachelor's degree)</b> Second degree (master's)		
<b>Education Profile:</b>	<b>practical</b>		
<b>Type of study*:</b>	full-time / <b>part-time</b>		
<b>Type of activities*:</b>	mandatory <b>X</b> supplementary <input type="checkbox"/> elective <input type="checkbox"/> .		
<b>Year and semester of study*:</b>	Year of study*: I <b>X</b> II <input type="checkbox"/> III <input type="checkbox"/> .	Semester of study*: 1 <b>X</b> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/>	
<b>Number of ECTS credits assigned</b>	<b>1,5</b>		
<b>Language of instruction:</b>	<b>Polish</b>		
<b>PSW Department Name:</b>	<b>Faculty of Health Sciences</b>		
<b>Contact (tel/email):</b>	tel. 55 279 17 68 e-mail: <a href="mailto:dziekanat@psw.kwidzyn.edu.pl">dziekanat@psw.kwidzyn.edu.pl</a>		
<b>Type of module/course relating to professional preparation*:</b>	<ul style="list-style-type: none"> <li>• basic sciences <b>X</b></li> <li>• social sciences and humanities <input type="checkbox"/></li> <li>• sciences in the fundamentals of nursing <input type="checkbox"/>.</li> <li>• specialty care sciences <input type="checkbox"/></li> </ul>		
<b>Person responsible for the module/subject:</b>			
<b>Person(s) in charge:</b>	According to the study plan		
<b>Forms of student workload</b>			<b>Student workload (number of teaching hours)</b>
<i>Contact hours with an academic teacher (according to the study plan)</i>			
Lectures (W)			<b>24</b>
Seminar (S)			
Conversations			
Exercise (C)			<b>6</b>
Practical classes (ZP)			
<b>BUNA - independent work of the student (according to the study plan).</b>			<b>7</b>
Student workload related to professional practice ( <i>according to the study plan</i> )			
<b>Total student workload - total number of</b>			<b>37</b>
<b>Number of ECTS credits for the subject/module</b>			<b>1.5, including 0 BUNA</b>
<b>Didactic methods</b>	<ul style="list-style-type: none"> <li>• Traditional lecture supported by multimedia techniques, interactive lecture, administering methods,</li> <li>• laboratory exercises,</li> <li>• self-study.</li> </ul>		
<b>Assumptions and purpose of the subject</b>	The student will acquire the ability to use knowledge of general and specific microbiology, evaluate the effectiveness of disinfection and sterilization, describe the structure and function of the immune system, and how it works, and understand the mechanisms of immune reactions.		
<b>Teaching tools</b>	Multimedia presentations, microscopes, microbiological preparations.		
<b>Prerequisites:</b>	Knowledge of biology at the high school level. Basic skills in biology.		
<b>The matrix of learning outcomes for the module / subject in relation to methods of verification of achievement of the intended learning outcomes and the form of realization of learning activities</b>			
Symbol learning outcome	Students who pass the module (subject) know/understand/are able to:	Methods of verifying the achievement of the intended learning outcomes	The form of implementation of teaching activities * enter symbol
A.W17.	Presents a classification of microorganisms including pathogenic microorganisms and those present in the human physiological microbiota.	<i>Written exam, project</i>	W/BUNA
A.W18.	He knows the basic concepts of microbiology and parasitology and the methods used in microbiological diagnosis.	<i>Written exam, project</i>	W/BUNA

