SILABUS EDUCATIONAL COMPONENT

PECULIARITIES OF REPRODUCTION OF SMALL ANIMALS

specialty	**211 -Veterinary medicine**	**compulsory nature of the discipline**	**selective**
educational program	**educational program**	**faculty**	**veterinary medicine**
educational level	**-**	**department**	**Veterinary surgery and reproductive medicine**

LECTURER

Zaika Petro Oleksandrovich

Higher education - specialty Veterinary Medicine Academic degree - Candidate of Veterinary Sciences, specialty 16.00.04 - Veterinary Pharmacology and Toxicology
Academic title - Associate Professor
Work experience - 23 years Indicators of professional activity on the subject of the course:
- Author of more than 20 methodological developments;
- 26 years of scientific work experience;
- co-author of a thematic publication in Web of Science.
- Participant of scientific and methodological conferences.
- practicing doctor
- Research interests: skin diseases of dogs and cats, anesthesiology, use of sodium humate

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Professor Dmytro Viktorovych Sliusarenko are involved in teaching the discipline.

GENERAL INFORMATION ABOUT THE EDUCATIONAL COMPONENT (DISCIPLINE)

Aim	studying the structural characteristics and functional features of the organs of small animal reproduction regulation systems peculiarities of keeping and using sires, methods of obtaining sperm, macro- and microscopic evaluation of its quality storage, artificial insemination techniques, embryo transplantation, peculiarities of the intrauterine period of small anima development, peculiarities of the structure and functioning of the fetoplacental complex, physiology and pathology of labo peculiarities of the physiological development of newborn puppies
Format	lectures, practical classes, independent work, individual assignments.
Detailing of learning outcomes and forms of their control	• - ability to follow the rules of personal safety in the study of small animals, using knowledge of their anesthesia and fixation, follow the rules of personal hygiene, to use the rules of asepsis and antisepsis in the implementation of any obstetric-gynaecological or andrological intervention or research (SC3) / individual practical training.- the ability to conduct research a the appropriate level, apply knowledge in practical situations, use tools, special devices for special manipulations in the performance of professional tasks (GC1, GC2, GC3, GC7, GC9, SC4, SC8, PLO1, PLO2, PLO4) / individual practical classes.- abili to perform obstetric and gynecological measures and operations (SC9 / individual practical training.- to understand and find the features of clinical research in order to form conclusions about the state of the animal and establish a diagnosis (GC2, GC PC1, PC2, PC8, PC11, PC19, PC19.1, PLO7, PLO8 / individual practical classes.- ability to think abstractly, analyze, synthesize, search, process information from various sources (GC1, PLO5, PLO6, PLO7) / individual practical classes.
Scope and forms of control	3 ECTS credits (90 hours): 12 hours of lectures, 18 hours of laboratory and practical classes; 30 hours of independent study, current control (2 tests); final control - differentiated credit.
Teacher requirements	timely completion of tasks, activity, teamwork
Terms of enrollment	"free enrollment"

COMPLEMENTS THE EDUCATION STANDARD AND EDUCATIONAL PROGRAM

Competencies	GC1. Ability to abstract thinking, analysis and synthesis.GC2. Ability to apply knowledge in practical situations.GC 3. Knowledge and understanding of the subject area and profession.GC7. Ability to conduct research at the appropriate level.GC 9. Ability to make informed decisions.SC1. Ability to establish the features of the structure and functioning of cells, tissues, organs, their systems and apparatus of the body of animals of different classes and species - mammals, birds, insects (bees), fish and other vertebrates.SC2. Ability to use tools, special devices, instruments, laboratory equipment and other technical means to perform the necessary manipulations in the performance of professional tasks.SC 3. Ability to comply with the rules of labor protection, asepsis and antisepsis during professional	**Program learning outcomes**	PLO1. To know and correctly use the terminology veterinary medicine.PLO 2. Use information from dome and foreign sources to develop diagnostic, therapeutic business strategies.PLO 4. Collect anamnestic data du registration and examination of animals, make decisi on the choice of effective methods of diagnosis, treatm and prevention of animal diseases.PLO 5. To establish relationship between clinical manifestations of the dise and the results of laboratory tests.PLO 6. Deve quarantine and health measures, methods of thera prevention, diagnosis and treatment of diseases of vari etiologies.PLO 7. To formulate conclusions about effectiveness of selected methods and means of keep feeding and treating animals, prevention of contagi and non-contagious diseases, as well as production

	activities.SC 4. Ability to conduct clinical research to formulate conclusions about the condition of animals or to establish a diagnosis.SC 8. Ability to plan, organize and implement measures for the treatment of animals of different classes and species suffering from non-communicable, infectious and invasive diseases.SC 9. Ability to carry out obstetric-gynaecological and surgical measures and operations.SC 13. Ability to develop strategies for the prevention of diseases of various etiologies.		**technological processes at enterprises for maintenance, breeding or exploitation of animals different classes and species.**

STRUCTURE OF THE EDUCATIONAL COMPONENT (DISCIPLINE)

