

## SYLLABUS OF THE EDUCATIONAL COMPONENT



### GENERAL AND SPECIAL SURGERY

Specialty	211 – Veterinary Medicine	Discipline Status	Mandatory
Educational Program	Veterinary Medicine	Faculty	Veterinary Medicine
Educational Level	Master's Degree	Department	Veterinary Surgery and Reproductology

### TEACHERS

**Slusarenko Dmytro Viktorovich**

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Scientific Degree: Doctor of Veterinary Sciences  
 16.00.05 - Veterinary Surgery  
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 16.00.04 - Veterinary Pharmacology and Toxicology  
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## GENERAL INFORMATION ABOUT THE COURSE

### Course Objectives

To teach students the fundamental principles of species-specific animal reactivity, inflammation, surgical infection. To instruct students in the principles of pathogenetic treatment of diseases in various parts of the animal body. To enable students to recognize different groups of diseases, correctly treat animals, and prevent diseases.

### Course Format

Lectures

Practical classes

Self-study

Individual assignments

### Detailed Learning Outcomes and Assessment Methods:

- Ability to use tools, specialized devices, instruments, conduct research, make informed decisions, evaluate and ensure the quality of work (Competencies: ZK7, ZK11, SK2, PRN1, PRN7) / Individual practical assignments.
- Ability to apply knowledge in practical situations, perform obstetric and surgical procedures and operations, collect case history data during animal examination, make decisions on the choice of effective methods of diagnosis, treatment and disease prevention (Competencies: ZK2, SK9, PRN2, PRN4) / Individual practical assignments.
- Ability to comply with occupational health and safety regulations, asepsis and antiseptics during professional activities, recommend health-improving measures, methods of therapy, diagnosis and treatment of diseases (Competencies: SK3, PRN5, PRN6) / Individual practical assignments.
- Ability to make informed decisions, conduct clinical studies to formulate conclusions about the condition of animals or establish a diagnosis (Competencies: ZK9, SK4, PRN10) / Individual test assignments

### Course Volume and Assessment Methods

10 ECTS credits (300 hours)

42 hours of lectures

116 hours of laboratory-practical classes

	<p><b>112 hours of self-study</b></p> <p><b>Modular control (5 modules)</b></p> <p><b>Assessment forms: Pass/Fail (non-differentiated), term paper, exam</b></p>
<b>Teacher requirements</b>	<p><b>Timely completion of assignments</b></p> <p><b>Active participation</b></p> <p><b>Teamwork</b></p>
<b>Enrollment Conditions</b>	<b>Mandatory component</b>

## COMPLEMENTS THE EDUCATION STANDARD AND EDUCATIONAL PROGRAM

<b>Competencies:</b>	<p>Ability to apply knowledge in practical situations (ZK 2)</p> <p>Ability to conduct research at the appropriate level (ZK 7)</p> <p>Ability to make informed decisions (ZK 9)</p> <p>Ability to evaluate and ensure the quality of work performed (ZK 11)</p> <p>Ability to use tools, specialized devices, instruments, laboratory equipment and other technical means for carrying out the necessary manipulations during professional activity (SK 2)</p> <p>Ability to comply with occupational health and safety regulations, asepsis and antiseptics during professional activities (SK 3)</p> <p>Ability to conduct clinical studies to formulate conclusions about the condition of animals or establish a diagnosis (SK 4)</p> <p>Ability to perform obstetric-gynecological and surgical procedures and operations (SK 9)</p>	<b>Program Learning Outcomes:</b>	<p>Know and correctly use the terminology of veterinary medicine (PRN 1)</p> <p>Use information from domestic and foreign sources to develop diagnostic, treatment and business strategies (PRN 2)</p> <p>Collect case history data during registration and examination of animals, make decisions on the choice of effective methods of diagnosis, treatment and prevention of animal diseases (PRN 4)</p> <p>Establish a link between the clinical manifestations of the disease and the results of laboratory tests (PRN 5)</p> <p>Develop quarantine and health-improving measures, methods of therapy, prevention, diagnosis and treatment of diseases of various etiologies (PRN 6)</p> <p>Formulate conclusions on the effectiveness of selected methods and means of keeping, feeding and treating animals, preventing infectious and non-infectious diseases, as well as production and technological processes at enterprises for keeping, breeding or exploiting animals of different classes and species (PRN 7)</p>
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Propose and use appropriate innovative methods and approaches to solving problematic situations of professional origin (PRN 10)

