



MODULE / SYLLABUS
EDUCATION CYCLE 2023-2026

Module/subject name:	PHARMACOLOGY		
Direction:	NURSING		
Level of study*:	I degree (bachelor's) II degree (master's degree)		
Profile of education:	practical		
Type of studies*:	stationary		
Type of classes*:	obligatory <input checked="" type="checkbox"/> supplementary <input type="checkbox"/> to choose from <input type="checkbox"/>		
Year and semester of studies*:	Year of study*: I <input checked="" type="checkbox"/> II <input type="checkbox"/> III <input type="checkbox"/>	Semester*: 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/>	
Number of ECTS credits assigned	3,5		
Language of instruction:	English		
Name of the PSW Department:	Faculty of Health Sciences		
Contact (tel./email):	Tel. 55 279 17 68 e-mail: dziekanat@psw.kwidzyn.edu.pl		
Type of module/subject relating to apprenticeships*:	<ul style="list-style-type: none"> • basic sciences <input checked="" type="checkbox"/> • social sciences and humanities <input type="checkbox"/> • science in the basics of nursing care <input type="checkbox"/> • specialist care <input type="checkbox"/> 		
Presenter(s):	according to the studies plan		
Forms of student workload		Student charge (number of teaching hours)	
<i>Contact hours with an academic teacher (according to the study plan)</i>			
Lectures (W)		45	
Seminar (S)			
E-learning (e-L)			
Conversatories			
Exercises (C)		24	
Practical classes (ZP)			
BUNA - independent student work (according to the study plan)		18	
Student's workload related to work placements (according to the study plan)			
Total student workload – total number		87	
Number of ECTS credits per subject/module		3.5, including 0.5 BUNA	
Didactic methods	<ul style="list-style-type: none"> • giving (lecture, talk), • programmatic (using audiovisual tools, boards), • activating (case method, situational method, staging method, didactic discussion, project method), • analysis of clinical cases. 		
Assumptions and aim of the subject	<p>— Obtaining by the student the knowledge and skills necessary to perform professional tasks in the field of pharmacotherapy.</p> <p>— Mastering the subject of classes and the ability to use the acquired knowledge in practice.</p>		
Teaching tools	Board and multimedia projector, boards.		
Prerequisites:	Basic knowledge of biochemistry and biophysics, physiology and pathology.		
Matrix of learning outcomes for the module / subject in relation to the methods of verifying the achievement of the intended learning outcomes and the form of implementation of didactic classes			
Symbol learning outcome	The graduate: knows and understands / is able to / is ready to	Methods for verifying the achievement of the intended learning outcomes	Form of implementation of didactic classes *(symbol)
A.W19.	individual groups of medications, their mechanisms of action, metabolism and side effects;	<i>Standardised written and/or oral examination, draft or oral answer</i>	W/BUNA
A.W20.	fundamental principles of pharmacotherapy;	<i>Standardised written and/or oral examination, draft or oral answer</i>	W/BUNA

A.W21.	drug groups, active substances in drugs, drug forms and routes of administration	<i>Standardised written and/or oral examination, Written and/or oral colloquium, draft or oral answer</i>	W/Ć/BUNA
A.W22.	impact of disease processes on metabolism and drug elimination;	<i>Standardised written and/or oral examination, Written and/or oral colloquium, draft or oral answer</i>	W/Ć/BUNA
A.W23.	the most common adverse drug reactions, including those caused by drug interaction, and the procedure of reporting adverse drug reactions;	<i>Standardised written and/or oral examination, Written and/or oral colloquium, draft or oral answer</i>	W/Ć/BUNA
A.W24.	principles of issuing prescriptions as directed by a physician;	<i>Written and/or oral colloquium, draft or oral reply</i>	Ć/BUNA
A.W25.	principles of treatment with blood or blood derivatives;	<i>draft or oral reply</i>	BUNA
A.U7.	assess toxicological risk for particular age groups and various clinical conditions;	<i>Written and/or oral colloquium, draft or oral reply</i>	W/C
A.U8.	make use of pharmaceutical information resources and databases of medicinal products;	<i>Written and/or oral colloquium, draft or oral reply</i>	Ć/BUNA
A.U9.	issue prescriptions for drugs necessary to continue treatment as directed by a physician;	<i>Written and/or oral colloquium, draft or oral reply</i>	Ć/BUNA
A.U10.	prepare prescriptions of formulas for medicinal substances and special- purpose foods as directed by a physician;	<i>Written and/or oral colloquium, draft or oral reply</i>	Ć/BUNA
O.K4.	take responsibility for their professional activities;	<i>Observation, self-assessment</i>	Ć/BUNA
O.K7.	perceive and recognise their own limitations in terms of knowledge, skills and social competences and carry out a self-assessment of their educational deficits and needs.	<i>Observation, self-assessment</i>	W/Ć/BUNA