Chapter 1. Features of the reproductive capacity of small animals

Lecture 1	Morphofunctional characteristics of the genital organs of females and males of small animals. Features of the manifestation of the sexual function of females of small animals.	Laboratory and practical training 1 (LPT 1)	Peculiarities of the sexual cycle of small animals. Mating of small animals.	Independent work	Sexual and physiological maturity of m and females of small animals, dependin on the breed. Sexual instinct, sexual reflexes, sexual intercourse. Natural insemination of small animals. Physiological basis of the use of small animal males. Influence of the type of nervous activity on the sexual function males. Inhibition of se reflexes. Male libido and reasons fo decrease. Prolonged estrus and la estrus Suppression of estrus, prolon prevention of estrus and short-term shi estrus. The importance of embryo tran in small animal breeding.
Lecture 2	Artificial insemination of animals. Advantages of the method, prevalence. Embryo transplantation. Fertilization and its features in females of different species of small animals.				
		LPT 2	Peculiarities of the sexual cycle of small animals. Mating of small animals.		
		LPT 3	Obtaining sperm from sires. Evaluation of the quality of ejaculate of small animal males.		
		LPT 4	Storage and cryopreservation of male small animal ejaculate. Artificial insemination of small animal females.		Methods for synchronizing sexual cy and inducing superovulation in fe small animals.
					Methods of obtaining embryos technology for working with embryos.
					Embryo transplantation and peculiar of transplantation in small animals.

Chapter 2. Prenatal, intrapartum and neonatal periods of small animals

Lecture 3	Peculiarities of physiology and pathology of the prenatal period.	LPT 5	Diagnosis of pregnancy in small animals. Pathology of pregnancy.	Independent work	Pathology of the placenta in infectio diseases of small animals. Anesthe of labor. Infectious diseases of newborn puppies and kittens. Caus and methods of treatment of mastopathies.
Lecture 4	Pathologies of small animal pregnancy.	LPT 6	Termination of pregnancy in small animals.		
Lecture 5	Features of physiology and pathology of the intrapartum period.	LPT 7	Physiology of labor. Pathology of the genera.		
Lecture 6	Neonatal period.	LPT 8	Help with pathological labor in small animals		
		LPT 9	Physiology and pathology after the parturition period. Death of newborn puppies and kittens.		

BASIC LITERATURE AND METHODOLOGICAL MATERIALS

	1. Obstetrics, gynecology and biotechnology of animal reproduction with the basics of andrology: Program of academic discipline for training specialists of higher agricultural educational institutions of 3-4 accreditation level in specialty 7.130501. "Veterinary Medicine" / G.V. Zvereva, S.P. Khomyn, V.A. Yablonsky, V.Y. Lyubetsky, G.G. Haruta - K.: Agrarian Education, - 2001. - 20 p.2. Hryshko DS Lectures on veterinary obstetrics: Study guide / DS Grishko. Kh.: - Flag, 2003. - 400 p.3. Physiology and pathology of reproduction of small animals / Textbook: Sumy regional printing house, publishing house "Kozatsky Val", 2005. - 554 p.4. Practical Veterinary Gynecology: Study guide. Manual for students of the Faculty of Veterinary Medicine, students of the Faculty of Advanced Training, specialists of veterinary medicine / KhZVI. Grishko DS, Zhidkov DN, Gontarenko VS and others -Kh. 1999.5. Diseases of dogs and cats / V.B. Borisevich, V.F. Galat, G.M. Kalinovsky and others; edited by A.Y. Mazurkevich - K.: Urozhay, 1996-432 pp.	**Methodological support**	1. Complex diagnostics and prevention of prenatal pathology in do Methodical recommendations for students of the Faculty of Veterin Medicine. Kh. - DBTU. - 2021. -47 p. 2. Workbook for independent work of students of the 2nd (2nd semest course of the Faculty of Veterinary Medicine in the course "Diseases small animals." -Kh. -2023.-21 P. 3. Sarbash D.V., Kantemir O.V., Zaika P.O. Methodical recommendatio for conducting laboratory and practical classes in the general course operative surgery for teachers and students of 2, 3 courses of the Facu of Veterinary Surgery. Kh.: DBTU 2022 - 44 p. 4. Sarbash DV, Tsimerman OO, Zaika P. Methodical instructions independent work for students of the Faculty of Veterinary Medici KhDZVA 2022 - 34p. 5. Sarbash D.V. Kantemir O.V., Zaika P.O., Tsimerman O.O. Methodi recommendations for conducting laboratory and practical classes in t general course of surgery for teachers and students of 2.3 courses of t Faculty of Veterinary Medicine Kh.

EVALUATION SYSTEM

SYSTEM		POINTS	ACTIVITY TO BE EVALUATED
Final assessment (different credit, exam)	**100 points ECTS (standard)**	**up to 100**	**40% - final testing** **60 % - student's current work during the semester**
Final assessment (non-differential credit)	**100 points ECTS (standard)**	**up to 100**	**100% - average grade for sections**
		up to 30	**30% - answers on test questions**

Rating of section	**100 points total**	**up to 30**	**30% - the result of mastering the block of independent work**
		up to 40	**40% - student activity in classes (oral answers)**

NORMS OF ACADEMIC ETHICS AND INTEGRITY

All participants in the educational process (including students) must adhere to the code of academic integrity and the requirements set forth in the Regulation "On Academic Integrity of Participants in the Educational Process of SBU": to be disciplined, well-mannered, respect each other's dignity, show goodwill, honesty, and responsibility.