

# SYLLABUS OF THE EDUCATIONAL COMPONENT



## General pharmacognosy

specialty	211 Veterinary medicine	mandatory discipline	selective
educational program	Veterinary medicine	faculty	of veterinary medicine
educational level	Master's degree	Department	pharmacology and parasitology

### TEACHER

#### Ladohubets Olena Vasyliivna



Higher education - specialty biologist  
 Scientific degree - candidate of biological sciences 03.00.13 Human and animal physiology  
 Academic title - associate professor of the department of pharmacology and parasitology  
 Work experience - 20 years  
 Indicators of professional activity on the subject of the course:

- author of more than 7 methodological developments;
- author and co-author of more than 120 scientific works, including articles indexed in Web of Science scientometric databases – 5,
- scientific-practical and methodical recommendations – 7, educational and methodological manuals – 4, GSTU – 2.

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The following are involved in the teaching of the discipline: associate professor, candidate of medicine. Sciences Duchenko Kateryna Andriivna.

## GENERAL INFORMATION ABOUT THE EDUCATIONAL COMPONENT (DISCIPLINE)

Goal	Acquisition of theoretical knowledge and practical skills regarding the etiology and pathogenesis of the main symptoms and syndromes of common animal diseases; selection of adequate drugs according to symptoms; effectiveness and safety of medicinal products, assessment of benefits/risks when using medicinal products; predicting the occurrence of a side effect of medicines; interpretation of the value of pharmacokinetic parameters of medicinal products; dosage for individual pharmacotherapy; implementation of pharmaceutical care.
Format	lectures, practical classes, independent work, individual tasks
Detailing of learning results and forms of their control	<ul style="list-style-type: none"> <li>• The ability to analyze data from educational and special literature when solving professional tasks related to the appointment of medicines for the treatment of animals and the prevention of diseases (GC1,GC2,PLO10) / <b>individual tasks for analysis</b></li> <li>• The ability to orientate in a wide arsenal of medicinal products, to scientifically prescribe one or another drug depending on the pharmacological action, animal species, the development of the pathological process with the maximum therapeutic effect and the minimum side effect; (GC2,GC3,PLO1,PLO15) / <b>individual tasks for analysis</b></li> <li>• The ability to draw up a pharmacological scheme for the treatment of animals, taking into account the combined action of drugs and their pharmacological compatibility;</li> <li>• The ability to distinguish the side effect of drugs and differentiate it from the symptoms of the development of pathological processes (GC2,GC3, SC7, PLO15,PLO20) / <b>individual tasks for analysis</b></li> </ul>
Scope and forms of control	3 ECTS credits (90 hours): 12 hours of lectures, 18 hours of practical classes; 60 hours of independent work, modular control (2 modules); final control - differentiated assessment.
Requirements of the teacher	timely completion of tasks, activity, teamwork
Enrollment conditions	after mastering the following components: (list)...." or "free enrollment"

## COMPLEMENTS THE STANDARD OF EDUCATION AND THE EDUCATIONAL PROGRAM

Competences	<p>GC1. Ability to abstract thinking, analysis and synthesis.</p> <p>GC2. Ability to apply knowledge in practical situations.</p> <p>GC3. Knowledge and understanding of the subject field and profession.</p> <p>GC8. Ability to learn and master modern knowledge.</p> <p>SC2. The ability to use tools, special devices, devices, laboratory equipment and other technical means to carry out the necessary manipulations during professional activities</p> <p>SC7. Ability to organize and conduct laboratory and special diagnostic studies and analyze their results.</p>	Program learning outcomes	<p>PLO1. Know and correctly use the terminology of veterinary medicine.</p> <p>PLO10. To propose and use expedient innovative methods and approaches to solving problematic situations of professional origin.</p> <p>PLO15. Know the rules of storage of various pharmaceuticals and biological preparations, ways of their enteral or parenteral use, understand the mechanism of their action, interaction and complex action on the animal body.</p> <p>PLO20. To have specialized software tools for performing professional tasks.</p>
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## STRUCTURE OF THE EDUCATIONAL COMPONENT (DISCIPLINES)