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

EXAMPLES OF METHODS FOR THE VERIFICATION OF LEARNING OUTCOMES

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

in terms of skills (exercises/seminars): Practical examination; Objective Structured Clinical Examination (OSCE); Mini-CEX (mini – clinical examination); Implementation of the commissioned task; Design, presentation

in the field of social competences: reflective essay; prolonged observation by the tutor / teacher of the teacher; 360° assessment (opinions of teachers, colleagues, patients, other colleagues); Self-assessment (including portfolio)

BUNA – the student's own work is verified by assessing the degree of implementation of the assumed learning outcomes: a test checking the student's knowledge of the subject specified in the syllabus, but also through final papers, projects, presentations and any other mid-term work.

TABLE OF PROGRAMME CONTENTS

Program content	Number of hours	Reference of learning outcomes to CLASSES
LECTURES, semester II		
1. Groups of drugs and the mechanism of their action. Side effects of drugs and interactions between drugs. Drug dependence. Pharmacogenetics – basic concepts. LADME – the fate of drugs in the body.	5	A.W19. A.W20. A.W21. A.W22. A.W23. A.U7. O.K7.
2. Pharmacology of the central and peripheral nervous system. Narcotic and non-narcotic analgesics.	5	A.W19. A.W20. A.W21. A.W22. A.W23. A.U7. O.K7.
3. Pharmacology of the circulatory system. Groups of drugs. Drug interactions. Principles of therapy of cardiovascular diseases (ischemic heart disease, hypertension, circulatory failure, etc.). Pharmacotherapy of lipid disorders and obesity.	5	A.W19. A.W20. A.W21. A.W22. A.W23. A.U7. O.K7.

4. Pharmacology of the gastrointestinal tract. Treatment of gastric ulcer and XII-nica. Principles of therapy of liver and pancreatic diseases	5	A.W19. A.W20. A.W21. A.W22. A.W23. A.U7. O.K7.
5. Pharmacology of the respiratory system. Expectorant, secretolytic and antitussive drugs. Treatment of bronchial asthma.	5	A.W19. A.W20. A.W21. A.W22. A.W23. A.U7. O.K7.
6. Pharmacology of endocrine glands. Rules for the treatment of diabetes.	5	A.W19. A.W20. A.W21. A.W22. A.W23. A.U7. O.K7.
7. Antibiotic therapy and chemotherapy. Principles of rational antibiotic therapy. Groups of antibiotics and chemotherapeutic agents, side effects.	5	A.W19. A.W20. A.W21. A.W22. A.W23. A.U7. O.K7.
8. Chemotherapeutic antiviral, antifungal, anthelmintic, antiprotozoal, antituberculosis.	5	A.W19. A.W20. A.W21. A.W22. A.W23. A.U7. O.K7.
9. Sources of information about the drug - informatory pharmaceuticals, databases on medicinal products.	5	A.W19. A.W20. A.W21. A.W22. A.W23. A.U7. A.U8. O.K. 7.
EXERCISES, semester II		
1. Nurses' rights to issue prescriptions – legal principles.	6	A.W21. A.W22. A.W24. U10. O.K7.
2. Prescriptions – elements, rules and procedure for issuing prescriptions. E-prescription.	6	A.W21. A.W22. A.W24. A.U9. U10. O.K4. O.K7.
3. Professional responsibility of the nurse related to the issuance of prescriptions.	6	A.W21. A.W22. A.W23. A.W24. A.U7. A.U9. A.U10. O.K4.
4. Prescribing of medicines, foodstuffs for particular nutritional uses and medical devices.	6	A.W21. A.W22. A.W23. A.W24. A.U8. A.U9. U10. O.K4. O.K7.
BUNA - independent student work, semester II		
1. Blood and blood substitutes.	1	A.W22. A.W25. O.K4. O.K7.
2. Radiological shading agents – types, indications, side effects.	1	A.W19. A.W21. A.W22. A.W23. O.K4. O.K7.
3. Basics of cancer chemotherapy.	2	A.W19. A.W20. A.W21. A.W22.
4. Vitamins, micro- and macroelements. Complex preparations. Principles of reasonable supplementation.	2	A.W19. A.W21. A.W22. O.K4. O.K7.
5. Antiretroviral therapy for HIV infections.	2	A.W19. A.W20. A.W21. A.W22. O.K4. O.K7.
6. Disinfectants.	2	A.W19. A.W20. A.W21. A.W22. O.K4. O.K7.
7. 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.
8. Prescription forms of medicinal substances and foodstuffs for particular nutritional uses (ordered by a doctor).	4	A.W19. A.W21. A.W22. A.W24. A.U8. A.U9. A.U10. O.K4.
LIST OF LITERATURE		
Basic literature:		
1. Katzung B.G. (editor), Basic & clinical pharmacology, McGraw-Hill Education, cop. © 2021		
Supplementary literature:		
1. Lehne's Pharmacology for Nursing Care, 11th Edition - Jacqueline Burchum & Laura Rosenthal		
Method of passing and forms and basic assessment criteria/examination requirements		
Method of credit		
— Exam – lectures		
— Passing with grade – exercises		
— Passing without a grade – BUNA		
Forms and criteria for passing		
PASSING THE SUBJECT - THE SUBJECT ENDS WITH AN EXAM		

