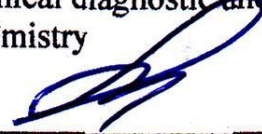


MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
SUMY NATIONAL AGRARIAN UNIVERSITY
DEPARTMENT
OF THERAPY, PHARMACOLOGY, CLINICAL DIAGNOSTIC AND
CHEMISTRY

“CONFIRMED”

Chief of therapy, pharmacology,
Clinical diagnostic and
chemistry



Ulko L.G.

«03» 05 2020 p.

WORKING PROGRAM

The work program on the subject (SYLLABUS)
" Ethology and welfare of the herd " for students in the direction of running
masters

OK 18 Ethology and welfare of the herd

Specialty: 211 "Veterinary Medicine"
Educational program: "Veterinary Medicine"
Faculty: Veterinary Medicine

2020- 2021 year

Curriculum of Professional Ethics was worked out for the first-year students of training direction 211 "Veterinary Medicine"

Authors:

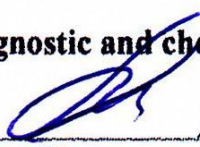
Doctor, Professor of therapy, pharmacology, clinical diagnostic and chemistry
Chair

Shkromada O. I.

()
Signature

Doctor, Professor of therapy, pharmacology, clinical diagnostic and chemistry
Chair

Ulko L. G.

()
Signature


Curriculum has been approbated on the therapy, pharmacology,
clinical diagnostic and chemistry

Minutes of " 3 " 05 2019 № 14

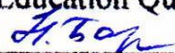
Chief of therapy, pharmacology, clinical diagnostic and chemistry
(Doctor, prof. L. G. Ulko)


signature

Coordinated by:

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

Dean of the Faculty  (O. L. Nechiporenko)

Methodist of the Department of Education Quality,
licensing and accreditation 



Registered in the electronic database: date: 06.07 2020

© SNAU, 2020

© Shkromada O. I., Ulko L.G.

1. THE WORKING PROGRAM OF THE DISCIPLINE

Name	Branch of knowledge, training direction, educational qualification	Characteristics of the discipline	
		full-time education	corresponde nce
The number of credits –3	Industry knowledge: 21 "Veterinary medicine"	<i>Regulatory (or for choice)</i>	
Modules – 2	Specialty: 211 "Veterinary medicine"	Year:	
Content modules: 2		2020-2021	
Individual research assignment: (if any) (name)		Course	
		2	
		Semester	
All hours - 90		3	
Weekly hours for full- time education: classroom –3 independent work of student -3	Educational degree mastersr	14 hours	____ hours.
		Practice, seminars	
		____ hours.	____ hours.
		Lab. lessons	
		30 hours.	-
		Independent work	
		46 hours.	____ hours.
		Kind of control:	
	standing		

The ratio of classroom hours for independent and individual work is:
for full-time education (%): (30/45)

The purpose and objectives of the discipline

Goals:

Familiarizing students with the concept of animal welfare and the corresponding obligations imposed on the owner, animal caregivers, veterinarian and other persons working with animals;

Task:

The student's understanding that the animal reflects the conditions in which it lives. The welfare of the animal is ensured if it is healthy, is in a comfortable and safe environment, eats well, can behave naturally, does not suffer from unpleasant conditions such as pain, fear and stress.

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

Know: know where to find up-to-date and reliable information regarding local, national, and international regulations and standards for animal welfare, describes humane methods of animal husbandry, transportation, and slaughter for food consumption and disease control.

Be able to: identify issues related to animal welfare and participate in corrective actions.

2. Discipline program

The updated version of the OP is being tested and reviewed at the meeting of the Department Protocol № 14 of 05.2020.

Module 1

Topic 1. Introduction.

The problem of determining ethology. Period of development. The main goal and methods of ethology. The relationship of ethology and other disciplines. Place of ethology in the system of Sciences. Defining the concept of welfare as a science and its tasks.

Topic 2. What is and is not animal welfare.

Definition of basic concepts. Characteristic. Protocol "on the protection and welfare of animals". Modern approaches to animal welfare. Physical and psychological state of well-being. Definition of "Five freedoms".

Topic 3. conditions for keeping animals.

