

MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
Sumy National Agrarian University
Department of Obstetrics and Surgery

"I approve"
Head of the department
A.Y. Krayevsky
" 22 " 06 2020

WORKING PROGRAM OF EDUCATIONAL DISCIPLINE (SYLLABUS)

PP.09 General and Special Surgery

Speciality: 211 Veterinarian of Medicine

Educational program: Veterinary Medicine

Faculty: veterinary medicine

2020 -2021 academic year

Work program on **General and special surgery** for students on specialty **211 "Veterinary Medicine"**.

The working program was approved at the meeting of the Department of Obstetrics and Surgery

Developer: PhD, associate professor A.Chekan



Work program approved at the meeting of the department obstetrics and surgery.

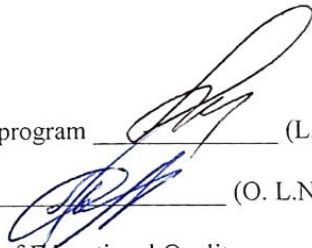
Protocol from " 22 " June 2020 year № 17

Head of Department _____ (Kraevsky AY)



Agreed:

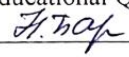
Guarantor of the educational program _____ (L.G.Ulko)



Of the Faculty Dean _____ (O. L.Nechiporenko)



Methodist of the Department of Educational Quality, licensing and accreditation _____ W. BananiA



Registered in electronic database: 08.07. 2020.

1. Description of the academic discipline

The name of indicators	The branch of knowledge, the direction of training, the educational and qualification level	Characteristics of the academic discipline
		daytime education
The number of credits - 3	Industry knowledge: <i>21 Veterinary medicine</i>	<i>Normative</i>
Modules - 2	specialty: <i>211 veterinary medicine</i>	Year of preparation: 2020 -2021
Content modules: 3		Course 4
		Semester 7th
Total number of hours - 90		Lectures 14 hours
		Practical, seminar -
Weekly hours for daytime training: classroom – 2,6 independent work of the student – 2,4	Educational degree: <i>master</i>	Laboratory 30 hours
		Independent work 46 hours
		Individual tasks: -
		Type of control: Exam

Note.

The ratio of hours of classroom hours to independent and individual work is: 51,1 /48,9 (46/44)

2. Aims and objectives of the academic discipline

Goal: formation of a system of special theoretical knowledge and practical skills in the diagnosis, treatment and prevention of surgical pathology in animals.

A task: study of the factors that cause surgical diseases and contribute to their occurrence; pathogenesis and clinical signs, general methods of diagnosis, mechanisms of recovery and factors, it contributes; principles of treatment and general methods of prevention of surgical diseases.

As a result of studying the academic discipline, the student must:

know:

Etiology and pathogenetic features of the clinical manifestation of various nosological forms of surgical pathology in animals of different species, on the basis of which an understanding of the essence of therapeutic preventive measures in the case of surgical diseases is formed.

be able to:

own modern methods of diagnosing surgical diseases and monitor them, make a diagnosis, prescribe rational methods of treatment and prevention, have practical skills in surgical care for animals.

3. The program of academic discipline

(hardened Science-methodical joy Science and methodology center "Agrosvita" Ministry of Science and Science of Ukraine 30.10.2017).

Module 1. General surgery.

Content module 1. Clinical pathophysiology of trauma. Surgical infection.

Subject 1. Clinical pathophysiology of trauma. Introduction. The concept of injury and injuries. Studies of injured animals, documentation. Shock, collapse. Inflammatory-regenerative reaction of the body to trauma. Mediators of inflammation. Local and general reactions of the body with inflammation. Species features of the inflammatory reaction. Pharmacological regulation of inflammation. Causal and pathogenetic therapy in surgical diseases of inflammatory origins. The use of light therapy and immunostimulatory therapy in surgical diseases

Subject 2. Surgical and specific infection. Surgical and specific infection, the basic principles of treatment.

Subject 3 General surgical infection. Purulent - resorptive fever. Sepsis. Kinds of it. Treatment.

Content module 2. Open mechanical damage. Diseases of the skin and nervous system.

