MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
SUMY NATIONAL AGRARIAN UNIVERSITY

Department of Obstetrics and Surgery

" Approve"
Head of Department
_____(Kraevsky A.I.)
«22» 06 2020 p.

WORKING PROGRAM OF EDUCATIONAL DISCIPLINE (SYLLABUS)

PP.33 Veterinary traumatology and orthopediology

Speciality: 211 Veterinarian of Medicine

Educational program: Veterinary Medicine

Faculty: veterinary medicine

2020 - 2021 academic year

Working program on Veterinary ophthalmology for students in the field of training: 211 Veterinary Medicine

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 _____ (Н. Baranik)

Registered in electronic database: 08. 07. 2020.

1. Description of the discipline

<table>
<tr><td rowspan="2">Name of indicators</td><td rowspan="2">Branch of knowledge, direction of training, educational-qualification level</td><td>Characteristics of the discipline</td></tr>
<tr><td>full-time education</td></tr>
<tr><td rowspan="2">Number of credits - 3</td><td>Branch of knowledge:
211 Veterinary Medicine</td><td rowspan="2">At the choice of the student</td></tr>
<tr><td rowspan="8">Training direction:
211 - "Veterinary Medicine</td></tr>
<tr><td>Modules -</td><td rowspan="2">Year of training:
2020-2021</td></tr>
<tr><td>Content modules: 4</td></tr>
<tr><td rowspan="3"></td><td>Course</td></tr>
<tr><td>4</td></tr>
<tr><td>Semester</td></tr>
<tr><td>The total number of hours is 90</td><td>8th</td></tr>
<tr><td rowspan="10">Weekly hours for full-time study:
classroom - 2
independent work of the student - 4</td><td rowspan="10">Education level:
master</td><td>Lectures</td></tr>
<tr><td>-</td></tr>
<tr><td>Practical, seminars</td></tr>
<tr><td>30</td></tr>
<tr><td>Laboratory</td></tr>
<tr><td></td></tr>
<tr><td>Independent work</td></tr>
<tr><td>60</td></tr>
<tr><td>Individual tasks:
-</td></tr>
<tr><td>Type of control:
test</td></tr>
</table>

Note. The ratio of the number of hours of classroom classes to independent and individual work is: 33.33/66.66% (30/60).

1. Purpose and tasks of the discipline

Goal : to form a system of special theoretical knowledge and practical skills in traumatology and diagnosis, treatment and prevention of orthopedic pathology in animals.

Objective: is the study of traumatic injuries of extremities and orthopedic diseases , local features of their occurrence and course, differential diagnostics, medical and preventive measures.

Topic 1. Traumatic injury in the area of shoulder blade and shoulder.

1. Studying of methods of diagnostics and treatment at fractures of the humerus.

2. Study of clinical signs and treatment of bursitis of two- head muscle of the shoulder and inflammation of the bursa of the perineum muscle.

3. Study of methods of diagnosis and treatment at break of two-head muscle of the shoulder.

4. Study of clinical signs and treatment with fascicular

Theme 2. Traumatic injuries in the area of the elbow joint.

1. Study of methods of diagnostics and treatment in dislocation, injuries and extensions of the elbow joint.

2. Study of clinical signs and treatment with elbow bursitis.

3. Diagnosis and treatment of fractures of the elbow and radial bones.

Topic 5. Traumatic injuries in the area of groats and thighs.

1. Studying features of injuries , wounds, mechanical damages of muscles of the cereal and thighs.

2. Study of methods of diagnostics and treatment at fascicular

3. Study of displacement (dislocation) of the two-head muscles of the thigh and tensions and dislocation of the hip joint.

4. Study of the features of diagnosis and treatment for fractures of the femur.

Theme 6. Traumatic injuries in the knee joint area.

1. Study of clinical features, diagnosis and treatment in dislocation and fracture of the kneecap.

Theme 7. Traumatic injuries in the leg.

1.Diagnostics, treatment and prevention of fractures of the tibia and tibia.

2. Diagnosis and treatment of tibial tibial and caudal muscle tibia.

Theme 9. Anatomical and physiological features of hoof and hoof.

