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

Department of Episootology and Parasitology Faculty of Veterinary Medicine

### **MODULE SYLLABUS**

# Infectious diseases of companion animals

optional

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: Dr. Veterinary Scie	nce, Professor (O.I. Kasianenko) (A) aver	
Module syllabus agreed at the	Minutes No 22 dated June18 2021	
Department meeting	Head of Episootology and Parasitology Department	( <u>O.I. Kasianenko</u> )

Approved by:	
Guarantor of the Academic program	(Shkromada O.I.)
Dean of the Faculty	(_Nechyporenko O.L.)
Syllabus review (attached) is provided by :	(Ulko L.G.)
- A	(Nahorna L.V.)
Representative of the Department of Education Quali	ty assurance,
licensing and accreditation	- (F. h gharek)
Registered in electronic data base	2021

## Syllabus review data:

The academic	The Academic pro-	Change		
year in which changes are made	gram attachment number with chang- es description	Minutes No and date of the department meeting	Head of Department	Guarantor of the Academ- ic program

#### **1. MODULE OVERVIEW**

2.       Faculty/Department       Veterinary Medicine / Episootology and Parasitology Department         3.       Type (compulsory or op- tional)       optional         4.       Program(s) to which module is attached to be filled in for compulsory types)       –         5.       Module can be suggested for (to be filled in for op- tional types)       –         6.       Level of the National Qualifications Framework       7 level         7.       Semester and duration of module       3 semester, 15 weeks         8.       ECTS credits number       5.0         9.       Total workload and time allotment       5.0         10.       Language of instruction       English         11.       Module leader       Dr. Veterinary Science, Professor O.I. Kasianenko         12.       Module leader contact information       The educational component is related to the general object the OP and covers aspects of infectious diseases of ci on animals and epizootic measures. The study of the di strengthens the main component of "Veterinary science-based planning, organ and conduct of preventive, curative and anti-epizootic prevention of infectious diseases of ci on animals and epizootic measures. The study of the di strengthens the main component of "Veterinary technologies prevention of infectious diseases of animals" and provide tional in-depth knowledge of science-based planning, organ and conduct of preventive, curative and anti-epizootic preventive, curative and anti-epizootic preventive, curative, curative and anti-epizootic preventive, curative,	1.	Title	Infectious	s diseases of c	ompanion anima	ls
3.       Type (compulsory or optional optional optional optional         4.       Program(s) to which module is attached (to be filled in for compulsory types)       -         5.       Module can be suggested for (to be filled in for optional ypes)       -         6.       Level of the National Qualifications Framework       7 level         7.       Semester and duration of module       3 semester, 15 weeks         8.       ECTS credits number       5,0         9.       Total workload and time allotment       Directed study       Self-directed st         10.       Language of instruction formation       8       22       120         10.       Language of instruction formation       160/3 Herasyma Kondratieva Street, 81, Tera.: +8(096) 669 09 02; viber +8(095) 615 39 02       02         11.       Module leader contact information       160/3 Herasyma Kondratieva Street, 81, Tera.: +8(096) 669 09 02; viber +8(095) 615 39 02       02         13.       Module description       The educational component is related to the general object the OP and covers aspects of infectious and epizootic prot that underlie the development of infectious and epizootic prot that underlie the development of sincet-based planning, organ and conduct of preventive, curative and anti-epizootic me for infectious diseases of companion animals.         14.       Module aim       Training of highly qualified and professional vetrinarians, dynamically comblem knowledge, skills, communica	2.	Faculty/Department	Veterinar	y Medicine / I	Episootology and	Parasitology
4.       Program(s) to which module is attached (to be filled in for compulsory types)       -         5.       Module can be suggested for (to be filled in for op- tional types)       Veterinary hygiene, sanitation and examination         6.       Level of the National Qualifications Framework       7 level         7.       Semester and duration of module       3 semester, 15 weeks         8.       ECTS credits number       5,0         9.       Total workload and time allotment       Directed study       Self-directed st Lectures         10.       Language of instruction       8       22       120         10.       Language of instruction       English       11.       Module leader       Dr. Veterinary Science, Professor       O.I. Kasianenko         12.       Module leader contact information       160/3 Herasyma Kondratieva Street, 81, Ten: +8(096) 069 09 02; viber +8(095) 615 39 02 oksana_kasjanenko@ukr.net         13.       Module description       The educational component is related to the general object the OP and covers aspects of infectious and epizootic prot that underlie the development of infectious diseases of companion animals.         14.       Module aim       Training of highly qualified and professional activities and ovice complex problems knowledge, skills, communication solve complex problems knowledge, skills, communication solve complex problems lated to prevention, diagnosis, treatment of co ion animals for infectious diseases, the provention of	3.	Type (compulsory or op- tional)	optional			
