SYLLABUS OF THE EDUCATIONAL COMPONENT

SPECIAL RESEARCH METHODS FOR SURGICAL DISEASES OF ANIMALS

Specialty	**211 – Veterinary Medicine**	**Discipline Status**	**selective**
Educational Program	**Veterinary Medicine**	**Faculty**	**Veterinary Medicine**
Educational Level	**Master's degree**	**Department**	**Veterinary Surgery and Reproductology**

TEACHER

Sliusarenko Dmytro Viktorovych

Higher education – specialty: veterinary medicine
Academic degree – Doctor of Veterinary Sciences
Academic title – Professor
Work experience – 28 years
Author and co-author of more than 120 scientific papers
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The following are involved in teaching the discipline: Candidate of Veterinary Sciences Synyagovska Kateryna Adolfivna, Candidate of Veterinary Sciences Zaika Petro Oleksandrovych

GENERAL INFORMATION ABOUT THE COURSE

Objective	**providing students with theoretical knowledge and practical skills in the technique of special research methods for differential diagnosis of surgical diseases of animals**
Format.	**lectures, practical classes, independent work, individual assignments.**
Detailing of learning results and forms of their control	**• ability to follow the rules of personal safety when studying animals, using knowledge about their fixation, to follow the rules of personal hygiene, to use the rules of asepsis and antiseptics when carrying out any intervention or research**

	(SC3) / individual practical classes. • ability to conduct research at the appropriate level, to apply knowledge in practical situations, to use tools, special devices for performing special manipulations when performing professional tasks (GC2, GC3, GC6, SC2, SC4, SC19, PLO7) / individual practical classes. • ability to determine the complex of necessary modern clinical, instrumental and laboratory methods and techniques, as well as to understand the purpose and use the necessary professional equipment, tools, reagents, etc., necessary for conducting research on the health and well-being of animals of various species and classes in accordance with the chosen direction and the set goal) / individual practical classes. • understand and clarify the features of conducting clinical studies in order to form conclusions about the condition of the animal and establish the effectiveness of treatment (GC 2, GC 3, SC 1, SC 2, SC 8, SC 11, SC 19, PLO 7, PLO 8)/ individual practical classes. • the ability to abstract thinking, analysis, synthesis, search, and processing information from various sources (GC 1, PLO 7)/ individual practical classes.
Scope and form of control	3 ECTS credits (90 hours): 18 hours of lectures, 36 hours of laboratory and practical classes; 36 hours of independent studies, current control (2 chapters); final control - differentiated test.
Teacher requirements	timely completion of tasks, activity, teamwork
Enrollment conditions	"free enrollment"

COMPLEMENTS THE STANDARD OF EDUCATION AND THE EDUCATIONAL PROGRAM

Competencies	GC1. Ability to abstract thinking, analysis and synthesis, search, process information from various sources. GC2. Ability to apply knowledge in practical situations. GC6. Ability to conduct research at the appropriate level, make informed decisions, evaluate and ensure the quality of the work performed. SC1. Ability to understand and clarify the features of the structure and functioning of cells, tissues, organs, their systems and apparatuses of the animal body. SC2. Ability to use tools, special devices, instruments, laboratory equipment and other technical means to perform the necessary manipulations when performing professional tasks. SC3. Ability to comply with safety rules, asepsis and antiseptics when performing professional activities. SC4. Ability to conduct clinical studies in order to formulate conclusions about the condition of animals or establish a diagnosis. SC11. Ability to develop prevention strategies. SC19. Ability to carry out professional activities within the chosen specialization.	**Program learning outcomes**	PLO 7. Collect anamnestic data during registration and examination of animals, find solutions to the choice of effective methods of preventing animal diseases. PLO 8. Explain the essence and dynamics of the development of physiological processes that occur in the animal body under the influence of environmental factors and the action of infectious agents.

STRUCTURE OF THE EDUCATIONAL COMPONENT

Chapter 1.					
Lecture 1	Basic rules for working with surgical	Laboratory	Basic principles of familiarization with	– ⊆	Use of Doppler for assessment of

