

**MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
SUMY NATIONAL AGRARIAN UNIVERSITY**

**Department of Virology, Pathology and Poultry Diseases. prof. II Panikar
Faculty of Veterinary Medicine**

MODULE SYLLABUS

Diseases of small and exotic animals
selective


Implemented in the “Veterinary Medicine” Academic Program

Area of specialization 211 “ Veterinary Medicine”



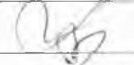


at the second (master 's) level of higher education

Sumy-2021



Author:  Reshetilo OI., Ph.D., Associate Professor
(signature) (surname, initials) (academic degree and title, position)

Considered, approved and approved at the meeting of the department virology, pathoanatomy and diseases of poultry. prof. Panikara II	protocol from 8.06.2021 № 12
	The head departments <u></u> <u>R. Petrov</u> <small>(signature) (surname, initials)</small>

Approved by:

Guarantor of the Academic program  L. Ulko
 Dean of the Faculty  O. Nechyporenko
 Syllabus review (attached) is provided by :  O. Shkromada
 G. Zon
 Representative of the Department of Education Quality assurance, licensing and accreditation 
 Registered in electronic data base 26 of 2021

Syllabus review data:

The academic year in which changes are made	The Academic program attachment number with changes description	Changes revised and approved		
		Minutes No and date of the department meeting	Head of Department	Guarantor of the Academic program
2022-2023	supplement 1	N 12 15-DG 22		

1. GENERAL INFORMATION ABOUT THE EDUCATIONAL COMPONENT

1.	Title	Research methodology		
2.	Faculty/Department	Faculty of Veterinary Medicine, Virology, Pathanatomy and Poultry Diseases after Prof. I.I. Panikar Department		
3.	Type (compulsory or optional)	selective		
4.	Program(s) to which module is attached (to be filled in for compulsory types)	OP Veterinary Medicine 211 - Veterinary medicine		
5.	Module can be suggested for (to be filled in for optional types)			
6.	Level of the National Qualifications Framework	7		
7.	Semester and duration of module	9 semesters, 15 weeks		
8.	ECTS credits number	3		
9.	Total workload and time allotment	Directed study		Self-directed study
		Lectures	Practical	Labs
		8		8
				74
10.	Language of instruction	English		
11.	Module leader	Associate Professor of Virology, Pathanatomy and Poultry Diseases Department, c. vet. med. Ivanovskaya L.B.		
11.1	Module leader contact information	FVM, office 15 or 17, 0965384585, lusj0951@gmail.com consultations every Friday from 14-15 to 15-30		
12.	General description of the educational component	"Diseases of small and exotic animals" - as a discipline lays the foundations of knowledge about biological features, etiology of diseases of small and exotic animals, causes, modern diagnostic methods, methods of treatment, prevention and combating them that will be needed in future work.		
13.	The purpose of the educational component	The purpose of the educational component is to form students' deep theoretical knowledge and practical skills in recognizing diseases of small domestic and exotic animals, studying the etiology, pathogenesis, symptoms, course, prognosis, treatment and prevention depending on the specific conditions of keeping and feeding small domestic and exotic animals		
14.	Prerequisites for studying OK, connection with other educational components of OP	The educational component, as a basis for clinical subjects, is based on the foundations of general theoretical disciplines: Animal Physiology, Clinical Diagnosis, Epizootology and Infectious Diseases, Parasitology and Invasive Diseases, Internal Medicine, Animal Obstetrics and Gynecology.		
15.	The policy of academic integrity	Attendance is mandatory, unacceptable delays, students must follow the rules of conduct in the classroom; You are not allowed to write off and use mobile phones while writing tests, taking tests and exams. Rearrangement of modules occurs for good reasons. Abstracts must have references to the literature used.		
16	Link in Moodle	https://cdn.snau.edu.ua/moodle/enrol/index.php?id=1929		