1. Study of the structure, function and metabolism of hemp and hoof.

2. Study of the mechanism of fingers and hooves.

Topic 12. Diseases of the basis of the skin of the hoof.

1. Studying features of injuries, punctures of the sole.

2. Study of causes, clinic and treatment in various forms nododermatitis in. (H Amulet

3. Study of peculiarities and treatment of l aminit.

Theme 15. Control over hoof and hemp.

1. Study of the features of clearing hoof and hemp. Horseshoeing.

2. Orthopedic horsing of cattle.

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.

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.

Theme 3. Surgical and specific infection.

1. Study of aerobic, anaerobic, putrefactive surgical infection and the main principles of treatment.

Theme 4. Pathogenetic therapy. 1. Treatment of novocaine. 2. Studying the methods of stimulating therapy in surgical diseases.

Theme 5. Closed mechanical damage.

1. The study of closed mechanical damage (bruise, hematoma, lymphoextravazate).

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.

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.

Theme 8. Thermal, chemical and radiation damage.

1. Study of clinical manifestation and treatment for thermal (burns, frostbites, electric injuries) and radiation damage.

Theme 9. Diseases of the skin. 1. Study of classification, etiology, pathogenesis, symptoms, treatment dermatitis and eczema.

2. Structure of the discipline

Names of content modules and themes	**Number of hours**					
	All - th	**including**				
		l	**p**	**Lab**	**Ind**	**s.r.**
1	**2**	**3**	**4**	**5**	**6**	**7**
Module 1. Traumatology.						
Content module 1 . Traumatic damage to the thoracic limb .						
Topic 1. Traumatic injury in the area of shoulder blade and shoulder.	10	-	2		-	8
Theme 2. Traumatic injuries in the area of the elbow joint.	4	-	4		-	-
Theme 3. Traumatic injuries in the area of the wrist and heel.	10	-	2		-	8
Theme 4. Traumatic injuries in the area of the wound and coronary arthritis.	10	-	4		-	6
Total content module 1	**40**	**-**	12		-	**22**
Content module 2.						

Topic 5. Traumatic injuries in the area of groats and thighs.	2	-	2		-	-
Theme 6. Traumatic injuries in the area	6	-	2		-	4
Theme 7. Traumatic injuries in the leg.	4	-	4		-	-
Theme 8. Traumatic injuries in the region of the fold joint and mold.	14	-	4		-	10
Total content module 2	**26**	-	**12**		-	**14**
Module 2. Veterinary orthopedics.						
Content module 1 . Diseases of a hoof and a hoof						
Theme 9. Anatomical and physiological features of hoof and hoof.	6	-	2		-	4
Theme 10. Pathology of the cornea capsule .	8	-	2		-	6
Topic 11. Diseases in the area of the crown and interdigital arches and pulp.	12	-	4		-	8
Topic 12. Diseases of the basis of the skin of the hoof.	10	-	2		-	8
Theme 13. Diseases of the deep structures of the hoof.	10	-	2		-	8
Total content module 2	**14**	-	4		-	**10**
Total hours	**90**	-	**30**		-	**60**