Research of animal welfare conditions. The hygiene of the animals. Influence of microclimate on the physiological state and productivity of animals. Stable and pasture systems of keeping. Characteristics of the main technological processes

Theme 4. The feeding of animals.

The scientific basis for feeding animals . The main elements of full-fledged diets and its role in animal nutrition . The need of animals for micro and macro elements of their source and feeding norms. The animals ' needs for vitamins. Control over the fullness of feeding. A study of the diet. Research of feed quality.

Module 2

Topic 5. Zoopsychology.

History of origin. The subject, methods and problems of animal psychology. Laughter and stress, pain. Treatment of sick animals. Humane euthanasia. The specific pattern of behavior and labile behavioral responses. Differences between the " languages " of humans and animals.

Topic 6. Ethology of animals.

Study of fundamental principles and issues of animal welfare and behavior. Individual forms of behaviour. Reproductive behavior. Mental manifestations of behavior.

Topic 7. Study of the formation and implementation of animal welfare policy (OIE, Codex Alimentarius, European Convention for the Protection of Vertebrate Animals

3. The structure of discipline

Name of tems	Number of hours					
	Day education form					
	All	with				
	L	P	Lab	Anot her	Indep work	
1	2	3	4	5	6	7
Module 1. General diagnosis						
Topic 1. Introduction Plan: 1. Historical stages of animal ethology. 2. Definition of the concept of welfare as a science, its tasks.	15	2		5		8
Topic 2. What is and is not animal welfare. Plan: 1. Definition of basic concepts. 2. Characteristics.	15	2		5		8
Topic 3. conditions for keeping animals Plan: 1. Research of animal welfare conditions 2. Hygiene of animals	14	2		4		8
Theme 4. Feeding animals Plan: 1. Studies diet 2. The study of feed quality	14	2		4		8
Total for semantic module 1	58	8		18		32

Module 2						
Topic 5. Zoopsychology Plan: 1. Effort and stress, pain 2. Treatment of sick animals humane euthanasia.	11	2		4		5
Topic 6. Ethology of animals.. Plan. Study of fundamental principles and issues of animal welfare and behavior	11	2		4		5
Topic 7. National and international veterinary legislation Plan. 1. Study of the formation and implementation of animal welfare policies. 2. Review of the main principles of legislation and organizational structures.	10	2		4		4
Total for semantic module 2	32	6		12		14
Total hours	90	14		30		46

4. Topics and plan of lectures

№ 3/Π	Topic title	Number of hours
Module 1		
1	Topic 1. Introduction Plan: 1. Historical stages of animal ethology. 2. Definition of the concept of welfare as a science, its tasks.	2
2	Topic 2. Scho I ne dobrobutom tvarin. Plan: 1. Proposed hard to understand. 2. Characteristics.	2
3	Topic 3. conditions for keeping animals Plan: 1. Research of animal welfare conditions 2. Hygiene of animals	2
4	Theme 4. Feeding animals Plan: 1. Studies diet 2. The study of feed quality	2
Module 2		
5	Topic 5. Zoopsychology Plan: 1. Effort and stress, pain 2. Treatment of sick animals 3. humane euthanasia.	2
6	Topic 6. Ethology of animals.. Plan. 1. Study of fundamental principles and issues of animal welfare and behavior. Basic understanding of local, national, regional and international animal welfare legislation.	2
7	Topic 7. National and international veterinary legislation Plan. 1. Study the formation and implementation of policies at the local, national, regional and international levels through legislation, regulation and operational strategy; relevant public policies on animal welfare. 2. Review of the main principles of legislation and organizational structures of the MEB, Codex Alimentarius, and the European Commission.	2
Together		14