2. CORRELATION BETWEEN MODULE LEARNING OUTCOMES (MLOs) AND PROGRAM LEARNING OUTCOMES (PLOs)

MLOs: On successful completion of the module the learner will be able to:	PLOs		How assessed
	PLOs 1	PLOs 2	
<p>MLOs 1. Understand the importance of discipline in shaping the worldview of a veterinarian. Follow safety rules when working with small and exotic animals. Distinguish between animal breeds and their species. Know the regulatory requirements for keeping and feeding animals, anatomical and physiological features, clinical and biochemical parameters of blood, urine. Master the technique and methods of blood sampling and administration of drugs to small and exotic animals. Make blood smears, obtain blood serum and examine them, conduct clinical examinations of animals.</p>	x	x	<ul style="list-style-type: none"> - Oral control (participation in a discussion on the topic of the lecture) - Laboratory-practical control (performance of tasks in laboratory works). - Written control (performance of tasks on independent work, independent elaboration of a theme as a whole or separate questions of independent work (results of testing, preparation of presentations, presentation report of independently developed material)) - Solving situational problems
<p>MLOs 2. Know the main infectious and invasive diseases of small and exotic animals: etiology, diagnosis, treatment, prevention. Prepare the animal for vaccination and use vaccination schemes for dogs and cats to prevent infectious diseases; prepare the drug and conduct microscopic diagnosis of dermatophytosis; to carry out coproscopic diagnosis of helminthiasis, microscopic (blood smears, native blood drop) diagnosis of babesiosis, heartworm disease and diagnosis of arachnoentomoses of animals.</p>	x	x	<ul style="list-style-type: none"> - Oral control (participation in a discussion on the topic of the lecture) - Laboratory-practical control (performance of tasks in laboratory works). Working with animals - Written control (performance of tasks on independent work, independent elaboration of a theme as a whole or separate questions of independent work (results of testing, preparation of presentations, presentation report of independently developed material)) - Solving situational problems
<p>MLOs 3. Know the sexual cycle in different animals, physiology and pathology of pregnancy, pathology of childbirth, postpartum diseases. Provide obstetric care for normal and abnormal births, castrate males and females. Do a caesarean section Capture animals. Apply the scheme of clinical research of animals. Carry out registration and collection of anamnesis. Analyze the obtained results Understand the significance of the results of animal registration and anamnesis collection Use the obtained data for</p>	x	x	<ul style="list-style-type: none"> - Oral control (participation in a discussion on the topic of the lecture) - Laboratory-practical control (performance of tasks in laboratory works). Working with animals - Written control (performance of tasks on independent work, independent elaboration of a theme as a whole or separate questions of independent work (results of testing, preparation of presentations, presentation report of independently developed material)) - Solving situational problems

further clinical research of animals.			- Final control (solving tests)
MLOs 4. Diagnose skin diseases, wounds, hernias, bone and joint diseases: etiology, diagnosis. Carry out treatment and prevention of diseases of various etiologies. Learn to diagnose feline urolithiasis and provide first aid for urethral obstruction. Diagnose diseases of turtles and iguanas of infectious and non-infectious etiology. Capture animals. Apply the scheme of clinical research of animals. Carry out registration and collection of anamnesis. Analyze the obtained results Understand the significance of the results of animal registration and anamnesis collection Use the obtained data for further clinical research of animals.	x	x	- Oral control (participation in a discussion on the topic of the lecture) - Laboratory-practical control (performance of tasks in laboratory works). Working with animals - Written control (performance of tasks on independent work, independent elaboration of a theme as a whole or separate questions of independent work (results of testing, preparation of presentations, presentation report of independently developed material)) Solving situational problems