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allotment         Lectures         Practicals         Labs           10.         Language of instruction         8         22         120           10.         Language of instruction         English         120           11.         Module leader         Dr. Veterinary Science, Professor O.I. Kasianenko           12.         Module leader contact information         160/3 Herasyma Kondratieva Street, 81, Ten.: +8(096) 069 09 02; viber +8(095) 615 39 02 oksana_kasjanenko@ukr.net           13.         Module description         The educational component is related to the general object the OP and covers aspects of infectious and epizootic prothat underlie the development of infectious diseases of corion animals and epizootic measures. The study of the di strengthens the main component of "Veterinary technologies prevention of infectious diseases of animals" and provide: tional in-depth knowledge of science-based planning, organ and conduct of preventive, curative and anti-epizootic me for infectious diseases of companion animals.           14.         Module aim         Training of highly qualified and professional activities and problems related to prevention, diagnosis, treatment of coin animals for infectious diseases and implement innot technologies in professional activities.           15.         Module Dependencies (prerequisites, correquisites, correquisites, correquisites, correquisites, incommatible modules)         The educational component is based on the study of EC: Epizootology and infectious for the prevention of infectious diseases, Veterinary technologies for the prevention of infectious	9.	Total workload and time		Directed stu	udy	Self-directed study
8         22         120           10.         Language of instruction         English           11.         Module leader         Dr. Veterinary Science, Professor O.I. Kasianenko           12.         Module leader contact information         160/3 Herasyma Kondratieva Street, 81, Ter.: +8(096) 069 09 02; viber +8(095) 615 39 02 oksana_kasjanenko@ukr.net           13.         Module description         The educational component is related to the general object the OP and covers aspects of infectious and epizootic pro- that underlie the development of infectious diseases of co- ion animals and epizootic measures. The study of the di strengthens the main component of "Veterinary technolgies prevention of infectious diseases of animals" and provider tional in-depth knowledge of science-based planning, organ and conduct of preventive, curative and anti-epizootic me for infectious diseases of companion animals.           14.         Module aim         Training of highly qualified and professional veterinarians, dynamically combine knowledge, skills, communication solve complex problems during professional activities and problems related to prevention, diagnosis, treatment of co- ion animals for infectious diseases and implement inno technologies in professional activities.           15.         Module Dependencies (prerequisites, co- requisites, incommatible modules)         The educational component is based on the study of EC: Epizootology and infectious diseases, Veterinary technologies for the prevention of infectious diseases. Veterinary technologies for the prevention of infectious		allotment	Lectures	Practicals	Labs	
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<ul> <li>14. Module aim</li> <li>Training of highly qualified and professional veterinarians, dynamically combine knowledge, skills, communication solve complex problems during professional activities and problems related to prevention, diagnosis, treatment of colion animals for infectious diseases and implement innot technologies in professional activities.</li> <li>15. Module Dependencies (prerequisites, correquisites, incompatible modules)</li> <li>The educational component is based on the study of EC: Epizootology and infectious diseases, Veterinary technologies for the prevention of infectious diseases.</li> </ul>	13.	Module description	The educ the OP a that unde ion anima strengthen preventio tional in-o and cond for infect	ational compo- nd covers asp rlie the develo- als and epizons the main co- n of infectious depth knowled- uct of preven- tious diseases of	onent is related to bects of infection opment of infect outic measures." omponent of "Ver is diseases of an lge of science-ba tive, curative an of companion an	to the general objectives of as and epizootic processes ious diseases of compan- The study of the dicipline terinary technolgies for the imals" and provides addi- used planning, organization ad anti-epizootic measures imals.
15. Module Dependencies (prerequisites, co- requisites, incompatible modules) The educational component is based on the study of EC: Epizootology and infectious diseases, Veterinary technologies for the prevention of infectious diseases. Veterinary technologies for the prevention of infectious	14.	Module aim	Training dynamica solve con problems ion anim technolog	of highly qual lly combine nplex problen related to pre als for infect ies in professi	ified and profess knowledge, skil as during profes evention, diagnos tious diseases a ional activities.	ional veterinarians, able to ls, communication skills, sional activities and solve sis, treatment of compan- nd implement innovative
animal diseases.       16.     The policy of academic	15.	Module Dependencies (prerequisites, co- requisites, incompatible modules) The policy of academic	The educa Epizootol Veterinar diseases, animal di	ational compo ogy and infec y technologie Veterinary tec seases.	nent is based on tious diseases, s for the prever chnologies for the cademic dishone	the study of EC: ntion of infectious animal he prevention of infectious sty are allowed during the