Subject 4. Open mechanical damage. Bleeding. Methods of stopping, the main methods of treating acute blood loss. Blood transfusion. Blood transfusion reactions. Wounds: classification, clinical characteristics. Morphology, pathogenesis and phases of wound process. Criteria for assessing the course of the wound process. Studies of a wounded animal Operative treatment and local drug therapy of wounds. Healing and healing of wounds in animals with radiation sickness and contaminated with radionuclides. Stop bleeding and fight with blood loss.

Subject 5. Diseases of the skin and nervous system. Eczema. (Etiology, pathogenesis, treatment, prevention). Paralysis and paresis. Traumas of the brain and spinal cord.

Module 2. General surgery.

Content module 3. Diseases of muscles, joints and diseases of tendons, tendon sheaths and burs. Diseases of bones, neoplasms.

Subject 6. Diseases of muscles, joints and diseases of tendons, tendon sheaths and burs. Myositis, myopathosis: etiology, pathogenesis, symptoms, treatment and prevention. Closed mechanical joint damage. Aseptic and septic inflammation of the joints. Chronic without e to a sudativn s processes joints. Osteochondrosis of joints. Clinical physiology of tendons, vaginas and bursa. Classification, etiology, pathogenesis, symptoms, treatment and prevention of bursitis, tendonitis and tendovaginitis.

Subject 7. Diseases of bones. Neoplasms. Diseases of blood vessels.
 Classification of bone fractures and their complications. Symptoms and diagnosis of fractures. Healing of fractures. Rational methods of treatment. Morphogenesis and stages of development of tumors. Symptoms, diagnosis and basic principles of treatment. Diseases of the blood vessels: arteritis, phlebitis and thrombophlebitis. Diseases of lymphatic vessels and nodes: lymphangitis and lymphonodulitis.

4. Structure of the academic discipline

Names of content modules and topics	Number of hours					
	daily form					
	whole	including				
		L	P	Lab	Ind	L.w.
1	2	3	4	5	6	7
Module 1. General surgery.						
Content module 1. Clinical pathophysiology of trauma. Surgical infection.						
Topic 1. Clinical pathophysiology of trauma. Introduction. The concept of injury and injuries. The reaction of the body to trauma. Shock, collapse. Inflammatory-regenerative reaction of the body to trauma.	16	2	-	2	-	12
Topic 2. Surgical and specific infection. Classification of surgical infection. Purulent infection. Anaerobic infection: classification, etiology, pathogenesis, symptoms, prognosis and treatment.	14	2	-	2	-	10
Topic 3. General surgical infection (sepsis). Pathogenetic therapy. General surgical infection. Purulent - resorptive fever. Sepsis. Kinds of it. Treatment. Treatment of novocaine. Studying the methods of stimulating therapy in surgical diseases.	6	-		4		-
Together with content module 1	36	4	-	8	-	22
Content module 2. Open mechanical damage. Diseases of the skin and nervous system.						
Topic 4. Open and closed mechanical damage. Wounds: classification, clinical characteristics. Morphology, pathogenesis, wound process phases and types of wound healing. The closed mechanical damages (a bruise, a hematoma, a lymphoextravazate).	20	2	-	8	-	10
Topic 5. Diseases of the skin and nervous system. Eczema. (Etiology, pathogenesis, treatment, prevention). Paralysis and paresis. Traumas of the brain and spinal cord.	12	2	-	6	-	4
Together with content module 2	32	4	-	14	-	14
Module 2. General surgery.						
Content module 3. Diseases of muscles, joints and diseases of tendons, tendon sheaths and burs. Diseases of bones, neoplasms.						

Topic 6. Diseases of muscles, joints and diseases of tendons, tendon sheaths and burs. Myositis, myopathosis: etiology, pathogenesis, symptoms, treatment and prevention. Closed mechanical joint damage. Aseptic and septic inflammation of the joints. Chronic nonexclusive joint processes. Osteochondrosis of joints. Clinical physiology of tendons, vaginas and bursa. Classification, etiology, pathogenesis, symptoms, treatment and prevention of bursitis, tendonitis and tendovaginitis.	14	2	-	4	-	10
Topic 7. Diseases of bones. Neoplasms. Diseases of blood vessels. Classification of bone fractures and their complications. Symptoms and diagnosis of fractures. Healing of fractures. Rational methods of treatment. Morphogenesis and stages of development of tumors. Symptoms, diagnosis and basic principles of treatment. Diseases of the blood vessels: arteritis, phlebitis and thrombophlebitis. Diseases of lymphatic vessels and nodes: lymphangitis and lymphonodulitis.	6	2	-	4	-	-
Together with content module 3	22	4		8		8
The amount of hours	90	14		30		46