5. Topics of laboratory classes

№ 3/Π	Topic title	Number of hours
Module 1		
1	Topic 1. Health management of herds and feeding Introduction.	2
2	Topic 2. Application of animal health and ethology principles, assessment and reduction of risk factors that cause diseases and negatively affect productivity.	2
3	Theme 3. The need for animal farming and fishing and aquatic fauna.	2
4	Topic 4. Hunger and thirst in animals.	2
5	Topic 5. Practice of animal health accounting	2
6	Topic 6. Careful and rational use of veterinary drugs.	2
Module 2		
7	Topic 7. Principles of preventive medicine	2
8	Theme 8. The application of the principles of animal health and ethology	2
9	Topic 9. Assessment and reduction of risk factors that cause diseases and negatively affect productivity.	2
10	Topic 10. Animal Ethics	2
11	Topic 11. Domestication of animals	2
12	Topic 12. Abnormal animal behavior, motivation Cognition and consciousness in animals	2
13	Topic 13. Controlling the behavior of animals.	2
14	Topic 14. Improving animal welfare. Animal welfare assessment	2
15	Topic 15. Development and support of Biosafety measures, animal hygiene support	2
Together		30

6. Independent work

№ 3/Π	Topic title	Number of hours
1	Topic 1. Perception in animals	10
2	Topic 2. Animal training. The theory of Association	10
3	Topic 3. Genetically determined behavior	10
4	Topic 4. Evolution of adaptive strategies	10
5	Topic 5. The development of behavior.	6
Together		46

7. Training Methods

1. learning Methods based on the source of knowledge:

1.1. Verbal: story, explanation, work with the book (reading, extracts, notes, making tables, reference notes, and so on).

1.2. Visual: demonstration, illustration, observation.

1.3. Practical: laboratory method, practical work.

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

2.1. analytical

2.2. inductive method

2.3. Deductive method

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

3.1. Partially-search (heuristic)

3.2. Research

4. Active learning methods - the use of technical training tools, excursions, group research, self-assessment of knowledge, the use of training and control tests, the use of reference lecture notes.

5. Interactive learning technologies - use of multimedia technologies.

8. Control methods

1. Rating control on a 100-point scale ECTS

2. An interim control during the semester (interim assessment)

3. Polchatelya assessment of the current work of students:

- the level of knowledge demonstrated on practical, laboratory and seminar classes;

- activity in the discussion of issues raised during the lesson;

the results of the implementation and defense of laboratory works;

- an independent study of the subject in General or particular issues;

the results of the testing;

- writing assignments at carrying out of control works;

9. The distribution of points that students receive (offset)

Routine testing and independent work	☰ ○ ☹ ☺ ☻	Atesta	All
---	-----------	---------------	------------

Module 1 - 35 points			Module 2 -35 points		Module 3 - __ points		Module 4 ___ points			S R S		tion	
T 1	T 2	T 3	T4	T5	T6	T7	T8	T 9	Tn	15	85 (70+15)	15	100
15	1 0	10	25	10									

Grading scale: national and ECTS

Total points	Mark	The rating on the national scale	
		for examination, course project (work) practices	to offset
90 – 100	A	Excellent	read
82-89	B	Good	
75-81	C		
69-74	D	satisfactory	
60-68	E		
35-59	FX	unsatisfactory with option to re-compile	not credited with the possibility of re- Assembly
1-34	F	unsatisfactorily with the mandatory repeated study of the discipline	not credited with a mandatory repeated study of the discipline

10. Recommended reading

Basic:

1. Zaporozhan V. M., Aryaev M. L. bioethics and Biosafety: Textbook / V. M. Zaporozhan, M. L. Aryaev. - K.: Zdorovya, 2013. - 456 p. Kolyadenko N. V.
2. Zoopsychology and comparative psychology: textbook /N. V. Kolyadenko. - Kiev: DP "Vid. Dom "Personnel", 2019. - 508 p.
3. Severinovskaya O. V. ethology (fundamentals of animal behavior): textbook for higher educational institutions / O. V. Severinovskaya, O. E. Pakhomov, V. K. Rybalchenko. - D.: publishing house of Dnepropetr. NATs. UN-TA, 2010. - 292 p.
4. Manning, Aubrey An introduction to animal behavior 2012/ Aubrey Manning, Marian Stamp Dawkins. – 6th ed., 470
5. veterinary clinical biochemistry / [Levchenko V. I., vlezlo V. V., Kondrakhin I. P., etc.]. - Belaya Tserkva, 2002. - 400 p.

