



## MODULE / SYLLABUS

EDUCATION CYCLE 2024-2027

<b>Module/subject name:</b>		<b>PHARMACOLOGY</b>	
<b>Direction:</b>		<b>NURSING</b>	
<b>Level of study*:</b>		<b>1st degree (bachelor's degree)</b> II degree (master's degree)	
<b>Education profile:</b>		<b>practical</b>	
<b>Type of studies*:</b>		<b>stationary/</b> part-time	
<b>Type of classes*:</b>		mandatory X complementary <input type="checkbox"/> optional <input type="checkbox"/>	
<b>Year and semester of study*:</b>		Year of studies*: IX II <input type="checkbox"/> III <input type="checkbox"/>	Semester of studies*: 1 <input type="checkbox"/> 2 X 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/>
<b>Number of ECTS credits assigned</b>		<b>3.5</b>	
<b>Language of instruction:</b>		<b>Polish</b>	
<b>PSW Department Name:</b>		<b>Faculty of Health Sciences</b>	
<b>Contact (phone/email):</b>		tel.55 279 17 68 e-mail:dziekanat@psw.kwidzyn.edu.pl	
<b>Type of module/subject related to vocational training*:</b>		<ul style="list-style-type: none"> <li>• basic science X</li> <li>• social sciences and humanities <input type="checkbox"/></li> <li>• teaching the basics of nursing care <input type="checkbox"/></li> <li>• teaching in the field of specialist care <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 Load (number of teaching hours)</b>	
<i>Contact hours with an academic teacher (according to the study plan)</i>			
Lectures (W)		<b>45</b>	
Seminar (S)			
Conversations			
Exercises (C)		<b>24</b>	
Practical classes (PK)			
<b>BUNA – independent student work</b> (according to the study plan)		<b>18</b>	
Student workload related to professional practice (according to the study plan)			
<b>Total student workload- total number</b>		<b>87</b>	
<b>Number of ECTS points per subject/module</b>		<b>3.5, including 0.5 BUNA</b>	
<b>Teaching methods</b>	<ul style="list-style-type: none"> <li>• traditional lecture supported by multimedia techniques,</li> <li>• practical exercises,</li> <li>• self-education</li> </ul>		
<b>Objectives and purpose of the course</b>	<ul style="list-style-type: none"> <li>— To provide the student with the knowledge and skills necessary to perform professional tasks in the field of pharmacotherapy.</li> <li>— Mastering the course topics and the ability to use the knowledge acquired in practice.</li> </ul>		
<b>Teaching tools</b>	Multimedia board and projector, boards.		
<b>Prerequisites:</b>	Basic knowledge of biochemistry and biophysics, physiology and pathology.		
<b>Learning outcomes matrix for a module/subject in relation to the methods of verifying the achievement of the intended learning outcomes and the form of implementation of didactic activities</b>			
Symbol learning effect	A student who passes a module (subject) knows/understands/is able to:	Methods of verifying the achievement of intended learning outcomes	The form of teaching activities * enter symbol
A.W19.	It characterizes individual groups of medicinal products, their main mechanisms of action and the changes they cause in the body and their side effects.	<i>Standardized written and/or oral examination, project or oral response</i>	W/BUNA
A.W20.	Defines the basic principles of pharmacotherapy.	<i>Standardized written and/or oral examination, project or oral response</i>	W/BUNA