### Module 1. General pharmacognosy

Lecture 1.	Basic concepts, terms and knowledge of pharmacognosy. A short historical sketch of pharmacognosy	Practical classes (PC 1-2)	Medicinal roses (MP) and medicinal roses (MRM). Medicine forms that are prepared from MP, the technology of their preparation	Independent work	Application in practice and prospects for the use of drugs from medicinal plant raw materials in veterinary medicine.
Lecture 2.	Basics of preparing, drying and preserving medicinal rose syrup	PC 3	Methods for assessing the reliability of medicinal raw materials		
Lecture 3.	Biotechnology of medicinal plants.	PC 4	Protection of wild medicinal plants and their resources Biotechnology of medicinal plants		

### Module 2. Pharmacological action and use of medicinal plants in veterinary medicine

Lecture 4.	Biologically active speech of medicinal plants: carbohydrates - monosaccharides, related monosaccharides, oligosaccharides, polysaccharides	PC 5	Classifications, physical and chemical properties of carbohydrates	Independent work	Application in practice and prospects for the use of drugs from medicinal plant raw materials containing alkaloids and glycosides in veterinary medicine.  Features of the clinical manifestation and course of poisoning by certain plant species.
		PC 6	Future classification of peptides and proteins; methods of observation and investigation		
Lecture 5	Biologically active compounds from medicinal plants: peptides and proteins – lactones, enzymes	PC 7	Classification, physical and chemical power, methods of fat retention, biological action and vicorization		
Lecture 6	Biologically active medicinal plants: glycosides	PC 8	Classification, physical and chemical properties of glycosides		
		PC 9	Classification, physico-chemical properties of phenolic compounds, their biological activity and stagnation		

## BASIC LITERATURE AND METHODOLOGICAL MATERIALS

literature	<p>K.L. Mealy Pharmacotherapeutics for Veterinary Dispensing.- Wiley-Dlackwell , 2019 .- 417 p.</p> <p>1. S.Giguere, J.Prescott, P.M.Dowling Antimicrobial Therapy in Veterinary Medicine.- Wiley-Dlackwell, 2013.- 675 p.</p> <p>2. Walter H. Hsu Handbook of Veterinary Pharmacology.-Wiley-Dlackwell , 2008 .-537 p.</p> <p>3. D.C.Plamb Veterinary Drug Handbook.- Pharma Vet.Inc.- 2011, 573 p.</p> <p>4. M. Papich Sounders Handbook of Veterinary Drugs. Small and Large Animals.- Elsevier.- 2011, 812 p.</p>	Methodical support	<p>1. H.Luellmann, K.Mohr, L.Hein Color Atlas of Pharmacology-Thieme, 2017.-876 p.</p> <p>2. L.Pokludova Antimicrobials in Livestock.- Springer, 2020.- 312 p.</p> <p>3. Recipe of veterinary medicine (Workbook). / Nikiforova O.V., Ladogubets O.V., Duchenko K.A. , Harkusha I.V./ 2023.-80 p.</p>

## EVALUATION SYSTEM ([electronic link to regulations](#))

	SYSTEM	POINTS	ACTIVITY TO BE EVALUATED
Final assessment	100 point ECTS (standard)	up to 50	50% of the average grade for the modules
		up to 50	final testing
Modular assessment	100 points total	up to 50	answers to test questions
		up to 20	oral answers in laboratory-practical classes
		up to 30	the result of mastering the block of independent work

## NORMS OF ACADEMIC ETHICS AND CHARITY

All participants in the educational process (including those seeking education) must adhere to the code of academic integrity and the requirements set forth in the provision "On academic integrity of participants in the educational process of DBTU": show discipline, education, respect each other's dignity, show kindness, honesty, responsibility.