## COURSE STRUCTURE

### Module 1. Traumatism of farm animals. Surgical infection. Pathogenetic therapy in veterinary surgery.

Lecture 1	Introductory lecture on general and special surgery	Practice 1	Features of work in a modern surgical clinic Animal body reactions to trauma	Independent work	<p>General and special methods of treatment of aseptic and purulent inflammation in different animal species. Differential diagnosis of edema, infiltrates and proliferations. Exudates. Types of exudates.</p> <p>Classification and differential diagnosis of phlegmon and abscesses. Surgical methods of their treatment. Pathogens of anaerobic infection. Modern aspects of the treatment of sepsis in animals.</p> <p>Methodology for the manufacture and use of tissue preparations of animal and plant origin in the treatment of animals with surgical pathology. Specific features of the use of novocaine blockades in animals with surgical pathology.</p>
Lecture 2	Surgical infection and its clinical manifestations	Practice 2	Aerobic infection: boil, carbuncle, abscess, phlegmon, gangrene.		
Lecture 3	Hemotransfusion in animals	Practice 3	Anaerobic infection: gas abscess, gas phlegmon, gas gangrene, malignant edema.		
		Practice 4	General surgical infection – sepsis		
		Practice 5	Skin diseases.		
		Practice 6	Pathogenetic therapy.		
		Practice 7	Physiotherapy in the treatment of animals with surgical diseases.		
		Practice 8	Light and electrotherapy.		
		Practice 9	Novocaine therapy.		
		Practice 10	Hemotransfusion.		
		Practice 11	Types and methods of hemotransfusion.		

		Practice 12	Features of work in a modern surgical clinic		
<b>Module 2. Open and closed mechanical tissue injuries.</b> <b>Necrosis, ulcers and fistulas. Burns and frostbite. Diseases of muscles, tendons and ligaments.</b>					
Lecture 4	Open soft tissue injuries	Practice 13	Closed soft tissue injuries.	Independent work	<p>Gunshot wound. Its features. Diagnosis, complications and treatment methods. Features of the course of the wound process in different types of domestic animals.</p> <p>Differential diagnosis of edema, hematomas, lymphoextravasations. Features of conducting diagnostics of closed injuries of various degrees and providing medical care to animals.</p> <p>Coagulative and colliquative necrosis, gangrene. Their etiopathogenesis, differential diagnosis and principles of treatment.</p> <p>Basic principles and modern methods of treatment of aseptic myositis, tendovaginitis in animals. Contractures. Types of contractures. Etiopathogenesis, clinical signs, treatment.</p>
Lecture 5	Closed soft tissue injuries and their clinical manifestations	Practice 14	Open soft tissue injuries, bleeding and methods of stopping it.		
Lecture 6	Muscle diseases	Practice 15	Methods of examining a wounded animal.		
Lecture 7	Diseases of tendons and tendon sheaths, mucous bags	Practice 16	Treatment of wounded animals.		
		Practice 17	Burns. Frostbite.		
		Practice 18	Necrosis. Ulcers. Fistulas		
		Practice 19	Muscle diseases.		
		Practice 20	Diseases of tendons and their sheaths.		
		Practice 21	Tendon ruptures, types of tendon sutures.		
		Practice 22	Diseases of mucous membranes and synovial bags.		
<b>Module 3. Diseases of bones and joints, neoplasms and hernias.</b> <b>Diseases of blood and lymphatic vessels and peripheral nerves.</b>					
Lecture 8	Joint diseases	Practice 23	Inflammatory joint diseases	Independent work	<p>Differential diagnosis of arthrosis, hemarthrosis, ankylosis, dystrophy and dislocation. Modern methods of treatment of joint dysplasia in small animals. Features of treatment of purulent inflammation of the joints.</p>
Lecture 9	Bone diseases	Practice 24	Non-inflammatory joint diseases		
Lecture 10	Neoplasia	Practice 25	Classification of bone fractures.		

		Practice 26	Osteosynthesis, its types and indications.	<p>Complications of purulent arthritis and methods of their elimination. Complications arising from open fractures. Their diagnosis, clinical signs, treatment and prevention. Bone regeneration. Phases and conditions that contribute to the acceleration of bone healing. Differential diagnosis of periostitis, hyperostoses, exostoses. Clinical signs, treatment and prevention.</p> <p>Papillomatosis. Features of the course and treatment in different species of animals. Surgical methods of treatment of benign tumors in animals. Modern principles of reconstructive surgery.</p>
		Practice 27	Neoplasms.	
		Practice 28	Modern methods of treating animals with neoplasms	
		Practice 29	Hernias	
		Practice 30	Diseases of peripheral nerves: paralysis, paresis.	
		Practice 31	Diseases of blood and lymphatic vessels.	

