SYLLABUS OF THE EDUCATIONAL COMPONENT

VETERINARY PHARMACOLOGY

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

TEACHER

Ladohubets Olena Vasylievna

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.

phone	0504022811	Email	ladohubets@gmail.com	remote support	Moodle

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

Goal	formation of a holistic view of the pharmacokinetics and pharmacodynamics of the main groups of therapeutic agents, their pharmacotherapeutic and side effects. Particular attention is paid to the indications and contraindications for the use of medicinal drugs in veterinary practice.
Format	lectures, practical classes, independent work, individual tasks
Detailing of learning results and forms of their control	• Ability to search and process information from professional sources regarding the use of medicinal products for the treatment and prevention of animal diseases (GC1, GC2, GC3, PLO 2) / individual tasks for analysis • Ability to treat and prevent animal diseases using medicines (GC2, GC3, GC8, SC8, PLO3, PLO15) / individual practical tasks • Ability to understand the importance and necessity of carrying out treatment and preventive measures with the use of medicinal products (GC2, GC3, GC10, SC8) / individual situational tasks • The ability to organize, conduct and analyze the results of special laboratory studies with the appropriate registration of their results (GC2, GC3, PLO 2) / individual tasks for analysis • • Ability to timely and effectively develop and implement measures regarding the use of medicinal products (GC2, GC3, GC8, SC8) / individual practical tasks
Scope and forms of control	5 ECTS credits (150 hours): 14 hours of lectures, 60 hours of laboratory classes; 76 hours of independent work, current control (2 chapters); final control - exam.
Requirements of the teacher	timely completion of tasks, activity, teamwork
Enrollment conditions	after mastering the following components: (list)....” or "free enrollment"

COMPLIANCE WITH THE EDUCATION STANDARD AND EDUCATIONAL PROGRAM

Competences	GC1. Ability to abstract thinking, analysis and synthesis. GC2. Ability to apply knowledge in practical situations. GC3. Knowledge and understanding of the subject field and profession. GC8. Ability to learn and master modern knowledge. GC10. Ability to communicate with representatives of other professional groups at different levels (with experts of other fields of knowledge/types of economic activity) SC8. Ability to plan, organize and implement measures for the treatment of animals suffering from non-contagious, infectious and invasive diseases	**Program learning outcomes**	PLO2. Use information from domestic and foreign sources to develop diagnostic, treatment and business strategies PLO3. Determine the essence of physico-chemical and biological processes that occur in the body of animals in normal and pathological conditions PLO15. Know the rules for storing various pharmaceuticals and biological products, the routes of their enteral or parenteral administration, understand the mechanism of their action, interaction and complex effect on the animal body

STRUCTURE OF THE EDUCATIONAL COMPONENT

Chapter 1. General pharmacology. Recipe. Special pharmacology. Medicines that act mainly on the central nervous system. Medicines acting mainly in the area of peripheral nerve endings. Means for the treatment of allergic diseases

Lecture 1.	The subject, methods, history and prospects of the development of pharmacology. General pharmacology. Pharmacokinetics. Pharmacodynamics of medicines.	laboratory-practical classes LPC-1-	General pharmacology. General recipe.	Independent work	General pharmacology. Recipe. Special pharmacology. Medicines that act mainly on the central nervous system. Medicines acting mainly in the area of peripheral nerve endings
		LPC 2	Solid dosage forms.		
		LPC 3	Soft dosage forms.		
Lecture 2.	Central nervous system depressants. Anticonvulsant and psychotropic drugs. Neuroleptics, tranquilizers, sedatives. Analgesic agents. Means that stimulate the function of the central nervous system.	LPC 4	Liquid dosage forms.		
		LPC 5	Central nervous system depressants.		
		LPC 6	Inhalation and non-inhalation means for anesthesia. Sleep aids. Preparations for euthanasia.		
Lecture 3.	Means acting on the peripheral nervous system. Agents that suppress afferent (sensitive) nerves. Means that excite sensitive receptors. Agents acting on the efferent nervous system.	LPC 7	Anticonvulsant and psychotropic drugs. Neuroleptics, tranquilizers, sedatives. Sedative drugs.		
		LPC 8	Analgesic agents. Narcotic and non-narcotic analgesics.		
		LPC 9	Means that stimulate the function of the central nervous system. Psychostimulants, analeptics, nootropics, antidepressants.		
Lecture 4.	The subject, methods, history and prospects of the development of pharmacology. General pharmacology. Pharmacokinetics. Pharmacodynamics of medicines.	LPC 10	Agents that suppress afferent (sensitive) nerves. Local anesthetics. Astringent, antacid and enveloping, adsorbing and complexing medicinal products.		
		LPC 11	Means that excite sensitive receptors.		
		LPC 12	Agents acting on the efferent nervous system. Means that stimulate M- and H-cholinergic, M- cholinergic, H- cholinergic receptors.		
		LPC 13	Agents acting on the efferent nervous system. M- and H-cholinoblockers, M-cholinoblockers, H-cholino-blockers. Anticholinesterase drugs. Reactivators of cholinesterase		
		LPC 14	Medicines acting on cholinergic synapses. Ganglioblockers. Muscle relaxants.Agents acting on adrenergic synapses.		