4. Topics of practical lessons

№.	Title of topic	Hours
1	***Topic 1. Traumatic injury in the area of shoulder blade and shoulder.*** 1. 2. Studying of methods of diagnostics and treatment at fractures of the humerus. 3. Study of clinical signs and treatment of bursitis of two- head muscle of the shoulder and inflammation of the bursa of the perineum muscle. 4. Study of methods of diagnosis and treatment at break of two-head muscle of the shoulder. 5. Study of clinical signs and treatment with fascicular ***Theme 2. Traumatic injuries in the area of the elbow joint.*** 1. Study of methods of diagnostics and treatment in dislocation, injuries and extensions of the elbow joint. 2. Study of clinical signs and treatment with elbow bursitis. 3. Diagnosis and treatment of fractures of the elbow and radial bones.	2
2	***Topic 5. Traumatic injuries in the area of groats and thighs.*** 1. Studying features of injuries , wounds, mechanical damages of muscles of the cereal and thighs. 2. Study of methods of diagnostics and treatment at fascicular 3. Study of displacement (dislocation) of the two-head muscles of the thigh and tensions and dislocation of the hip joint. 4. Study of the features of diagnosis and treatment for fractures of the femur.	2
3	***Theme 6. Traumatic injuries in the knee joint area.*** 1. Study of clinical features, diagnosis and treatment in dislocation and fracture of the kneecap. ***Theme 7. Traumatic injuries in the leg.*** 1.Diagnostics, treatment and prevention of fractures of the tibia and tibia. 2. Diagnosis and treatment of tibial tibial and caudal muscle tibia.	2
4	***Theme 9. Anatomical and physiological features of hoof and hoof.*** 1. Study of the structure, function and metabolism of hemp and hoof. 2. Study of the mechanism of fingers and hooves.	2
5	***Topic 12. Diseases of the basis of the skin of the hoof.*** 1. Studying features of injuries, punctures of the sole. 2. Study of causes, clinic and treatment in various forms nododermatitis in. (H Amulet 3. Study of peculiarities and treatment of l aminit.	2
6	***Theme 15. Control over hoof and hemp.*** 1. Study of the features of clearing hoof and hemp. Horseshoeing. 2. Orthopedic horsing of cattle.	2

7	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
8	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
9	Theme 3. Surgical and specific infection. 1. Study of aerobic, anaerobic, putrefactive surgical infection and the main principles of treatment.	2
10	Theme 4. Pathogenetic therapy. 1. Treatment of novocaine. 2. Studying the methods of stimulating therapy in surgical diseases.	2
11	Theme 5. Closed mechanical damage. 1. The study of closed mechanical damage (bruise, hematoma, lymphoextravazate).	2
12	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
13	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
14	Theme 8. Thermal, chemical and radiation damage. 1. Study of clinical manifestation and treatment for thermal (burns, frostbites, electric injuries) and radiation damage.	2
15	Theme 9. Diseases of the skin. 1. Study of classification, etiology, pathogenesis, symptoms, treatment dermatitis and eczema.	2
	Together	**30**

5. Independent work

№	Title of topic	Number hours
1	Topic 1. Traumatic injury in the area of shoulder blade and shoulder. Shoulder joint injury. Shoulder joint wounds. Dissecting osteochondrosis of the head of the humerus. Aseptic necrosis of the shoulder head in young dogs and horses. Arthrosis of the shoulder joint. Deforming arthritis of the shoulder joint.	6
2	Theme 3. Traumatic injuries in the area of the wrist and heel. Precast Bursitis. Wounds and bruising of the joint of the wrist. Wrist contract. Fractures of an additional bone. Wounds, tears, stretching of the	6

	tendons of the wrists. Wounds, cracks and fractures of the bones are heel. The rupture of deep and superficial flexors in the heel region.	
3	Theme 4. Traumatic injuries in the area of the wound and coronary arthritis. Bruise and wounds of the joint joint. Stretching of the wrist joint. Dislocation of the wrist joint. Path joint contract. Cracks and fractures of the waist bone. Fractures of the first phalanx of the sesameemal bones. Stretching, dislocation and wounds of the coronary joint. Fractures of the coronary bone.	6
4	Theme 6. Traumatic injuries in the knee joint area. Stretching, Contusion and sore knee. Bursitis in the area of the knee joint.	6
5	Theme 8. Traumatic injuries in the region of the fold joint and mold. Fractures of the bones of the femoral joint. Extension of the fold joint Zaplesnovoho wounds and inflammation of the joint. Tendovaginitis in the region of the swollen joint. Breaking the hemic tendon and calf muscle. Offset of the tendon of the surface fingers. Osteoarthritis zaplesnovoho joint. Chronic deforming arthritis (osteochondrosis) of the fold joint (spatum). Periaryticular Ositizing periarthritis. Wounds, injuries , fractures, bone fractures in the area of mildew.	6
6	Theme 9. Anatomical and physiological features of hoof and hoof. Features of the structure of hoof pigs, sheep and horse.	6
7	Theme 10. Pathology of the cornea capsule. Assessment of the quality of the hoof. Cracks of the hoof. Chicken with a brittle and brittle horn.	6
8	Topic 11. Diseases in the area of the crown and interdigital arches and pulp. Penetration of the flesh, an interdigital arbor. Phlegmon, purulent-necrotic and ulcerous lesions of the crown and interdigital arches. Rotting the horn of the mink. Defeat of mild cartilage. Purulent inflammation of the interdigital glands in sheep. Limaks.	6
9	Topic 12. Diseases of the basis of the skin of the hoof. In the specimen Verrucous (warlike) pododermatite . Gangrenous Necrotic Abacus	6
10	Theme 13. Diseases of the deep structures of the hoof. Wounds, inflammation of the hoof. Acute aseptic inflammation of the hemopoietic joint (giving birth). Septic inflammation of the hemp joint. Septic subtrochlear bursitis. Chronic aseptic subtrochleitis . Fractures of hemp and shuttle bone.	6
	Together:	**60**