5. Topics and plan for lecture classes

№	Topic Title	Amount hours
1	Theme 1. Clinical pathophysiology of trauma. Plan. 1. Introduction. 2. The concept of injury and injuries. 3. The reaction of the body to trauma. Shock, collapse. 4. inflammatory-regenerative reaction of the body to trauma.	2
2	Theme 2. Surgical and specific infection. Plan. 1. Classification of surgical infection. 2. Purulent infection. Anaerobic infection: classification, etiology, pathogenesis, symptoms, prognosis and treatment.	2
3	Theme 3. Sepsis. Plan. 1. General surgical infection. 2. Purulent-resorptive fever. 3. Sepsis. Kinds of it. 4. Treatment.	2
4	Theme 4. Open mechanical damage. Plan. 1. Wounds: classification, clinical characteristics	2

	2. Morphology, pathogenesis, wound process phases and types of wound healing.	
5	Theme 5. Diseases of the skin and nervous system. Plan. 1. Eczema. (Etiology, pathogenesis, treatment, prevention). 2. Paralyche and paresis. 3. Trauma of the brain and spinal cord.	2
6	Theme 6. Diseases of muscles. Diseases of the joints. Plan. 1. Myositis, myopathy. 2. Rheumatic myositis diagnosis and pathogenesis; 3. General principles of treatment for diseases of muscles. 4. Classification of joint diseases. 5. Aseptic synovitis . 6. Purulent inflammation of the joints. 7. Osteoarthritis. 8. Deforming osteoarthritis	2
7	Theme 7. Diseases of bones. Neoplasms. Plan. 1. Classification of bone fractures and their complications. 2. Symptoms and diagnosis of fractures. 3. Healing of fractures. 4. Rational therapies. 5. Morphogenesis and stages of development of tumors. 6. Symptoms, Diagnosis and Basic Treatment Principles	2
	Together	14

6. Themes of laboratory exercises

№	Topic Title	Amount hours
1	Theme 1. Clinical pathophysiology of trauma. 1. Familiarization with the work of the surgical clinic, conducting the documentation. Health and safety at work in a surgical clinic. 2. Investigation of injured animals.	2
2	Theme 2. Clinical pathophysiology of trauma. 1. Study of local and general reactions of the body in inflammation. Species features of the inflammatory reaction. 2. Pharmacological regulation of inflammation. Causal and pathogenetic therapy in surgical diseases of inflammatory origins.	2
3	Theme 3. Surgical and specific infection. 1. Study of aerobic, anaerobic, putrefactive surgical infection and the main principles of treatment.	2
4	Theme 4. Pathogenetic therapy. 1. Treatment of novocaine. 2. Studying the methods of stimulating therapy in surgical diseases.	2
5	Theme 5. Closed mechanical damage.	2