	integrity	study of EC. Plagiarism check algorithm systems are tools for
		counteracting violations of academic integrity. In case of viola-
		tions, the response is in accordance with the regulations on the
		academic integrity of participants in the educational process in
		Sumy NAU (https://snau.edu.ua/viddil-zabezpechennya-yakosti-
		osviti/zabezpechennya-yakosti-osviti/akademichna-
		dobrochesnist/). If a violation of academic integrity is detected,
		the completed task is not credited and is sent for reexecution.
17	Link in Moodle	

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

OK learning outcomes:	How assessed
MLOs:	
On successful completion of the module the learner	
will be able to:	
MLOs 1. Carry out epizootological, clinical and pathological and differential diagnosis of infectious diseases of companion animals.	Rating control according to the 100-point scale of ECTS assessment. Polycriteria assessment of the current work of higher education students: survey of theoretical questions, written assignments during tests, assessment of knowledge, surveys during laboratory-practical classes; activity during the discussion of issues submitted for classes and role-playing epizootic games; express control during classroom classes; self-study of the topic as a whole or individual issues of independent work of higher education (writing essays, test results, individual written tests, preparation of presentations, presentation report of self-developed material). RDN is assessed during the current and final control (offset). During the current and final control in the process of assessment of the discipline are taken into account prepared by the applicant and published scientific publications in collections that are part of professional publications and / or conference proceedings.
MLOs 2. Identify and apply methods of prevention and treatment of companion animals using therapeutic and prophylactic agents and evaluate their effectiveness.	Rating control according to the 100-point scale of ECTS assessment. Polycriteria assessment of the current work of higher education students: survey of theoretical questions, written assignments during tests, assessment of knowledge, surveys during laboratory-practical classes; activity during the discussion of issues submitted for classes and role-playing epizootic games; express control during classroom classes; self-study of the topic as a whole or individual issues of independent work of higher education (writing essays, test results, individual written tests, preparation of presentations, presentation report of self-developed material). RDN is assessed during the current

	and final control (offset). During the current and final control in the process of assessment of the discipline are taken into account prepared by the applicant and published scientific publications in collections that are part of professional publications and / or conference proceedings.
MLOs 3. Identify and implement measures aimed at protecting humans from diseases common to animals and humans.	Rating control according to the 100-point scale of ECTS assessment. Polycriteria assessment of the current work of higher education students: survey of theoretical questions, written assignments during tests, assessment of knowledge, surveys during laboratory-practical classes; activity during the discussion of issues submitted for classes and role-playing epizootic games; express control during classroom classes; self-study of the topic as a whole or individual issues of independent work of higher education (writing essays, test results, individual written tests, preparation of presentations, presentation report of self-developed material). RDN is assessed during the current and final control (offset). During the current and final control in the process of assessment of the discipline are taken into account prepared by the applicant and published scientific publications in collections that are part of professional publications and / or conference proceedings.