A.W21.	Knows the individual groups of drugs, the active substances contained in drugs, the uses of drugs, and the forms and routes of their administration.	<i>Standardized written and/or oral examination, Written and/or oral colloquium, project or oral answer</i>	W/C/BUNA
A.W22.	Discusses the influence of disease processes on the metabolism and elimination of drugs.	<i>Standardized written and/or oral examination, Written and/or oral colloquium, project or oral answer</i>	W/C/BUNA
A.W23.	Presents the most important adverse drug reactions, including those resulting from drug interactions, and the procedure for reporting adverse drug reactions.	<i>Standardized written and/or oral examination, Written and/or oral colloquium, project or oral answer</i>	W/C/BUNA
A.W24.	Knows the principles of issuing prescriptions as part of the execution of medical orders.	<i>Written and/or oral colloquium, project or oral response</i>	Ć/BUNA
A.W25.	Discusses the principles of treatment with blood and blood substitutes.	<i>project or oral response</i>	BUNA
A.U7.	Estimates the toxicological hazard in specific age groups and in various clinical conditions.	<i>Written and/or oral colloquium, project or oral response</i>	C
A.U8.	Uses pharmaceutical information guides and databases on medicinal products.	<i>Written and/or oral colloquium, project or oral response</i>	Ć/BUNA
A.U9.	Issues prescriptions for medications necessary to continue treatment as part of the execution of medical orders.	<i>Written and/or oral colloquium, project or oral response</i>	Ć/BUNA
A.U10.	Prepares records of prescription forms of medicinal substances and foodstuffs for particular nutritional uses prescribed by a physician.	<i>Written and/or oral colloquium, project or oral response</i>	Ć/BUNA
O.K4.	Takes responsibility for the professional activities performed.	<i>Observation, self-assessment</i>	Ć/BUNA
O.K7.	Notifies and recognizes own limitations in terms of knowledge, skills and social competences and performs self-assessment of educational deficits and needs.	<i>Observation, self-assessment</i>	W/C/BUNA

\*W-lecture; S-seminar; K-conversations; Ć-exercises; ZP-practical classes; PZ-professional internships; BUNA-independent student work

#### EXAMPLES OF METHODS FOR VERIFYING LEARNING OUTCOMES

**in terms of knowledge (lectures/seminars):** oral exam (non-standardized, standardized, traditional, problem-based); written exam – the student generates / recognizes the answer (essay, report; short structured questions /SSQ/; multiple choice test /MCQ/; multiple answer test /MRQ/; matching test; Y/N test; answer completion test),

**in terms of skills (exercises/conversations):** Practical exam; Objective Structured Clinical Examination /OSCE/; Mini-CEX (mini – clinical examination); Realization of assigned task; Project, presentation

**in the field of social competences:** reflective essay; extended observation by supervisor/lead teacher; 360° feedback (opinions from teachers, colleagues, patients, other collaborators); Self-assessment (including portfolio)

**BUNA** –the student's own work is verified by assessing the degree to which the assumed learning outcomes have been achieved: a test checking the student's knowledge of the topics specified in the syllabus, but also through term papers, projects, presentations and any other mid-semester work.

#### PROGRAM CONTENT TABLE

Program content	Number of hours	Relating learning outcomes to CLASSES
<b>LECTURES, semester II</b>		
1. Basic concepts of pharmacology. Autonomic drugs.	6	A.W19. A.W20. A.W23. O.K7.
2. Drugs used in pain therapy	5	A.W19. A.W20. A.W21. A.W22. A.W23. O.K7.
3. Blood pharmacology.	6	A.W19. A.W20. A.W21. A.W22. A.W23. O.K7.
4. Pharmacotherapy of cardiovascular diseases.	6	A.W19. A.W20. A.W21. A.W22. A.W23. O.K7.
5. Disinfectants and antiseptics.	5	A.W19. A.W20. A.W21. A.W22. A.W23.. O.K7.
6. Respiratory pharmacology. Expectorants, secretolytics and antitussives.	6	A.W19. A.W20. A.W21. A.W22. A.W23. O.K7.
7. Pharmacotherapy of digestive system diseases.	5	A.W19. A.W20. A.W21. A.W22. A.W23. O.K7.
8. Basics of antibiotic therapy	6	A.W19. A.W20. A.W21. A.W22. A.W23. O.K7.