6. Methods of training

1. Methods of learning by the source of knowledge:

1.1. ***Verbal*** : narrative, explanation, lecture, work with the book (reading, writing, summarizing, making reference notes, etc.).

1.2. ***Visual*** : demonstration of educational video films, observation of sick animals.

1.3. ***Practical*** : practical work (review, research, treatment of sick animals), production-practical methods (trips to the farm).

2. Methods of learning by the nature of the logic of knowledge.

2.1. ***Analytical*** : the study of orthopedic diseases of individual elements of the limb of animals.

2.2. ***Methods of synthesis:*** anamnesis analysis, clinical study of a sick animal.

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

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

3. Methods of training by the nature and level of independent mental activity of students.

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

3.2. ***Reproductive*** : the application of the learned theoretical material in practice.

3.3. ***Explanatory : Demonstration:*** explanation of unclear issues with demonstration, tables, schemes, formulas, photos and videos. Demonstration of diagnostic and therapeutic methods in live animals.

4. Active teaching methods - use of technical means of training (multimedia lectures), occupations in the workplace, self-assessment of knowledge, simulation teaching methods - implementation of situational tasks using educational and control tests, use of reference notes of lectures.

5. Interactive learning technologies - the use of multimedia technologies, the viewing of video material on the topic during lectures and practical classes, the use of the case-study method (analysis of specific production situations), dialogue training, cooperation of students.

7. Distribution of points that students receive

<table>
<tr><th colspan="8">Current testing and independent work</th><th rowspan="2">Together for modules and IWS</th><th rowspan="2">Attestation</th><th rowspan="2">Exam</th><th rowspan="2">Amount</th></tr>
<tr><th>Content module 1
10 points</th><th colspan="2">Content module 2
20 points</th><th colspan="5">Content module 3
40 points</th><th>IWS</th></tr>
<tr><td>T1</td><td>T2</td><td>T3</td><td>T4</td><td>T5</td><td>T6</td><td>T7</td><td>T8</td><td rowspan="2">15</td><td rowspan="2">70
(70 + 15)</td><td rowspan="2">15</td><td rowspan="2">-</td><td rowspan="2">100</td></tr>
<tr><td>20</td><td>10</td><td>10</td><td>10</td><td>5</td><td>5</td><td>5</td><td>5</td></tr>
</table>

Scale of assessment: national and ECTS

<table>
<tr><th rowspan="2">The sum of points for all kinds of learning activities</th><th rowspan="2">Evaluation of ECTS</th><th colspan="2">Evaluation of the national scale</th></tr>
<tr><th>for examination, course project (work), practice</th><th>for credit</th></tr>
<tr><td>90 - 100</td><td>A</td><td>excellent</td><td rowspan="5">credited</td></tr>
<tr><td>82-89</td><td>B</td><td rowspan="2">good</td></tr>
<tr><td>74-81</td><td></td></tr>
<tr><td>64-73</td><td>D</td><td rowspan="2">satisfactorily</td></tr>
<tr><td>60-63</td><td>E</td></tr>
<tr><td>35-59</td><td>FX</td><td>unsatisfactorily, with resit</td><td>not credited with the ability to resit</td></tr>
<tr><td>0-34</td><td>F</td><td>unsatisfactorily with the mandatory repeated study of discipline</td><td>not credited with a mandatory re-examination of discipline</td></tr>
</table>

8. 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.

9. 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.: Aristea, 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.