3. MODULE INDICATIVE CONTENT

Topic. List of issues to be addressed within the topic	Distribution of hourse				Learning resources ¹
	Directed study			Self-directed study	
	Lectures	Practical	Labs		
Topic 1. Defining the discipline and its role in the formation of a veterinarian. Small animals, their importance. Exotic animals and their significance.	2			6	[1, 7, 14, 17, 20, 22]
Topic 2. Diseases of small animals of viral etiology.	1		2	6	[1, 5, 9, 16, 19, 25]
Topic 3. Diseases of animals of bacterial etiology.	1		2	6	[1, 10, 12, 15, 20, 27]
Topic 4. Parasitic diseases of small and exotic animals.	2		2	12	[1, 3, 6, 8, 17, 21]
Topic 5. Anatomical and physiological data on the reproductive system of females and males. Sexual cycle. Mating and fertilization. Physiology of pregnancy.	1			10	[2, 4, 7, 9, 18, 23]
Topic 6. Pathology of pregnancy: etiology, symptoms, diagnosis, treatment. Obstetric care. Granting				10	[4, 7, 11, 15, 24]

¹Конкретне джерело із основної чи додатково рекомендованої літератури

rules obstetric care.					
Topic 7. Internal diseases of small and exotic animals. Urolithiasis in cats and dogs. Etiology, diagnosis, treatment, prevention.	1		2	12	[2, 6, 11, 17, 26]
Topic 8. Surgical diseases of small and exotic animals				12	[3, 5, 12, 14, 25]
Total	8		8	74	

4. TEACHING AND TEACHING METHODS

MLOs	Teaching methods (directed study)	Hours	Learning methods (self-directed study)	Hours
MLOs 1	Survey of students with explanations of key issues of the subject. Interactive discussion of the topic in the form of a discussion, which includes information presented in diagrams and drawings, answers to students' questions. Mastering practical skills, methods of laboratory work (concept of symptom, prognosis, diagnosis, syndrome, fixation of animals). Work with animals / biological materials.	3	Independent elaboration of materials on the topic. Memorization of theoretical material, observation. On the basis of the studied and processed material of registration of the synopsis on independent work Getting acquainted with the information of official sites on the topic of the lesson or a particular issue. Solving situational tasks (orally: registration and collection of anamnesis, use of the obtained data for further.	16
MLOs 2	Survey of students with explanations of key issues of the subject. Interactive discussion of the topic in the form of a discussion, which includes information presented in diagrams and drawings, answers to students' questions. Mastering practical skills, methods of laboratory work (concept of symptom, prognosis, diagnosis, syndrome, fixation of animals). Work with animals / biological materials.	5	Independent elaboration of materials on the topic. Memorization of theoretical material, observation. On the basis of the studied and processed material of registration of the synopsis on independent work Getting acquainted with the information of official sites on the topic of the lesson or a particular issue. Solving situational tasks (orally: registration and collection of anamnesis, use of the obtained data for further research of animals).	18
MLOs 3	Survey of students with explanations of key issues of the subject. Interactive discussion of the topic in the form of a discussion, which includes information presented in diagrams and drawings, answers to students' questions.	4	Independent elaboration of materials on the topic. Memorization of theoretical material, observation. On the basis of the studied and processed material of registration of the synopsis on independent work	20

	Mastering practical skills, methods of laboratory work (concept of symptom, prognosis, diagnosis, syndrome, fixation of animals). Work with animals / biological materials.		Getting acquainted with the information of official sites on the topic of the lesson or a particular issue. Solving situational tasks (orally: registration and collection of anamnesis, use of the obtained data for further research of animals).	
MLOs 4	Survey of students with explanations of key issues of the subject. Interactive discussion of the topic in the form of a discussion, which includes information presented in diagrams and drawings, answers to students' questions. Mastering practical skills, methods of laboratory work (concept of symptom, prognosis, diagnosis, syndrome, fixation of animals). Work with animals / biological materials.	3	Survey of students with explanations of key issues of the subject. Interactive discussion of the topic in the form of a discussion, which includes information presented in diagrams and drawings, answers to students' questions. Mastering practical skills, methods of laboratory work (concept of symptom, prognosis, diagnosis, syndrome, fixation of animals). Work with animals / biological materials.	20

