

## SILABUS EDUCATIONAL COMPONENT



### OPERATIVE SURGERY WITH THE BASICS OF TOPOGRAPHIC ANATOMY AND ANESTHESIOLOGY

specialty	211 - Veterinary medicine	compulsory nature of the discipline	mandatory
educational program	veterinary medicine	faculty	veterinary medicine
educational level	second (master's) degree	department	veterinary surgery and reproductive medicine

### TEACHERS

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<p><b>Scientific degree:</b> Candidate of Veterinary Sciences, specialty 16.00.04 - Veterinary Pharmacology and Toxicology  <b>Academic rank</b> - associate professor  <b>Work experience</b> - 23 years</p> <p>Email : <a href="mailto:peter.zaika34@gmail.com">peter.zaika34@gmail.com</a>                      Tel. +3805676833954</p>	<p><b>Scientific degree:</b> Candidate of Veterinary Sciences, specialty 16.00.01 - diagnostics and therapy  <b>Academic title</b> - assistant professor  <b>Work experience</b> - 1.5 years</p> <p>e-mail <a href="mailto:yurabusel@gmail.com">yurabusel@gmail.com</a>                      Tel. +38067 605 0451</p>	<p><b>Position</b> - assistant  <b>Work experience</b> - 23 years</p> <p>e-mail: 0506480868@btu.kharkov.ua                      Tel: 0506480868</p>	<p><b>Academic degree:</b> Doctor of Philosophy 21 - veterinary medicine, 211 - veterinary medicine  <b>Position</b> - assistant  <b>Work experience</b> - 1.5 years</p> <p>Email : <a href="mailto:denys.kryvoruchenko@gmail.com">denys.kryvoruchenko@gmail.com</a>                      Tel. +380952829299</p>

## GENERAL INFORMATION ABOUT THE EDUCATIONAL COMPONENT

Objective.	formation of the rules of correct surgery, anesthesia and free orientation in the operational field
Format.	lectures, laboratory and practical classes, independent work, individual assignments
Detailing learning outcomes and forms of their control	<ul style="list-style-type: none"> <li>• Ability to use tools, special devices, instruments, research at the appropriate level, make informed decisions, evaluate and ensure the quality of work performed (GC2, GC 7, GC11, SC2, PLO1) / individual practical tasks</li> <li>• Ability to apply knowledge in practical situations, to understand and find out the peculiarities of the structure and functioning of the animal body, the ability to carry out obstetric and surgical measures and operations (GC2, GC 9, SC9, SC16) / individual practical tasks</li> <li>• Ability to comply with the rules of labor protection, asepsis and antisepsis during professional activities (SC3) / individual practical tasks</li> <li>• Ability to conduct clinical research to formulate conclusions about the condition of animals or to establish a diagnosis (GC2, SC4) / individual test tasks</li> </ul>
Scope and forms of control	8 ECTS credits (240 hours): 30 hours of lectures, 60 hours of laboratory and practical classes; 120 hours of independent work, current control; final control - differentiated test, exam.
Teacher requirements	timely completion of tasks, activity, teamwork
Terms of enrollment	according to the curriculum

## COMPLIANCE WITH THE EDUCATION STANDARD AND EDUCATIONAL PROGRAM

Competencies	<p>GC 2 Ability to apply knowledge in practical situations;  GC 7 Ability to conduct research at the appropriate level;  GC 9 Ability to make informed decisions;  GC 11 Ability to evaluate and ensure the quality of work performed;  SC 2 Ability to use tools, special devices, instruments, laboratory equipment and other technical means to carry out the necessary manipulations in the course of professional activity;  SC 3 Ability to comply with the rules of labor protection, asepsis and antisepsis during professional activities;  SC 4 Ability to conduct clinical research to formulate conclusions about the condition of animals or to establish a diagnosis;  SC 9 Ability to perform obstetric and gynecological and surgical procedures and operations.  SC16 Ability to protect the environment from pollution by livestock waste, as well as materials and veterinary products</p>	Program learning outcomes	PLO 1 Know and correctly use the terminology of veterinary medicine
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## STRUCTURE OF THE EDUCATIONAL COMPONENT

## Chapter 1. Prevention of surgical infection. Injections, infusions and blood transfusions

<b>Lecture 1</b>	Introductory lecture on operative surgery with the basics of topographic anatomy and anesthesia	<b>Practical training class 1</b>	Introductory lesson	<b>Independent work</b>	<p>Methods of fixing large and small animals. Methods of fixation of zoo animals and birds. Medication preparation of animals for fixation.</p> <p>Means and devices used for capturing wild and domestic animals. The main elements of safety precautions when handling animals. Features of the defense response in different species of animals. Modern means of asepsis and antiseptics.</p> <p>Modern methods of sterilization of instruments, suture material, and medicines in the production environment. Modern methods of surgical hand antisepsis. Organization of surgical work in medical institutions and on livestock farms. Improving the technique of preparing the surgical field and the surgeon's hands in various ways before performing a surgical operation. Improvement of the technique of performing intradermal, subcutaneous, intramuscular, intravenous and other injections on living objects. Features of fixation and anesthesia of zoo animals. Contraindications and complications of anesthesia. Features of animal resuscitation. Anesthesia of different types of farm animals. Modern narcotic drugs. Modern local anesthetics. Their characteristics, doses, methods of use. Types of suture material. Their characteristics. Methods of use. Elements of plastic surgery. The concept of plastic surgery. Their types and characteristics. Modern materials used for the manufacture of pins, plates, orthopedic wires, etc. in the performance of osteosynthesis. Modern suture materials used for tendon and nerve injuries and their characteristics. Tail exarticulation in different species of animals. Modern tools used in this operation. The technique of the operation. Development and improvement of the technique of tying surgical, marine and classical knots. Voluntary and involuntary dermatoplasty. Their purpose. Types and methods of performance.</p>
<b>Lecture 2</b>	Prevention of surgical infection		<b>PTC 2,3</b>		
<b>Lecture 3,</b>	Injections, infusions and bloodletting	<b>PTC 4,5</b>	Prevention of surgical infection		
<b>Lecture 4-6</b>	Anesthesiology	<b>PTC 6</b>	Injections and infusions		
<b>Lecture 7</b>	Narcosis	<b>PTC 7,8</b>	Local anesthesia. Epidural anesthesia		
<b>Lecture 8</b>	Anesthesia	<b>PTC 9</b>	Anesthesia of agricultural animals. Premedication. Anesthesia of agricultural animals		
<b>Lecture 9</b>	Desmurgia Elements of surgical operations	<b>PTC 10</b>	Elements of surgical operations		
<b>Lecture 10</b>	Operations on the head. Areas of skin inertia				