## **3. MODULE INDICATIVE CONTENT**

	Autumn semester
Topics	Directed st

	Ilutu		5001		
Topics	Directed study			Learning	
				1	resources <sup>1</sup>
	Cl	assroom v	vork	Self-directed	
				study	
	Lectu	Practic	Labs	· ·	
	res	als			
<b>Topic 1.</b> Bacterial focal infections	2		4	16	[1, 5, 7, 12, 13,
(Leptospirosis, salmonellosis, rabies,					14, 17, 18, 19, 25,
Aujeszky's disease. Rickettsiosis.					26]
Mycoplasmosis).					1
<b>Topic 2.</b> Adenoviral infections of dogs	2		4	16	[3, 5, 9, 11, 22,
(Infectious hepatitis of carnivores.					24]
Infectious larengotracheitis of dogs).					-
<b>Topic 3.</b> Parvovirus infections of dogs	2		2	14	[2, 3, 5, 7, 9, 11,
and cats (Panleukopenia of cats					22. 241
Parvovirus of dogs					, ]
	2		2	1.4	
<b>Topic 4.</b> Coronavirus infections of dogs	2		2	14	[2, 3, 5, 7, 9, 11,
and cats (Canine coronavirus. Infectious					13, 22, 23, 24]
peritonitis of cats).					
Topic 5. Calcivirosis. Leukemia of cats.			2	14	2, 3, 5, 7, 9, 11,

<sup>&</sup>lt;sup>1</sup> Specific source from the main or additional recommended literature

Immunodeficiency of cats.				13, 22, 23, 24, 26]
Topic 6. Infectious diseasesfur	-	2	14	[1, 5, 7, 12, 14,
(Myxomatosis. Viral hemorrhagic				17, 18, 19, 25, 26]
disease of rabbits).				
Topic 7. Infectious diseases of mink	_	2	16	[1, 5, 7, 12, 13,
(Aleutian mink disease. Pseudomonas				14, 17, 18, 19, 25]
mink. Fur pasteurellosis).				
Topic 8. Mycoses and mycotoxicosis	—	4	16	[1, 4, 5, 7, 9, 11,
(Systemic mycoses. Dermatomycoses.				15]
Mycotoxicosis)				
Total	8	22	120	

#### 4. TEACHING AND LEARNING METHODS

MLOs	Teaching methods	Hours	Learning methods	Hours
	(directed study)		(self-directed study)	
MLOs 1. Carry out epizootological, clinical and pathological and differential diagnosis of infectious diseases of companion animals.	Narration of theoretical questions, explanations, conversation (heuristic and reproductive), lecture on the etiology, epizootology, pathogenesis, clinical signs, pathological changes, differential diagnosis of infectious diseases of companion animals. Laboratory-practical classes in (educational-scientific laboratory of PCR- diagnostics, inter-faculty educational-scientific laboratory of electron microscopy). Demonstration of methods and results of diagnostic tests, illustration, observation. Use of technical means of training and problem situations, excursions, on- the-job training, group research, use of training and control tests). Use of multimedia technologies, spreadsheets, application of the method of analysis of specific situations (case-study), dialogue training, part-time students (cooperation)	10	Pobota with a book, lecture notes, educational and methodical literature (reading, translation, writing, taking notes, making tables, graphs, reference notes). Acquaintance with the information of official sites on a subject of employment or a separate question (the instruction on prevention and elimination of an infectious disease). Memorization of theoretical material, observation. The student must apply teaching methods by the nature of the logic of cognition (analytical, synthesis methods, inductive method, deductive method, translational method). On the basis of the studied and processed material to independently generate an opinion during a theoretical survey, solving situational problems, debates, discussions, binary classes, business and role-playing games, group research). Use multimedia technologies, dialogue learning, student	40
MLOs 2. Plan,	Narration of theoretical	10	Pobota with a book, lecture	40
organize and	questions, explanations,		notes, educational and	
implement measures	conversation (heuristic and		methodical literature (reading,	
tor the treatment and	reproductive), lecture on		translation, writing, taking	
prevention of	treatment prevention of		notes, making tables, graphs,	
infectious diseases	infoctions discasses of		reference notes).	
animals using	companion animals.		Acquaintance with the	