Chapter 2. Antimicrobial, antiviral and antiparasitic drugs. Deratizing drugs. Drugs affecting the hematopoietic system. Medicines regulating the functions of some organs and systems. Drugs affecting metabolism and the immune system. Antitumor drugs					
Lecture 5.	Chemotherapeutic drugs. Antibiotics. Sulfanilamides. Anthelmintic drugs. Insecticidal and acaricidal preparations.	LPC 15	Chemotherapeutic drugs. Antibiotics Penicillins. Cephalosporins. Aminoglycosides	Independent work	Antimicrobial, antiviral and antiparasitic drugs. Deratizing drugs. Drugs affecting the hematopoietic system. Medicines regulating the functions of some organs and systems Drugs affecting metabolism and the immune system. Antitumor drugs
Lecture 6.	Drugs affecting the cardiovascular system. Cardiotonic means. Drugs affecting the blood system.	LPC 16	Chemotherapeutic drugs. Antibiotics. Tetracyclines. Levomycetin preparations. Macrolides. Rifamycins. Antibiotics of different groups. Treatment and prevention of coronavirus in small domestic animals		
		LPC 17	Sulfanilamides		
Lecture 7.	Medicines that affect the urinary system. Preparations for the treatment of organs of the gastrointestinal tract.	LPC 18	Antiseptic and disinfecting preparations.		
		LPC 19	Antiparasitic drugs. Anthelmintic drugs. Insecticides and acaricides.		
		LPC 20	Antiparasitic drugs. Insecticides and acaricides.		
		LPC 21	Antiprotozoal, coccidiostatic drugs. Zoocides.		
		LPC 22	Drugs affecting the cardiovascular system.		
		LPC 23	Drugs affecting the blood system.		
		LPC 24	Medicines that affect the urinary system.		
		LPC 25	Preparations for the treatment of organs of the gastrointestinal tract.		
		LPC 26	Enzyme preparations and probiotics.		
		LPC 27	Vitamin preparations.		
		LPC 28	Hormonal and antihormonal drugs		
		LPC 29	Medicines affecting immune processes		
		LPC 30	Antihypoxants and antioxidants		

BASIC LITERATURE AND METHODOLOGICAL MATERIALS

Literature

RECOMMENDED BOOKS

Basic literature

1. K.L. Mealy Pharmacotherapeutics for Veterinary Dispensing.- Wiley-Dlackwell , 2019 .- 417 p.
2. S.Giguere, J.Prescott, P.M.Dowling Antimicrobal Therapy in Veterinary Medicine.- Wiley-Dlackwell, 2013.- 675 p.
3. Walter H. Hsu Handbook of Veterinary Pharmacology.-Wiley-Dlackwell , 2008 .-537 p.

Additional literature

4. D.C.Plamb Veterinary Drug Handbook.- Pharma Vet.Inc.- 2011, 573
5. M. Papich Sounders Handbook of Veterinary Drugs. Small and Large Animals.- Elsevier.- 2011, 812 p.

Methodological materials

1. H.Luellmann, K.Mohr, L.Hein Color Atlas of Pharmacology-Thieme, 2017.-876 p.
2. L.Pokludova Antimicrobals in Livestock.- Springer, 2020.-312 p.
3. Recipe of veterinary medicine (Workbook). / Nikiforova O.V., Ladogubets O.V., Duchenko K.A. , Harkusha I.V./ 2023-80 p.

EVALUATION SYSTEM

SYSTEM		POINTS	ACTIVITY TO BE EVALUATED
Final assessment	100 point ECTS (standard)	up to 50	50% of the average grade for the chaptes
		up to 50	final testing
Rating of section	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.