5. ASSESSMENT

5.1. Diagnostic assessment

5.2. Summative assessment

5.2.1. Intended learning outcomes methods:

No	Summative assessment methods	Grades	Deadline
1.	Oral control (participation in a discussion on the topic of the lecture).	30 marcs / 30%	Weekly
2.	Written control (performance of tasks on independent work). Solving situational problems.	15 marcs / 15%	According to the schedule
3.	Laboratory and practical control (performance of tasks in laboratory work) Work with animals.	40 marcs / 40%	According to the schedule of the labs
4.	Final control (solving tests).	15 marcs / 15%	According to the schedule of modules

5.2.2. Grading criteria

Summative assessment method	Unsatisfactory	Satisfactory	Good	Excellent
	<14 points	15-24 points	25-34 points	35-40 points
Thematic survey. Oral control	The student can reproduce only individual fragments of the course.	The student has certain knowledge provided in the program of the discipline, has the	The student is generally well versed in the material, knows the basic	The student demonstrates complete and solid knowledge of the educational

		basic provisions studied at a level that is defined as the minimum allowable	principles of the material, makes an analysis of possible situations based on them and is able to apply it in solving typical practical problems, but admits some inaccuracies	material in the amount that corresponds to the program of the discipline, correctly and reasonably makes the necessary decisions in various non-standard situations.
	<i><9 points</i>	<i>10-19 points</i>	<i>20-29 points</i>	<i>30 points</i>
Laboratory-practical control (performance of tasks in laboratory works). Working with animals	The student is not prepared to solve problems, the answer is incomplete, some components are missing or insufficient to disclose	Most of the requirements are met, but some components are missing or insufficiently disclosed, there is no analysis of other approaches to the issue Using the basic theoretical provisions, the student has difficulty performing the task. Execution of tasks is significantly formalized: there is compliance with the algorithm, but there is no deep understanding of the work	The student has mastered the basic material, and understands the solution of problems, has suggestions on the direction of their solutions. All the requirements of the task are met, but in violation of the methods	The task is performed methodically correctly and qualitatively. The student is able to implement the theoretical provisions of the discipline in practice When performing tasks, he showed the ability to solve tasks independently
	<i><5 points</i>	<i>5-8 points</i>	<i>8-14 points</i>	<i>15 points</i>
Written control (performance of tasks on independent work). Protection of the abstract from independent work. Solving clinical and situational problems	The student does not have a complete understanding of the material on the discipline. The student is not prepared to independently solve problems that outline the purpose and objectives of the discipline	Despite the fact that the student completed the program of the discipline, he worked passively, his answers during the design of works are mostly incorrect, unfounded	Knows the characteristics of the main provisions that are crucial in performing the design of tasks and explaining the decisions made, within the discipline being studied. Errors in the answers are not systemic.	When performing tasks, he showed the ability to solve tasks independently. The synopsis is an impeccably designed, logically arranged material with an understanding of the interrelationships of the processes revealed on this topic.
Multiple choice tests	<i><5 points</i>	<i>5-8 points</i>	<i>8-14 points</i>	<i>15 points</i>
	The student gives the correct answer	The student has some knowledge	The student is generally well	The student demonstrates

	to several questions (≤ 33% of the correct answers).	provided in the program of the discipline, has the basic principles studied and gives the correct answer to several questions (34-59% of correct answers).	versed in the material, knows the basics of the material, and gives the correct answer to several questions (60-89% of the correct answers).	complete and solid knowledge of the study material in the amount that corresponds to the program of the discipline, correctly answers the test questions (90-100% of correct answers).
Design and presentation report of independently processed materia	≤ 5 points	6–9 points	10–13 points	14–15 points
	The student does not have a complete understanding of the material on the discipline. The student did not perform independent study of the material.	Despite the fact that the student completed the program of the discipline, but some components are missing or insufficiently developed, the student worked passively.	Knows the basic provisions that are crucial in	The student does not have a complete understanding of the material on the discipline. The student did not perform independent study of the material.