Lecture:

The basis for obtaining credit/zal is:

- presence of 100%; confirmed by an entry on the attendance list,
- possible 10% absence balanced in a manner individually agreed with the lecturer,
- active participation in lectures (joining the discussion initiated by the lecturer, showing interest in the issues discussed during the lecture),
- BUNY pass

Exercise

The basis for obtaining credit for the assessment is:

- presence of 100%; confirmed by an entry on the attendance list,
- active participation in the exercises (joining the discussion initiated by the lecturer, showing interest in the issues discussed during the exercises,)
- correct, positively assessed oral answer to 3 questions in the field of content related to learning **OUTCOMES** in the field of knowledge and skills, asked to the student during the exercises,

Evaluation criteria — oral answer

Assessment	Criterion
Very good	Correct, full, independent answer to 3 questions asked to the student by the lecturer
Endorsement	Correct, requiring little orientation by the teacher, answer to the 3 questions asked to the student
Sufficient	Correct, incomplete, requiring significant orientation by the teacher answer to the 3 questions asked to the student
Insufficient	No answer or incorrect answer to each of the 3 questions asked to the student

BUNA evaluation criteria - independent student work

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

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

FINAL EXAM IN THE SUBJECT

- The condition for admission to the exam is to obtain credit from lectures and exercises / seminars and pass BUNY (project)
- The exam takes the form of a written test, a 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% of the answers qualifies for a positive assessment.

Test evaluation criteria

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

and/or reply orally

Evaluation criteria – oral answer

Assessment	Criterion
Very good	Correct, full, independent answer to 3 questions asked to the student by the lecturer
Endorsement	Correct, requiring little orientation by the teacher, answer to the 3 questions asked to the student
Sufficient	Correct, incomplete, requiring significant orientation by the teacher answer to the 3 questions asked to the student
Insufficient	No answer or incorrect answer to each of the 3 questions asked to the student

FINAL GRADE IN THE SUBJECT:

- the exam accounts for 60% of the final grade in the subject
- the remaining 40% is the average grade from other forms of classes

The final grade is recalculated according to the following criteria:

3.0 -3.24 – sufficient (3.0)

3.25 -3.74 – sufficient (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 abandoned for justified reasons:

Making up for abandoned classes is possible only in the case of a student's illness documented by sick leave or other random reasons. Justification of classes and passing of the material being the subject of exercises during the period of absence is made by the lecturer conducting the classes.

Both a student returning from dean's leave and a student repeating the year is obliged to attend all classes and take the exam. Only if the exam in a given year has been obtained with at least a sufficient grade (3.0), a student repeating the year due to another subject may be exempted from the need to attend classes and pass and pass the subject.

Acceptance: Vice-Rector for Teaching and Student Affairs