	animal patients	and practical lesson 1 (Practice 1)	equipment and practice of special research methods – 4 hours		blood flow in soft tissue tumors. Study of ultrasonic signs of inflammatory processes in the joints of cattle. Computed tomography (CT) in veterinary surgery: Principle of operation, indications and interpretation of images. Assessment of the informativeness of CT in the diagnosis of bone and joint injuries in small animals. Use of contrast agents to improve visualization of pathological processes in the abdominal organs.
Lecture 2	Basic principles of general and special methods of examining animals in surgical pathology				
	X-ray examination of animals in surgical pathology	Practice 2	Main surgical diseases for which X-ray examination of animals is performed. Analysis of clinical cases – 4 hours		
Lecture 3	Ultrasound examination of animals in surgical pathology	Practice 3	Main surgical diseases for which ultrasound examination of animals is performed. Analysis of clinical cases – 4 hours		
Lecture 4	Endoscopic examination of animals in surgical pathology	Practice 4	Main surgical diseases for which endoscopic and thermographic examination of animals is performed. Analysis of clinical cases – 4 hours		
			Chapter 2.		
Lecture 5	Laboratory methods of animal research in surgical pathology	Practice 5	Main surgical diseases for which laboratory research of animals is carried out. Types of research and analysis of clinical cases – 4 hours	Independent work	The use of endoscopy in digestive system surgery. Changes in hematological parameters in inflammatory processes in animals. Diagnostic value of bone marrow punctate analysis. Blood, urine analysis, biopsy, their significance in diagnosis. Use of electrocardiography (ECG) in veterinary surgery: Indications, methodology and interpretation of results. Methods for assessing the general condition of the animal before surgical intervention: Comprehensive examination to minimize risks during surgery.
Lecture 6	Functional methods of animal research in surgical pathology	Practice 6	Main surgical diseases for which functional research of animals is carried out. Analysis of clinical cases – 4 hours		
Lecture 7	Special research methods in the diagnosis of surgical diseases of individual body systems of different animal species in surgical pathology	Practice 7	Special methods of research of animals used in veterinary anesthesiology – 4 hours		
Lecture 8	Generalization of information for the purpose of making a diagnosis in animals in surgical pathology	Practice 8	Interpretation of results of special research methods in surgical patients – 4 hours		
		Practice 9	Differential diagnostics of surgical diseases of animals based on data of special research methods – 4 hours		

BASIC LITERATURE AND METHODOLOGICAL MATERIALS

Basic literature

1. Сучасні методи і засоби місцевої анестезії тварин: наук.-метод. посібник / Д.В. Слюсаренко, Д.В. Сарбаш, М.Г. Ільніцький, В.М. Власенко, С.В. Рубленко. – Х.: Стиль-Іздат, 2017.– 140 с.
2. Власенко В.М. Оперативна хірургія, анестезіологія і топографічна анатомія. /В.М.Власенко, Л.А. Тихонюк, М.В. Рубленко. - Загальна частина. Біла Церква. 2006. – 531 с.
3. Власенко. В.М. Словник термінів ветеринарної хірургії./ Власенко В.М., Тихонюк Л.А. –Біла Церква: 2008. – 357с.
4. Campoy L. Small Animal Regional Anaesthesia and Analgesia / L. Campoy, M.R. Read. – Wiley-Blackwell, 2013. – 288 p.
5. Burkitt Creedon J.M. Advanced monitoring and procedures for small animal emergency and critical care / Jamie M. Burkitt Creedon, Harold Davis. – Wiley-Blackwell, 2012. – 888 p.

Methodological materials

1. Диференціальна епідуральна блокада у великої рогатої худоби та собак: метод. рекомендації / М.Г. Ільніцький, С.В. Рубленко, Д.В. Слюсаренко, Д.В. Сарбаш. – Х., 2015. – 18 с
2. Епідуральна анестезія у собак за виконання оперативних втручань в ділянці живота : метод. рекомендації / Д.В. Слюсаренко, М.Г. Ільніцький, Д.В. Сарбаш. – Х., 2017. – 11 с.
3. Епідуральна анестезія за виконання хірургічних маніпуляцій в ділянці тазових кінцівок у великої рогатої худоби : методичні рекомендації / Д.В. Слюсаренко, М.Г. Ільніцький, Д.В. Сарбаш. – Х., 2017. – 12 с.
4. Слюсаренко Д.В. Спірографія у собак за виконання хірургічних маніпуляцій / Д.В. Слюсаренко, Д.В. Сарбаш // Наук. вісник вет. медицини: зб. наук. праць. – Біла Церква, 2012. – Вип. 10(99). – С. 109–112.

EVALUATION SYSTEM

SYSTEM		POINTS	ACTIVITY THAT IS ASSESSED
Final assessment (different credit, exam)Final evaluation	100 ECTS points (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
Rating of section	100 points total	up to 30	30 % - answers to test questions
		up to 30	30 % - the result of mastering the block of independent work
		up to 40	40 % - student activity in class (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 stipulated in the regulation "On Academic Integrity of Participants in the Educational Process of SBTU": to demonstrate discipline, good manners, respect each other's dignity, show kindness, honesty, and responsibility.