6. Dugatkin, Lee Alan, 2009 Principles of animal behavior / Lee Alan Dugatkin. -- Third edition, 674
7. Internal diseases of animals / pulmonology. - Grodno: Grsmu, 2011. - 192 p. [G. G. Shcherbakov, A. V. Korobov, B. M. Anokhin, etc.]; under the General editorship Of G. G. Shcherbakov, A.V. Korobov. Saint Petersburg: LAN, 2002, 736 p.
8. Internal non-infectious diseases of animals: Textbook.-2nd kind., add. / M. O. Sudakov, M. I. Tsvilikhovsky, V. I. Bereza et al. - K.: Tsel, 2002. - 352 p.
9. internal diseases of animals /[Levchenko V. I., Kondrakhin I. P., vlezlo V. V. and others.]; edited by V. I. Levchenko. - Belaya Tserkva, 2001. - Part 2. - 544 p.
10. internal diseases of animals /[Levchenko V. I., Kondrakhin I. P., vlezlo V. V. and others.]; edited by V. I. Levchenko. - Belaya Tserkva, 2012. - Part 1. - 528 p.
11. Volkov V. S., Bazanov G. A. Pharmacotherapy and standards of treatment of diseases of the cardiovascular system: a Guide for doctors. Moscow: LLC "Moscow information Agency", 2010. - 360 p.
12. Diagnosis of cardiovascular diseases. The wording of the classification: a practical guide / Edited by Y. N. Denisov and S. G. Gorokhova, Moscow: GEOTAR-Media, 2008, 96 P.
13. Diagnostic equipment in veterinary medicine /[Ionov P. S., Belyakov I. M., Usha B. V., etc.]. - Moscow: Kolos, 1979. - 223 p.
14. animal blood Testing and clinical interpretation of the results. Methodological recommendations / [Levchenko V. I., Sokolyuk V. M., Bezukh V. M., etc.]. - Belaya Tserkva, 2002. - 56 p.
15. Examination of urine. Methodological recommendations / [Levchenko V. I., Tishkovsky M. ya., Sakhnyuk V. V. et al.]. - Belaya Tserkva, 2005. - 74 p.
16. Zurdinov J. I. the ABC of ECG / Y. I. Sobinov.- Ed.3-e. - Rostov on don publishing house "Phoenix", 2003. - 160 p.
17. Kasmaliev R. S. Internal diseases of dogs, cats and poultry: study guide / R. S. Karmeliet. Uralsk, 2005, 149 p.
18. Clinical diagnostics with radiology [Voronin E. S., Snoz G. V., Vasiliev M. F. et al.]. - Moscow: Kolos, 2006. - 509 p.
19. Klinichna Diagnostika vnutrishnikh khvorob tvarin / [V. I. Levchenko, V. V. Vlizlo, I. P. Kondrakhin TA in.]; edited By V. I. Levchenko. Bila Tserkva, 2004, 608 p.
20. Klinichna Diagnostika khvorob tvarin / [V. I. Levchenko, M. O. Sudakov, Y. L. Melnik TA in.]; edited By V. I. Levchenko. - K.: Crop, 1995. - 368 p.
21. Fundamentals of cardiology. Principles and practice (2nd edition) / edited by Prof. Clive Rosendorf – Lviv: Medicine of the Suite, 2007. – 1060 p.

22. Workshop W klono dagnostika of hvorob tvarin to take involving laboratory work , samostijna students Bachelor fields of study directly 6.110101 "Veterinary medicine" / □N. I. Suslov, P. Antonenko, P. M. Sklyarov TA I n.□ // Dnepropetrovskiy reigning agrarnij University, Department klono dagnostika the vnutrishnih of hvorob tvarin – Dnipropetrovsk : Staryi DDU, 2013. – 274 p.