	1. The study of closed mechanical damage (bruise, hematoma, lymphoextravazate).	
6	Theme 6. Open mechanical damage. 1. Study of a wounded animal. Criteria for assessing the course of the wound process. 2. Operative treatment and local drug therapy for wounds.	2
7	Theme 7. Foreign bodies in tissues and organs, necrosis, ulcers, fistulas. 1. Study of the influence of foreign bodies in tissues and organs. 2. Study of etiology, pathogenesis, symptomatology and treatment in necrosis, ulcers, fistulas.	2
8	Theme 8. Thermal, chemical and radiation damage. 1. Study of clinical manifestation and treatment for thermal (burns, frostbites, electric injuries) and radiation damage.	2
9	Theme 9. Diseases of the skin. 1. Study of classification, etiology, pathogenesis, symptoms, treatment dermatitis and eczema.	2
10	Theme 10. Diseases of the skin. 1. Elaboration of diagnostic methods for specimen (etiology, pathogenesis). 2. Treatment of treatment methods for eczema.	2
11	Theme 11. Diseases of nerves. 1. Development of methods for diagnosis of paralysis and paresis. 2. Analysis of the appointment and conduct of proper treatment. 3. Study of peripheral nerve damage (concussion, bruise, compression, stretching). 4. Study of paresis and paralysis, trauma of the brain and spinal cord.	2
12	Theme 11. Diseases of muscles. 1. Study of classification, etiology, pathogenesis, symptoms, treatment and myositis and myopathy.	2
13	Theme 14. Diseases of joints and tendons, tendon sheaths and burs. 1. The study of the classification, etiology, pathogenesis, symptoms, treatment and aseptic, septic and chronic exexclusive joint processes. 2. Study of the physiology of tendons, vaginas and bursa .3. Study of classification, etiology, pathogenesis, symptoms, treatment and bursitis, tendonitis and tenosynovitis.	2
14	Theme 13. Diseases of bones. 1. Study of bone diseases: ostitis, periostitis, osteomyelitis, necrosis and caries. 2. Treatment methods for diagnosis, treatment and prevention of bone diseases.	2
15	Theme 15. Neoplasms. Diseases of blood vessels. 1. Study of diseases of blood vessels: arteritis, phlebitis and thrombophlebitis. 2. Study of diseases of lymphatic vessels and nodes: lymphangitis and lymphonodulitis a. 3. Development of surgical methods for treatment of tumors. 4. Study of chemotherapy methods, relapse prediction.	2
	Together	30

7. Independent work

№	Topic Title	Amount hours
1	Topic 1. Clinical pathophysiology of trauma. Mediators of inflammation. Application of light therapy and immunostimulatory therapy in surgical diseases.	10
2	Topic 2. Surgical and specific infection. Specific surgical infection.	10
3	Topic 3. Open mechanical damage. Healing and healing of wounds in animals with radiation sickness and contaminated with radionuclides. Stop bleeding and fight with blood loss.	10
4	Topic 4. Diseases of the skin. Pustular skin diseases.	6
5	Topic 5. Diseases of tendons, tendon sheath and burs. Stretching and rupture of the tendon. Wounds of tendons.	10
	Total:	46

8. Methods of teaching

1. Methods of learning by source of knowledge:

1.1. **Verbal:** story, explanation, lecture, work with a book (reading, extracts, notes, production of reference notes, etc.).

1.2. **Visible:** demonstration of educational videos, supervision of sick animals.

1.3. **Practical:** laboratory method (examination of wound fingerprints and exudate), practical work (examination, research, treatment of surgically sick animals), production-practical methods (trips to the farm).

2. Methods of teaching by the nature of the logic of cognition.

2.1. **Analytical:** study of surgical diseases of individual systems, organs and parts of the body of animals.

2.2. **Synthesis methods:** analysis of anamnesis, clinical study of a sick animal.

2.3. **Inductive method:** the study of clinical signs and the diagnosis of the disease on their basis.

2.4. **Deductive method:** differential diagnosis of diseases.

3. Methods of teaching on the nature and level of independent thinking activities of students.

3.1. **Partial-search (heuristic):** on the instructions of the teacher, the search for data on the Internet, literary sources.

3.2. **Research**

3.4. **Reproductive:** the application of the theoretical material studied in practice.

3.5. **Explanatory and demonstrative:** explanation of unclear issues with demonstrations, tables, diagrams, formulas, photos and video material. Demonstration of diagnostic and therapeutic methods on live animals.

4. Active teaching methods - The use of technical means of teaching (multimedia lectures), occupational classes, self-assessment of knowledge,

simulation methods of teaching - the implementation of situational tasks using training and control tests, the use of basic notes of lectures.

5. Interactive learning technologies - use of multimedia technologies, viewing video materials on the topic while giving lectures and practical exercises, using case-study method, interactive training, student cooperation.

9. Methods of control

1. Rating control on a 100-point scale of ESKT estimation
2. Intermediate control during the semester (intermediate certification)
3. I Polikriterialna assessment of the current work of students:
 - Level of knowledge demonstrated in practical and laboratory classes;
 - Activity in the discussion of issues that are presented to the class;
- Independent study of the topic as a whole or separate issues;
 - Test results;
- Written tasks in the course of control works;
- Production situations.
4. Direct accounting in the final assessment of student performance of a specific individual task:
 - Coursework (project);
 - Educational and research work;
 - Educational and practical research with presentation of results and the like.