therapeutic and	Laboratory-practical classes		information of official sites on a	
prophylactic agents.	in (educational-scientific		subject of employment or a	
	laboratory of PCR-		separate question (the	
	diagnostics, inter-faculty		instruction on prevention and	
	educational-scientific		elimination of an infectious	
	laboratory of electron		disease).	
	microscopy).		Memorization of theoretical	
	Demonstration of methods		material, observation.	
	and results of diagnostic		The student must apply teaching	
	tests, illustration,		methods by the nature of the	
	observation.		logic of cognition (analytical,	
	Use of technical means of		synthesis methods, inductive	
	training and problem		method, deductive method,	
	situations, excursions, on-		translational method).	
	the-job training, group		On the basis of the studied and	
	research, use of training		processed material to	
	and control tests).		independently generate an	
	Use of multimedia		opinion during a theoretical	
	technologies, spreadsneets,		survey, solving situational	
	application of the method		problems, debates, discussions,	
	of analysis of specific		binary classes, business and	
	dialogue training part time		role-playing games, group	
	students (cooperation)		research).	
	students (cooperation).		Use multimedia technologies,	
			dialogue learning, student	
		10	cooperation (cooperation).	10
MLOs 3. Develop	Narration of theoretical	10	Pobota with a book, lecture	40
and implement	questions, explanations,		notes, educational and	
measures to protect	conversation (neuristic and		translation writing taking	
diagonal common to	instruction on biosecurity		notes making tables graphs	
animals and	and biosafety		reference notes)	
humans	Demonstration of methods		reference notes).	
numans.	and results of diagnostic		Acquaintance with the	
	tests. illustration.		information of official sites on a	
	observation.		subject of employment or a	
	Use of technical means of		separate question (the	
	training and problem		instruction on prevention and	
	situations, excursions, on-		elimination of an infectious	
	the-job training, group		disease).	
	research, use of training		Memorization of theoretical	
	and control tests).		material, observation.	
	Use of multimedia		The student must apply teaching	
	technologies, spreadsheets,		methods by the nature of the	
	application of the method		logic of cognition (analytical,	
	of analysis of specific		synthesis methods, inductive	
	situations (case-study),		method, deductive method,	
	dialogue training, part-time		translational method).	
	students (cooperation).		On the basis of the studied and	
			processed material to	
			independently generate an	
			opinion during a theoretical	
			survey, solving situational	
			problems, debates, discussions,	
			binary classes, business and	
			role-playing games, group	
			research).	
			Use multimedia technologies,	

	dialogue learning, student	
	cooperation (cooperation).	

#### **5. ASSESSMENT**

5.1. Diagnostic assessment

5.2. Summative assessment

# 5.2.1. Intended learning outcomes methods:

No	Summative assessment methods	Grades	Deadline
	Thematic survey	20 points / 20%	Weekly
	Execution of tasks in laboratory-practical classes	20 points / 20%	According to the schedule
	Testing	15 points / 15%	For 7-8 weeks
	Report with a presentation on the subject of independent study of the discipline	45 points / 45%	According to the schedule of delivery of modules

## **5.2.2.** Evaluation criteria

Summative assessment method	Unsatisfactorily	Satisfactorily	Good	Excellent
Thematic survey	<12 points	12-15 points	15-18 points	19-20 points
	The student can play only individual fragments of the course.	Most requirements are met, but some components are missing or insufficiently disclosed, there is no analysis of other approaches to the issue	All requirements of the task are fulfilled	All requirements of the task are fulfilled, creativity, thoughtfulness is shown, own solution of a problem is offered
Execution of tasks in	<12 points	12-15 points	15-18 points	19-20 points
laboratory- practical classes	Task requirements not met	Most of the tasks are done withusing on the basis of basic theoretical principles, the student has difficulty explaining the rules for solving laboratory-practical problems. Execution of individual control tasks is significantly formalized, there is no deep understanding of the work	The student has mastered the basic material, and understands and performs laboratory-practical tasks, has suggestions for the direction of their solutions. Understands the main provisions that are decisive in the course, can solve similar problems by those discussed with the	The applicant implements the theoretical material of the discipline in the performance of laboratory and practical work, is able to analyze and compare the results based on the knowledge, skills, practical skills acquired in this discipline

			teacher, but allows a small number of inaccuracies.	
Multiple selection	$\leq$ 5 points	6-9 points	10–13 points	14-15 points
test	The student gives the correct answer to several questions ( $\leq 33\%$ of the correct answers).	The student has some knowledge provided in the program of the discipline, has the basic provisions being studied and gives the correct answer to several questions (34-59% of correct answers).	The student is generally well versed in the material, knows the basic provisions of the material, and gives the correct answer to several questions (60-89% of the correct answers).	The student demonstrates 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	<9 points	10-19 points	20-39 points	40-45 points
presentation report of independently processed material	The integrity of the student's understanding of the material on the discipline is lacking. 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 performing independent work / individual tasks. Errors in the answers are not significant.	All requirements, tasks are fulfilled, creativity, thoughtfulness is shown, own solution of a problem is offered.