5.3. Formative assessment

Formative exercises are designed to enable students to develop particular aspects of their learning, prior to summative assessments. Formative exercises are designed to help students use feedback and self-reflection to manage and develop their learning so that they can see how to improve their work.

№	Formative Assessment elements	Date
1	Oral interview of students with explanation of key questions of the subject, answers to students' questions, mastering practical skills (methods of laboratory work)	During the lesson according to the schedule
2	Oral feedback from the teacher while working on solving clinical and situational problems	During the lesson according to the schedule
3	Written feedback from the teacher after checking the syllabus for self-study of the discipline.	Within a week, after execution

Self-assessment can be used as an element of summative assessment and formative assessment.

6. LEARNING RESOURCES (LITERACHA)

6.1. The main sources

6.1.1 Textbooks, manuals

1. Diseases of dogs and cats. Ed. A.I. Mazurkevich. K. : "Harvest". 2006. 428 p.
2. Borisevich V.B., Borisevich B.V. Infectious and non-communicable diseases of dogs. K., 2007. 435 p.
3. Bogdanova I.B. Food for cats and dogs. M. : 2002. 354 s.
4. Gaskell R.M., Bennett M. Handbook of infectious diseases of dogs and cats. M. : "Aquarium", 2000. 222 p.
5. Carlson D.D., Giffin D.M., Carlson L.D. Home veterinary guide for cat owners. M. : Tsentrpoligraf, 2007. 573 s.

6. Nimand H.G., Suter P.B. Diseases of dogs. M.: "Aquarium", 2001. 806 p.
7. Starchenkov S.V. Diseases of small animals. S.-P.: 2009. 509 p.
8. Filippov Y.I., Pridatko A.G., Eliseev A.N., etc. Domestic cats. M. Rosagropromizdat", 2001. 309 p.
9. Chandler E.A., Gaskell K.J., Gaskell R.M. Diseases of cats. M.: "Aquarium", 2002. 687 p.
10. Jarofke D., Lande J. Reptiles. Diseases and treatment. M.: "Aquarium", 2009. - 317 p.
11. Pritvorov A. Exotic pets. M.: Kristall, 2006. 176 p.
12. Helmutdinov R.Ya., Ivanov A.V., Panin A.N. Infectious diseases of exotic and wild animals M.: Колос, 2010. 666 p.

6.1.2. Methodical support

13. Reshetilo O.I. Methodical instructions for conducting laboratory-practical classes on the subject "Diseases of small animals" on the topic: "Diseases of dogs of viral etiology" for students of EQL "Bachelor" of the Faculty of Veterinary Medicine. Sumy: SNAU, 2015. 30 p.
12. Reshetilo O.I. Methodical instructions to laboratory-practical classes on the subject "Diseases of small animals" on the topic: "Diseases of cats of viral etiology" part 1 for students of EQL "Bachelor" of the Faculty of Veterinary Medicine. Sumy, 2015. 22 p.
13. Reshetilo O.I. Methodical instructions to laboratory-practical classes on the subject "Diseases of small animals" on the topic: "Diseases of cats of viral etiology" part 2. Sumy, 2016 - 26 p.
14. Reshetilo O.I. Methodical instructions for conducting laboratory-practical classes from the discipline "Diseases of small animals" on the topic: "Diseases of dogs of bacterial etiology" for students of the Faculty of Veterinary Medicine. Sumy, 2016. 19 p.
15. Reshetilo O.I. Methodical instructions for independent work in the discipline "Diseases of small animals" for students in the direction of training 211 "Veterinary Medicine", 212 "Veterinary Hygiene, Sanitation and Examination" EQL "Bachelor" of the Faculty of Veterinary Medicine. Sumy, 2017. 95 p.
16. Reshetilo O.I. Methodical instructions to lectures on the subject "Diseases of small animals" for students majoring in 211 "Veterinary Medicine" educational degree "Bachelor" of the Faculty of Veterinary Medicine. Sumy, 2018. 93 p.