A.W19.	Characterizes the different groups of medicinal agents, the main mechanisms of their action and the transformations in the body and side effects caused by them.	<i>Written exam, project</i>	W/BUNA
A.U6.	Recognizes the most common human parasites based on their structure, life cycles and the disease symptoms they cause.	<i>Written and/or oral colloquium</i>	Ć
O.K7.	Recognizes and recognizes his own limitations in knowledge, skills and social competence, and makes a self-assessment of deficits and educational needs.	<i>Observation, self-assessment</i>	W/BUNA
*W-lecture; S-seminar; K-conversations; ZP-exercises; ZP-practical activities; PZ-internships; BUNA-student independent work.			
<b>SAMPLE METHODS FOR VERIFICATION OF LEARNING OUTCOMES</b>			
<b>In terms of knowledge (lectures/lectures):</b> oral examination ( <i>non-standardized, standardized, traditional, problem-based</i> ); written examination - the student generates / recognizes the answer ( <i>essay, report; short structured questions /SSQ/; multiple choice test /MCQ/; multiple response test /MRQ/; matching test; T/N test; answer completion test</i> ).			
<b>In terms of skills (exercises/conversations):</b> Practical exam; Objective Structured Clinical Examination /OSCE/; Mini-CEX (mini - clinical examination); Completion of an assigned task; Project, presentation.			
<b>In terms of social competence:</b> reflective essay; prolonged observation by supervisor/teacher-in-charge; 360° assessment (feedback from teachers, colleagues, patients, other colleagues); Self-assessment (including portfolio)			
<b>BUNA</b> - the student's own work is verified through an assessment of the degree of realization of the established learning outcomes: a test to check the student's knowledge of the topics specified in the syllabus, but also through credit work, projects, presentations and any other mid-semester work.			
<b>TABLE OF PROGRAM CONTENT</b>			
<b>Program content</b>		<b>Number of hours</b>	<b>Relation of learning outcomes to ACTIVITIES</b>
<b>LECTURES, semester I</b>			
1.	Structure, morphology, physiology of bacteria.	2	A.W17. A.W18. O.K7.
2.	The physiological flora of man. Carriage of pathogenic microorganisms. Detailed bacteriology.	2	A.W17. A.W18. O.K7.
3.	Structure, morphology, physiology of filamentous fungi and yeasts. Fungi as pathogens of humans.	2	A.W17. A.W18. O.K7.
4.	Characteristics of viruses. The most important pathogenic viruses.	2	A.W17. A.W18. O.K7.
5.	Division of parasites. The most common parasitic diseases.	3	A.W17. A.W18. O.K7.
6.	Food poisoning and infections.	3	A.W18. O.K7.
7.	Systemic infections.	3	A.W18. O.K7.
8.	Basic knowledge of immunology and epidemiology.	2	A.W18. O.K7.
9.	Vaccines and antisera. Immunization Program in Poland.	2	A.W18. A.W19. O.K7.
10.	Principles of rational antibiotic therapy. Empirical, targeted, sequential antibiotic therapy. Mechanisms of bacterial resistance to antibiotics and chemotherapeutics.	3	A.W18. A.W19. O.K7.
<b>EXERCISES, semester I</b>			
1.	The most common human parasites - an analysis of the structure, life cycles and disease symptoms they cause.	6	A.U6.
<b>BUNA - independent student work, semester I</b>			
1.	Expanding knowledge of bacterial and fungal metabolism.	7	A.W17-19., O.K7.
2.	Expand the knowledge of viral diseases occurring in humans.		
3.	Expand knowledge of infectious disease prevention, immunology and epidemiology.		
<b>LITERATURE LIST</b>			
<b>Primary Literature:</b>			
— Baj J., <i>Microbiology</i> , PWN, Warsaw 2018.			
— Blaszkowska J., Ferenc T., Kurnatowska P. (eds.), <i>Outline of medical parasitology</i> , Urban & Partner, Wrocław 2022 (print).			
<b>Supplementary literature:</b>			
— Murray P. R., Tenover F. C., Tenover K. C., <i>Microbiology</i> , Urban & Partner, Wrocław, 2022.			

**Manner of passing and forms and basic evaluation criteria/examination requirements**

**Method of crediting**

- Exam - lectures
- Passing grade - exercises
- Credit without a grade - BUNA

**Forms and criteria for passing**

**Lecture:**

The basis for obtaining credit is:

- Active participation in lectures (joining the discussion initiated by the lecturer, showing interest in the issues discussed during the lecture),
- Obtaining a passing grade on the colloquium,
- BUNA credit.

**Exam:**

- takes the form of a written test, multiple-choice test /MCQ/ with one correct answer (each correct answer is 1 point, no answer or incorrect answer 0 points, a minimum of 60% correct answers qualifies for a passing grade.

**Grading criteria for the test**

<b>Evaluation</b>	Very Good (5.0)	Good plus (4.5)	Good (4.0)	Sufficient plus (3.5)	Sufficient (3.0)	Unsatisfactory (2.0)
% of correct answers	93-100%	85-92%	77-84%	69-76%	60-68%	59% and below

**Exercises**

The basis for obtaining credit for a grade is:

- Attendance 100%; confirmed by an entry on the attendance list,
- Active participation in exercises (joining the discussion initiated by the lecturer, showing interest in the issues discussed during the exercises,)
- Positive evaluation of the colloquium - a test containing single-choice, multiple-choice and completion questions For a complete, correct answer, the student receives 1 point, incorrect or no answer 0 points, a minimum of 60% of correct answers qualifies for a passing grade.

**BUNA evaluation criteria - independent student work**

Presentation preparation

<b>Evaluation criteria</b>	<b>Evaluation: zal/nzal</b>	
Compliance of the content of the work with the subject of education		
Substantive evaluation of the work		
Evaluation of the selection and use of sources		
Evaluation of the formal side of the work (footnotes, language)		
	*(recommendations for work).	
	(evaluation)	(signature)

\* if any of the criteria is not met, correct the work according to the lecturer's recommendations.

**FINAL COURSE GRADE:**

Exam grade

**Conditions for making up classes missed for excused reasons:**

Making up missed classes is possible only in the case of a student's illness documented by a medical exemption or other fortuitous reasons. Excuses for classes and credit for the material covered during the period of absence are made by the lecturer conducting the class.

Both a student returning from dean's leave and a student repeating a year are required to attend all classes and take the exam. Only in the case of obtaining a grade of at least satisfactory (3.0) on an exam in a given year, a student repeating a year due to another subject may be exempted from having to attend classes and pass and pass the subject.

**Acceptance:  
pro-rector for teaching  
affairs**