#### **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.

No	Formative Assessment elements	Date		
	Autumn semester			
1.	Oral feedback after studying topics 1–3, 6–7	3 <sup>th</sup> week		
2.	Written feedback after studying topics 4-5	8 <sup>th</sup> week		
3.	Written feedback from the teacher while working on labor-	During classes		
	atory-practical tasks			
4.	Oral feedback from the teacher after the report with a	During classes		
	presentation on the topic of independent study of the disci-			
	pline			

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

#### 6. LEARNING RESOURCES (LITERATURE)

#### The main sources

1. Yarchuk BM, Verbytsky PI, Lytvyn VP, and others. General epizootology. Bila Tserkva, 2002 - 656 p.

2. Infectious diseases of cats: textbook. way. / OE Galatyuk and others. Zhytomyr: Polissya. 2017. 132 p.

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6. VP Litvin, L.V. Oliynyk, LE Kornienko, BM Yarchuk. Factor diseases of agricultural animals. White Church. 2002.- 368 p.

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10. Davidson's medicine: principles and practice: manual: lane. 23rd English kind. : у 3 т. Т. 1 / за ред. S. G. Ralston, J. D. Penman, W. J. Streken, R. P. Hobson; Science. ed. lane. V. Zhdan, L. Babinets, L. Pasieshvili, V. Velychko, N. Mykhailovska. К.: BCB «Медицина», 2020. 258 с.

11. Tilly LP, Tilly L. Diseases of cats and dogs. Per. with English GEOTAR-Media, 2010. 506 p.

12. Chronic infectious diseases of animals / L.Ye. Kornienko, VO Busol, VV Nedosekov and others; for order. L.Ye. Kornienko. Bila Tserkva, 2008. 348 p.

#### **Methodical support**

13. Campylobacteriosis of birds: [monograph] / TI Fotina, AV Berezovsky, OI Kasyanenko, YE Dvorskaya. - S.: Sumy National Agrarian University, 2010. - 140 p.

14. Kassich VY, Rebenko GI Methodical recommendations "Prevention of factor diseases of animals" - Sumy, 2010 - 23 p.

15. Rebenko GI, Gurova TV, Vershnyak TV Methodical recommendations "Biological wastes and methods of their disinfection." - Sumy, 2011 - 34 p.

16. Kassich VY, Rebenko GI, Methodical recommendations "Emerging and exotic infections." - Sumy, 2011 - 16 p.

17. Rebenko GI Natural focal infectious diseases. Tutorial. - Sumy, 2012 - 52 p.

18. Kassich VY, Rebenko GI Antimicrobial therapy for infectious diseases of animals. Tutorial. - Sumy, 2013 - 50 p.

19. Rebenko GI, Baidevlyatov Yu.A. Probiotics and biotherapy. Methodical instructions - Sumy, 2014. - 28 p.

20. Kassich VY, Rebenko GI, Baidevlyatov YA Methodical instructions Execution of course works on epizootology. - Sumy, 2014 - 32 p.

21. Nosocomial infections and infection control: textbook. manual / K.V. Yurko, VM Kozko, GO Solomennik. К.: BCB «Медицина», 2020. 296 с.

22. Kalinina OS, Panikar II, Skibitsky VG Veterinary virology. K. Higher education, 2004. 432p. 3. Laboratory diagnosis of tuberculosis infection: textbook. way. / Yu.I. Фещенко, О.А. Журило, А.I. Barbova. К.: ВСВ «Медицина», 2019. 304 с.

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#### **Other sources**

Website of the State Veterinary and Phytosanitary Service: <u>http://www.vet.gov.ua/</u> MEB website: <u>http://www.oie.int/</u>

Website of the State Food and Consumer Services http://www.consumer.gov.ua