6.1.3. Other sources

17. Belov AD, Danilov EP, Dukur II и во. Болезни собак: Справочник [Electronic resource] / Болезни собак: Справочник. М.: Agropromizdat, 2000. 368 p.: - Access mode:<http://www.rulit.net/tag/biology/bolezni-sobak-spravochnik-download-free-170032.html>
18. Berghoff P. K. Small pets. Diseases and treatment. [Electronic resource] .. Small pets. Diseases and treatment. M.: Aquarium, 1999. 224 p. - Access mode: <http://do.gendocs.ru/docs/index-363020.html>
19. Diseases of dogs. [Electronic resource]. Moscow Veterinary Web Center. - Access mode:<http://webmvc.com/bolezni/dog.php>
20. Diseases of dogs. Veterinary reference book [Electronic resource]. -Access mode: http://www.petshealth.ru/pets/dog/veterinar/sprav/vet_sprav.shtml
21. Dubrovina EV Skin diseases of cats.[Electronic resource]. Access mode:<http://vet-online.wwstudio.net/practics/Details/5>
22. Diseases of dogs. ZOOVET Training Center[Electronic resource]. - Access mode: <http://www.zoovet.ru/diseases.php?vid=82>
23. Moskovkina NN, Sotskaya MN Genetics and hereditary diseases of dogs and cats [Electronic resource]. / H.H.Moskovkina, . Genetics and hereditary diseases of dogs and cats. M.: ООО "Aquarium LTD", 2000. 448 p. Access mode: <http://www.rulit.net/tag/biology/genetika-i-nasledstvennye-bolezni-sobak-i-koshek-download-free-178130.html>

24. Starchenkov SV Diseases of small animals. Diagnosis. Treatment. Prevention. [Electronic resource. Diseases of small animals. Diagnosis. Treatment. Prevention. - Doe. - 2009. - Access mode:<http://mirknig.com/2011/10/08/bolezni-melkih-zhivotnyh-diagnostika-lechenie-profilaktika.html>

6.2. Additional sources

25. Bratyukha S., Nagorny I, Revenko I., etc. Diseases of your pets. K. "Alterpress". 2005. 335 p.
26. Allen V.E. Complete course in obstetrics and gynecology for dogs. M.: "Aquarium", 2002. 446 p.
27. Kuzmin AA Aibolit's tips. H. ICP "Parity", 2005. 427 p.

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		Minutes No and date of the department meeting	Head of Department	Guarantor of the Academic program
2022-2023		No 12 dated 15.06.2022		

1. GENERAL INFORMATION ABOUT THE EDUCATIONAL COMPONENT

9.	Total workload and time allotment	Directed study			Self-directed study
		Lectures	Practical	Labs	
		8		8	74

3. MODULE INDICATIVE CONTENT

Topic. List of issues to be addressed within the topic	Distribution of hourse				Learning resources ²
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	Lectures	Practical	Labs		
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Topic 4. Parasitic diseases of small and exotic animals.	2		2	12	[1, 3, 6, 8, 17, 21]
Topic 5. Anatomical and physiological data on the reproductive system of females and males. Sexual cycle. Mating and fertilization. Physiology of pregnancy.	1			10	[2, 4, 7, 9, 18, 23]
Topic 6. Pathology of pregnancy: etiology, symptoms, diagnosis, treatment. Obstetric care. Granting rules obstetric care.				10	[4, 7, 11, 15, 24]
Topic 7. Internal diseases of small and exotic animals. Urolithiasis in cats and dogs. Etiology, diagnosis, treatment, prevention.	1		2	12	[2, 6, 11, 17, 26]
Topic 8. Surgical diseases of small and exotic animals				12	[3, 5, 12, 14, 25]
Total	8		8	74	