## Chapter 2. Special part of operative surgery

<b>Lecture 11</b>	Surgeries in the ventral part of the neck.	<b>PTC 11,12</b>	Desmurgia	<b>Independent work</b>	<p>Different methods of anesthesia in small and large animals during operations in the head area. Their characteristics. Practice the technique of blockades in the head on live objects. Anatomical features of the structure in the ventral</p>
<b>Lecture 12</b>	Operations in the chest area	<b>PTC 13,14</b>	Elements of surgical operations		

<b>Lecture 13</b>	Operations in the abdomen	<b>PTC 15,16</b>	Surgery on the head	<b>Independent work</b>	part of the neck in different species of animals. Features of esophagotomy in large animals. The modern concept of bandages, dressings and their application. Development of decortication techniques in young cattle. Modern types of dressings used for bone fractures in animals. A modern view of the use of adhesive bandages in the workplace. Technique of performing operations on the vessels in the veins of the tracheal region of the neck in large and small animals. Principles of intestinal suturing. Types of anastomoses.
<b>Lecture 14</b>	Operations on the genitourinary organs	<b>PTC 17,18</b>	Surgery on the head		
<b>Lecture 15</b>	Operations on the penis. Operations in the male perineum area	<b>PTC 19,20</b>	Operations in the neck area		
		<b>PTC 21,22</b>	Operations in the chest area		
		<b>PTC 23,24</b>	Operations in the abdomen		
		<b>PTC 25</b>	Operations on the genitourinary organs		
<b>PTC 26-29</b>	Operations on the genitourinary organs. Castration of females (cows and heifers, pigs, bitches, cats). Operations in the male perineum area.				
<b>PTC 30</b>	Surgeries on the thoracic and pelvic extremities				

### BASIC LITERATURE AND METHODOLOGICAL MATERIALS

<b>Main literature</b>	<ol style="list-style-type: none"> <li>1. Magda I.I. Operative surgery with the basics of topographic anatomy and anesthesiology. K.: Higher school, 1995. 235 c.</li> <li>2. Magda I.I. Workshop on operative surgery. K.: Higher school, 1993. 235c.</li> <li>3. Vlasenko VM Dictionary of veterinary surgery terms / VM Vlasenko, LA Tikhoniuk. Bila Tserkva: Bila Tserkva State Agrarian University, 2008. 357 c.</li> <li>4. Vlasenko V.M. Operative surgery, anesthesiology and topographic anatomy. Special part. Bila Tserkva: 2006. 544 c.</li> <li>5. Vlasenko V.M. Operative surgery, anesthesiology and topographic anatomy. - General part. Bila Tserkva. 2006. 531 c</li> </ol>	<b>Methodological support</b>	<ol style="list-style-type: none"> <li>1. Materials of the discipline "Operative surgery with the basics of topographic anatomy and anesthesiology" for applicants for the second (master's) level of higher education in the specialty 211 Veterinary Medicine of full-time education in the system of educational web environment. URL: <a href="http://moodle.btu.kharkiv.ua/course/view.php?id=439">http://moodle.btu.kharkiv.ua/course/view.php?id=439</a></li> <li>2. Sarbash DV, Slyusarenko DV, Sinyagovska KA, Zaika PA Methodical recommendations for conducting laboratory and practical classes in the course of general surgery for teachers and students of the 3rd year of the Faculty of Veterinary Medicine. KHDZVA 2018. - 46 c.</li> <li>3. Sarbash DV, Slyusarenko DV, Sinyagovska KA, Zaika PA Methodical recommendations for conducting laboratory and practical classes in the course of special surgery for teachers and students of 3,4 courses of the Faculty of Veterinary Medicine. KHDZVA 2018. - 46 c.</li> <li>4. Sarbash D.V., Slyusarenko D.V. Sinyagovska K.A., Zaika P.O. Methodical recommendations for clinical practice for 4th year students of the Faculty of Veterinary Medicine, specialty 6.110101 "Veterinary Medicine" Kh. KHDZVA. 2018. 16 c.</li> </ol>
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### EVALUATION SYSTEM

<https://biotechuniv.edu.ua/wp-content/uploads/2024/01/norm-b-pol-org-op.pdf>

SYSTEM		BALLS	ACTIVITIES BEING EVALUATED
<b>Final evaluation</b>	<b>100 ECTS points (standard)</b>	<b>up to 50</b>	<b>50% of the average grade for the chapter</b>
		<b>up to 50</b>	<b>final testing</b>

Rating of section	100 points total	up to 50	answers to test questions
		up to 20	oral answers at laboratory and practical classes
		up to 30	result of mastering the block of independent work

### **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 BSTU": to be disciplined, well-mannered, respect each other's dignity, show goodwill, honesty, and responsibility.