<b>EXERCISES, semester II</b>		
1. Painkillers – types, pharmacotherapy.	6	A.W21. A.W22. A.W24. A.U10. O.K7.
2. Pharmacotherapy of digestive system diseases.	6	A.W21. A.W22. A.W24. A.U9. A.U10. O.K4. O.K7.
3. Drugs used in the treatment of asthma.	6	A.W21. A.W22. A.W23. A.W24. A.U7. A.U9. A.U10. O.K4.
4. Application of the principles of antiseptics and disinfection.	6	A.W21. A.W22. A.W23. A.W24. A.U8. A.U9. A.U10. O.K4. O.K7.
<b>BUNA – independent student work, semester II</b>		
1. Blood and blood substitutes.	3	A.W22. A.W25. O.K4. O.K7.
2. Vitamins, micro- and macroelements. Complex preparations. Principles of sensible supplementation.	4	A.W19. A.W21. A.W22. O.K4. O.K7.
3. Disinfectants.	3	A.W19. A.W20. A.W21. A.W22. O.K4. O.K7.
4. Patient education in pharmacotherapy, sources of information about drugs. OTC drugs.	4	A.W19. A.W20. A.W21. A.W22. A.W23. A.U9. O.K4. O.K7.
5. Records of prescription forms of medicinal substances and foodstuffs for particular nutritional uses (prescribed by a physician).	4	A.W19. A.W21. A.W22. A.W24. A.U8. A.U9. A.U10. O.K4.
<b>LITERATURE LIST</b>		
<b>Basic literature:</b>		
1. Mutschler E., Farmakologia i toksykologia, MedPharm, Wrocław 2016.		
<b>Additional literature:</b>		
1. Hryniewiecka E., Joniec-Maciejak I., Ordynacja i farmakoterapia w praktyce pielęgniarki i położnej, Urban & Partner, Wrocław 2019.		
<b>Method of passing and forms and basic assessment criteria/examination requirements</b>		
<b>How to pass</b>		
— Exam - lectures		
— Graded exam – exercises		
— Pass without grade – BUNA		
<b>Forms and criteria for passing</b>		
PASSING A SUBJECT – THE SUBJECT ENDS WITH AN EXAMINATION		
<b>Lecture:</b>		
The basis for obtaining a credit/pass is:		
— 100% attendance; confirmed by an entry on the attendance list,		
— a possible 10% absence compensated in an individual manner agreed with the teacher,		
— active participation in lectures (joining the discussion initiated by the lecturer, showing interest in the issues discussed during the lecture),		
— passing BUNA.		
<b>Exercises:</b>		
The basis for obtaining credit for a grade is:		
— 100% attendance; 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),		
— a written or oral test during the last class covering writing down prescriptions and knowledge covering the topics discussed during the exercises.		
<b>Assessment criteria</b>		
Rate	Criterion	
Very good	Correct, complete, independent answer to 3 questions asked to the student by the instructor	
All right	Correct answer, requiring slight guidance from the teacher, to 3 questions asked to the student	
Sufficient	Correct, incomplete, requiring significant guidance from the teacher, answer to 3 questions asked to the student	

Insufficient	No answer or incorrect answer to any of the 3 questions asked to the student
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**BUNA assessment criteria – independent student work**

Design

Assessment criteria	Rating: pass/fail
Compatibility of the work content with the subject of education	
Content evaluation of the work	
Evaluation of the selection and use of sources	
Assessment of the formal aspect of the work (footnotes, language)	
<i>*(work recommendations)</i>	
	<i>(rate)</i>
	<i>(signature)</i>

\* if any of the criteria are not met, the work should be corrected according to the lecturer's recommendations

**FINAL SUBJECT EXAM**

- The condition for admission to the exam is to obtain credits from lectures and exercises and to pass BUNA (project)
- The exam is in the form of a written test, multiple choice test /MCQ/ with one correct answer (each correct answer is worth 1 point, no answer or incorrect answer is worth 0 points, at least 60% of correct answers qualifies for a positive grade.

**Test Grading Criteria**

Rate	Very good (5.0)	Good plus (4.5)	Good (4.0)	Sufficient plus (3.5)	Satisfactory (3.0)	Insufficient (2.0)
% correct answers	93-100%	85-92%	77-84%	69-76%	60-68%	59% and less

**FINAL SUBJECT GRADE:**

- the exam constitutes 60% of the final grade of the subject
- the remaining 40% is the average of grades from other forms of classes

The final grade is calculated according to the following criteria:

- 3.0 -3.24 – satisfactory (3.0)
- 3.25 -3.74 – satisfactory (3.5)
- 3.75 -4.24 – good (4.0)
- 4.25-4.74 – good plus (4.5)
- 4.75 -5.0 – very good (5.0)

**Conditions for making up classes missed due to justified reasons:**

Making up missed classes is only possible in the case of a student's illness documented by a medical certificate or other unforeseen reasons. The excuse for classes and crediting the material covered by the exercises during the absence is made by the lecturer conducting the classes.

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 if the exam in a given year is graded at least satisfactory (3.0) can a student repeating a year due to a different subject be exempted from the obligation to attend classes and pass and pass the subject.

**Approval: Vice-Rector for Education**