10. Distribution of points that students receive

Current testing and independent work								I W S	Together for modules and IWS	Attestation	Exam	Amount
Content module 1 10 points	Content module 2 20 points		Content module 3 40 points									
T1	T2	T3	T4	T5	T6	T7	T8	15	55 (40 + 15)	15	30	100
5	5	5	5	5	5	5	5					

Scale of assessment: national and ECTS

The sum of points for all kinds of learning activities	Evaluation of ECTS	Evaluation of the national scale	
		for examination, course project (work), practice	for credit
90 - 100	A	excellent	credited
82-89	B	good	
74-81	S		

64-73	D	satisfactorily	
60-63	E		
35-59	FX	unsatisfactorily, with resit	not credited with the ability to resit
0-34	F	unsatisfactorily with the mandatory repeated study of discipline	not credited with a mandatory re-examination of discipline

11. Methodological support

1. Surgical diseases of the finger of cattle // Methodical instructions for students of the Faculty of Veterinary Medicine and students of the Institute of Postgraduate Studies. White Church, 1996. - 31 p.
2. Methodical recommendations for independent study of general and special surgery. Dnepropetrovsk, 2004. - 72 p.
3. Methodical recommendations on writing and registration of course work (medical history) / Krayevsky AI, Stotsky AG, Lazorenko AB and others. / Sumy, 2009. - 24 p.

12. Recommended literature

Basic

1. General veterinary surgery / I.S. Panko, V.M. Vlasenko, M.V. Rublenko and others; under the editorship of I.S. Panko (second edition, additional and revised) - White Church: Belotserkovsky State Agrarian University, 2008. - 328 p.
2. Special veterinary surgery / I.S. Panko, V.M. Vlasenko, A.A. Gamota and others; under the editorship of I.S. Panko. - White Church: BSAU, 2003. - 416 p.
3. General veterinary surgery // I.S. Panko, V.M. Vlasenko, V.I. Izdepsky, etc. - The White Church: BSAU, 1999. - 264.
4. Private veterinary surgery / B.S. Semenov, A.V. Lebedev, A.N. Eliseev and others. Ed. B.S. Semenova and A.V. Lebedev. - M.: Kolos, 1997. - 496 p.
5. General veterinary-medical surgery / V.B. Borisevich, B.V. Borisevich, A.F. Petrenko, N.M. Homin: editorial. V.B. Borisevich, - M.: The scientific world, 2001. - 274 p.

Auxiliary

1. Vlasenko VM, Tikhonyuk L.A. Veterinary anesthesiology. - The White Church, 2003. - 336s.
2. Veterinary orthopedics of hoof and limb disease: Posib. for stud. agrarian. off Education level I-IV accreditation with special. "Veterinary medicine" / V.B. Borisevich, B.V. Borisevich, A.F. Petrenko, N.M. Homin - M.: DIA, 2007. - 136 p.
3. Tumors of animals: etiology, pathogenesis, diagnostics, complex therapy / A.A. Gamota, V.I. Metel, J. Krupnik, A.R. Misaki. - Lviv: Galitsky Publishing Union, 2007. - 168 p.
4. Borisevich VB, Borisevich BV and others. Veterinary Medical Ophthalmology: Textbook / Ed. V.B. Borisevich. - M.: Aristeia, 2006. - 212 p.
5. Surgical diseases of farm animals / K.I. Shakalov, I.A. Kalashnik, V.A. Lukyanovsky and others. M. : Agropromizdat, 1987.
6. Lukyanovsky VA, Belov AD, Belyakov LN, Diseases of the Bone System of Animals. M.Kolos. 1984
7. Shakalov K.I. Profilaklika of traumatism of farm animals in industrial complexes. M.Kolos, 1981.
8. Izdepsky VI, Stotsky AG, Kharenko N.I. et al. Physical Therapy with non-contagious animal diseases. - Sumy, 2006. - 132 p.