**Модуль 4. Хвороби ділянки голови, потилиці, шиї, грудей та холки.**

**Хвороби ділянки живота, попереку та тазу, сечостатевого органів. Діагностики хвороб кінцівок.**

Lecture 11	Special surgery, its purpose and tasks. Diseases of the head	Practice 32	Diseases of the head.	<p>Independent work</p> <p>Ear diseases. Otitis. Classification and distribution of dental diseases. Anomalies of tooth development and dental occlusion. Caries, gingivitis, periodontitis, periodontitis, osteomyelitis. X-ray diagnostics in veterinary dentistry. Drawing up a plan for receiving animals with diseases of the oral cavity. Justification of the prescribed diagnostic and treatment methods.</p> <p>Inflammation of the jugular vein, obstruction of the esophagus. Drawing up a plan for receiving animals with diseases of the occiput and neck,</p>
Lecture 12	Diseases of the oral cavity in animals	Practice 33	Dental pathology in animals. Dental diseases.	
Lecture 13	Diseases of the chest and withers	Practice 34	Dental pathology in animals. Periodontal diseases.	
Lecture 14	Diseases of the abdomen	Practice 35	Diseases of the nape and neck	
		Practice 36	Diseases of the lumbar and pelvic regions.	
		Practice 37	Diseases of the abdomen. Ileus.	

		Practice 38	Complications associated with castration in various species of animals.	<p>diseases of the chest. Justification of the prescribed diagnostic and treatment methods.</p> <p>Diseases in the lumbar region: spondylitis, spondyloarthritis, fractures, dislocations. Diseases in the pelvic and perineal region. Pelvic bone fractures, paraproctitis, perineal hernia, rectal prolapse. Drawing up a plan for receiving animals with diseases of the lumbar region and pelvis. Justification of the prescribed diagnostic and treatment methods.</p>
		Practice 39	Diseases of the genitourinary organs of an inflammatory nature.	
		Practice	Neoplasms of the genitourinary organs.	
		Practice 41	Diagnosis of diseases of the extremities. General and special methods of examination	
		Practice 42	Diseases of the thoracic extremities.	
		Practice 43	Diseases of the pelvic extremities.	

#### Module 5. Veterinary orthopedics and ophthalmology

Lecture 15	Definition of the concept of “veterinary orthopedics”	Practice 44	The structure of individual parts of the hooves and hooves in different species of animals.	Independent work	<p>Innervation and blood supply of hooves and hooves in animals. Necrosis and ossification of soft cartilage in horses. Features of the use of conductive anesthesia in diseases of the hooves and hooves in animals. Features of hoof care in various methods of keeping cows.</p> <p>Differential diagnosis of keratitis using modern devices and equipment. Pathological state of the aqueous humor of the eye. Causes of occurrence, diagnosis and treatment. Diagnosis and treatment of mass eye lesions in cattle. Breed-specific features of the spread of eye diseases in animals. Diseases of the lacrimal apparatus.</p>
Lecture 16	Hoof diseases	Practice 45	Diagnosis of hoof diseases in animals.		
Lecture 17	Hoof deformities	Practice 46	Research of animals with diseased hooves in production conditions with different forms of animal keeping		
Lecture 18	Veterinary ophthalmology	Practice 47	Hoof diseases. Differential diagnosis. Sole wounds, pododermatitis, inflammation in the area of the corolla and pulp, Rusterholtz ulcer, laminitis, PPD, hoof rot, necrobacteriosis.		
Lecture 19	Diseases of the eyelids and conjunctiva	Practice 48	Diseases of deep hoof structures. Diseases of the hoof joint, navicular		

			bursa, subtrochleitis. Founder and sinker.
Lecture 20	Diseases of the cornea	Practice 49	Horse shoeing. Types of horseshoes, their structure and manufacture. Purpose and characteristics.
Lecture 21	Diseases of the refractive structures of the eye, lens diseases.	Practice 50	Methods of cleaning hooves in cattle during inflammatory processes and the use of pathogenetic treatment agents.
		Practice 51	Morpho-physiological characteristics of the organ of vision
		Practice 52	General and special methods of studying animals with eye diseases.
		Practice 53	Methods and features of the use of drugs in the treatment of eye diseases in animals.
		Practice 54	Diseases of the eyelids, conjunctiva and cornea
		Practice 55	Diseases of deep structures of the eye: vascular tract, retina, optic nerve.
		Practice 56	Diseases of the refractive structures of the eye. Diseases of the vitreous body: hemorrhages, opacities and detachments.
		Practice 57	Diseases of all parts of the eye and emergencies in veterinary ophthalmology.
		Practice 58	Types of surgical interventions for the treatment of animals with eye diseases.

Inflammation of the lacrimal sac, lacrimal tubules and nasolacrimal duct. Their diagnosis and treatment.