Electrical resource:

1. <https://www.gov.uk/government/publications/consolidated-version-of-asp-1986>
2. <https://www.nc3rs.org.uk/welfare-assessment>
3. https://www.elsevier.com/_data/promis_misc/ARRIVE.pdf

Additional information:

1. Law of Ukraine "about veterinary medicine" / decree of the Verkhovna Rada of Ukraine no. 2499-XII vid 25.06.92 // Vidomosti Verkhovnoi Radi Ukrainy. - 1992. - No. 36. - P. 531 (iz zminami I dopovnennyami).
2. Antonenko p. P. Fototerapia have tvarynnytstvi: prevention of hvorob, smorning montato, pavement produktivnost / P. Antonenko: monograph.- Dnipro: IMA-Pres, 2010. - 260C.
3. Kozachok V. S. Klinichne doslidzhennya ekzotichnih tvarin: Navchalny posibnik / V. S. Kozachok, O. O. Skiba, M. I. Tsvilikhovsky. - K.: Aristey, 2010. - 252 p.
4. Kovalenko L. I. Methods of therapeutic assistance to animals. Brief reference / L. I. Kovalenko. - K.: Crop, 1991. - 208 p.: Il.
5. Kondrakhin I. p. Diagnostics and therapy of internal animal diseases / I. Kondrakhin, V. Levchenko. - Moscow: Aquarium-Print, 2005. - 830s.: Il.
6. Korobov A.V. Methodological bases for the order of clinical examination of a sick animal. Textbook (monograph) / Korobov A.V., Shcherbakov G. G., Parshin P. A.-Moscow: Aquarium-Print, 2008. - 64 p.: Il.
7. Kruglova Yu. S. Morphological studies of blood in various animal species (clinical Hematology): methodical instructions / Kruglova Yu. S., Korobov A.V.-M.: FGOU VPO Mgavmib, 2009. - 48 p.
8. Lines I. A. nesuraznyh Diagnosis of animal diseases with the use of computers / lines I. A. – Moscow, 1989. – 360
9. Lokes P. I. Doslidzhennya Kalu have dogs I kishok. Metodichni vkazivki / Lokes P. I., Kurman A. F., Kirdan S. V.-Poltava, 2002. - 42 p.
10. Lokes P. I. Doslidzhennya Sechi u dogs I kishok. Metodichni vkazivki / Lokes P. I., Kurman A. F.-Poltava, 2002. - 50 p.

11. Lubina A.V. Programmed manual on methods of clinical laboratory research / Lubina A.V., Spector I. S., Katasonova T. V.-Moscow, 1971. - 208 p.
12. Mazurkevich A. Y. Pathophysiology tvarin / Mazurkevich A. Y., Tarasevich V. L., Klugi J.-K.: Vyshcha SHKOLA, 2000. -352 p.
13. Martin M. Manual of Electrocardiology of small Pets / Martin M.; TRANS. from English. Suvorov O. V.; ed. Zorinoi A. I.-Moscow: LLC "AQUARIUM PRINT", 2005. - 144 p.
14. Methodics ukazi schodo vikoristannya bohmovaly dozen bolongo material from reigning laboratories veterinarno medicine at dagnostic zakhvoryuvan infectino patolog / Y. M. Nowicka, D. P., and Kucheruk, O. V. Golubici; Min. AGR. policy of Ukraine, Keep. DEP. vet. med. Ukraine. Kiev, 2000, 85 p.
15. Antonenko p. P. Profilaktyczne zastosuvannya the drug of natural origin "Ftopku" in tvarynnystv. Method. recom. / P. p. Antonenko .- Dnipropetrovsk : MA - Pres 2008.- 20 C.
16. Antonenko p. P. Zastosuvannya preparatu natural origin "Flohale" I "Gastaldo" for profilactic nesuraznyh of hvorob tvarin I ptic. . Method. recom. / P. p. Antonenko .- Dnipro: IMA-Pres 2008. - 20 p.
17. Laboratorni dozen crow tvarin that interpretacija Yogo rezultatu. Methodical posibnik / [Levchenko V. I., Golovakha V. I., Sakhnyuk V. I. TA in.]. Ed. V. I. Levchenka I V. M. Bezukha. Bila Tserkva, 2015, 136 p.
18. methods of veterinary clinical laboratory diagnostics: directory / [Kondrakhin I. P, Arkhipov A.V., Levchenko V. I. et al.]; under the editorship of Professor I. P. Kondrahin. – Moscow: Kolos, 2004. - 520 p.
19. Methods of clinical examination of a sick animal. Educational and methodical manual / [Kumkov V. T., Korobov A.V., Parshin P. A., etc.]. - Moscow: Mgavmib named after K. I. Scriabin, 2005. - 39 p.