## BASIC LITERATURE AND METHODOLOGICAL MATERIALS

### Basic literature

1. Борисевич В.Б., Панько І.С., Терес М.О., Іздепский В.Й. Спеціальна ветеринарна хірургія. – К.: Видавн. УСГА, 1993. – 493с.
2. Борисевич В.Б. Ветеринарна ортопедія і офтальмологія / Борисевич В.Б. – К. : Урожай, 1994. – 136 с.
3. Ветеринарна ортопедія / [ Борисевич В.Б., Борисевич Б.В., Петренко О.Ф., Хомін Н.М.]. – К., 2007. – 136 с.
4. Загальна ветеринарно-медична хірургія / за ред. проф. Борисевича В.Б. – К.: Науковий світ, 2001.
5. Загальна хірургія: підручник / С. Д. Хіміч, М. Д. Желіба, І. Д. Герич та ін.; за ред. С. Д. Хіміча, М. Д. Желіби. – 3-є вид., перероб. і доп. – Київ : ВСВ "Медицина", 2018. – 608 с
6. Калашник І.О. Кування коней та хвороби копит / Калашник І.О., Юрченко Л.І., Сарбаш Д.В. – Харків : РВП Оригінал, 1998. – 216 с.
7. Ортопедія парно- і непарнопалих тварин / [Борисевич В.Б., Борисевич Б.В., Сухонос В.П., Петренко О.Ф., Хомін Н.М. та ін]. – К. : ДІА, 2008. – 200 с.
8. Пантьо В. І. Загальна хірургія : навч. посібник / В. І. Пантьо, В. М. Шимон, О. О. Болдіжар. – Ужгород : ІВА, 2010. – 464 с.
9. Панько І.С., Власенко В.М., Гамота А.А., Рубленко М.В., Іздепський В.Й., Петренко О.Ф., Ільницький М.Г. Спеціальна ветеринарна хірургія. – Біла Церква, БДАУ, 2003. – 416 с.
10. Петренко О.Ф та ін.«Хірургія ветеринарної медицини».-К.: Вища освіта, 2005.- 399.
11. Практикум: Загальна та спеціальна хірургія: / Д. В. Сарбаш, Д. В. Слюсаренко, К. А. Синяговська, О. В. Кантемир, П. О. Заїка. Харків, 2020. – 265 с.
12. Сарбаш Д.В. Ортопедія коней / Сарбаш Д.В., Кантемир О.В. Слюсаренко Д.В. – [2-е изд.]. – Харків, 2009. – 216 с.
13. Словник термінів ветеринарної хірургії. // Власенко В.М., Тихонюк Л.А. – Біла Церква, 2008. – 360 с.
14. Спеціальна ветеринарна хірургія / [ Панько І.С., Борисевич В.Б., Терес М.О. та ін.]. – К. : УСГА, 1993. – 401 с.

### Methodological support

1. Слюсаренко Д.В., Синяговська К.А., Сарбаш Д.В., Заїка П.О., Кочевенко А.С. Методичні рекомендації для проведення лабораторно-практичних занять з курсу загальної хірургії для студентів другого рівня вищої освіти (магістр) 4 курсу на базі ПЗСО та 3 курсу на базі молодший спеціаліст факультету ветеринарної медицини. Х.: ДБТУ 2024- 112с.
2. Слюсаренко Д.В., Синяговська К.А., Сарбаш Д.В., Заїка П.О., Кочевенко А.С. Методичні рекомендації для проведення лабораторно-практичних занять з курсу спеціальна хірургії для студентів другого рівня вищої освіти (магістр) 4 курсу на базі ПЗСО та 3 курсу на базі молодший спеціаліст факультету ветеринарної медицини. Х.: ДБТУ 2024 – 52с.
3. Слюсаренко Д.В., Синяговська К.А., Сарбаш Д.В., Заїка П.О., Кочевенко А.С. Методичні рекомендації для написання історії хвороби з курсу загальної та спеціальної хірургії для студентів другого рівня вищої освіти (магістр) 5 курсу на базі ПЗСО та 4 курсу на базі молодший спеціаліст факультету ветеринарної медицини. Х.: ДБТУ 2024 – 10 с.
4. Робочий зошит для лабораторних занять з дисципліни «Загальна хірургія» / Д.В. Слюсаренко, К.А. Синяговська, Д.В. Сарбаш, А.С. Кочевенко – Х.: ДБТУ 2024 – 124 с.
5. Робочий зошит для лабораторних занять з дисципліни «Хірургічні хвороби продуктивних тварин» / Д.В. Слюсаренко, К.А. Синяговська, Д.В. Сарбаш, А.С. Кочевенко – Х.: ДБТУ 2024 – 116 с.

## GRADING SYSTEM

SYSTEM		POINTS	ACTIVITY THAT IS ASSESSED
Summative Assessment	100 ECTS points (standard)	up to 50	50% від усередненої оцінки за модулі
		up to 50	підсумкове тестування
Modular Assessment	100-point total	up to 50	відповіді на тестові питання
		up to 20	усні відповіді на лабораторно-практичних заняттях
		up to 30	результат засвоєння блоку самостійної роботи

## 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 the State Biotechnological University": to demonstrate discipline, good manners, respect each other's dignity, show kindness, honesty, and responsibility.