

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

FACULTY OF VETERINARY MEDICINE
DEPARTMENT OF EPIZOOTOLOGY AND PARASITOLOGY

**WORK PROGRAM
(SYLLABUS) OF TEACHING PRACTICE
EDUCATIONAL COMPONENT**

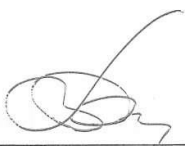
No.28–PARASITOLOGY AND INVASIVE DISEASES ANIMAL

Implemented within the educational program "VETERINARY MEDICINE"

in the specialty H6 "VETERINARY MEDICINE"

at the _second master's_ level of higher education

Sumy – 2025

Developer:  Risovany V.I. Associate Professor
(signature) (surname, initials) (academic degree and title, position)

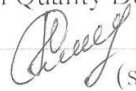
Reviewed, approved and ratified at the meeting of the Department of Epidemiology and Parasitology	Minutes of June 12, 2025 No. 17	
	Manager departments  (signature)	Kasianenko O.I. (last name, initials)

Agreed:

Educational program guarantor  O. Uerast
(signature) (full name)

Dean of the Faculty,
where the educational program is implemented  Lyudmila NAGORNA

Review of the work program (attached) provided by: 
(Full name)

Methodologist of the Education Quality Department,
licensing and accreditation  N. Baranovsk
(signature) (full name)

Registered in the electronic database: date: 02.06. 2025.

Information on reviewing the work program (syllabus):

Educationalthe year in which changes are being made	Number of the appendix to the work program with a description of the changes	Changes reviewed and approved		
		Date and number of the meeting minutes departments	Head of the Department	Educational program guarantor
2026-2027				

GENERAL INFORMATION ABOUT THE EDUCATIONAL COMPONENT					
1.	Name OK	Parasitology and Invasive Diseases Training Practice			
2.	Faculty/ chair	Faculty of Veterinary Medicine, Department of Epidemiology and Parasitology			
3.	Status OK	Mandatory			
4.	Program/Specialty(s) that include OK for mandatory OK	Educational and professional program "Veterinary Medicine". Second master's level of higher education in the specialty H6 "Veterinary Medicine" Fields of knowledge Agriculture, forestry, fisheries and veterinary medicine Qualification: Doctor of Veterinary Medicine			
5.	NQF level	Level 7			
6.	Semester and duration study	Full-time: 9 semesters, 18 weeks			
7.	Number of credits ECTS	10			
8.	Total hours and their distribution	Contact work (classes) full-time		Independent work	
		Lectures	Practical /seminar	Laboratory	Daily Correspo ndence
					30 -
9.	Language of instruction	Ukrainian			
10.	Teacher/Coordinator educational component	Candidate of Veterinary Sciences, Associate Professor Rysovany V.I. Senior lecturer Negreba Yu.V.			
10.1	Contact information	Drawn by V.I. - Corp. 3, room 62, phone: 0963007430; viber0974706536, rvisu@ukr.net ; Negreba Yu.V. - corp. 3, room 62, phone: 0989498577; viber0662967712, Yla7578@ukr.net Room 64 of the Department of Epidemiology and Parasitology. Monday from 10:00 a.m. to 2:00 p.m.			
11.	General description of the educational component	Completion of the training practice "Parasitology and Invasive Animal Diseases" is an important component of the educational process and is aimed at mastering the system of professional skills and abilities by applicants, as well as mastering the primary experience of professional activity and should contribute to the self-development of the applicant.			
12.	Purpose of the educational component	The main goal is to form competencies, to obtain professional skills and abilities, through deepening, supplementing and consolidating theoretical and practical knowledge and abilities obtained in the process of theoretical training in the discipline, acquiring practical skills in production conditions on issues of biological contamination by invasive elements of the environment. Characteristics of trematodes, cestodes, nematodes, insects and unicellular organisms, their structure,			

		classification, clinical signs of diseases that they cause in animals and birds, pathological anatomical changes, the effects of parasites on the body, prevention and measures to combat them. Intravital and posthumous diagnostics of trematodoses, cestodes and nematodoses, arachnoentomosis and protozoan diseases.
13.	Prerequisites for studying OK:	The educational component is based on the acquisition of knowledge and skills in the system of professional training of the educational degree "Master". When studying the discipline, students have the opportunity to familiarize themselves with the foundation of any parasitic research, since it is it that gives an idea of the peculiarities of the organization, functioning, diversity and role of representatives of various parasitic groups of animals in natural ecosystems and human life. The educational component is closely related to such fundamental sciences as ecology, physiology, zoology and animal anatomy.
13.1	Connection with other educational components of the OP	
13.2	Logistics and technical support for the implementation of the OK	Requirements for the practice base: Specialized laboratories with a sufficient number of workplaces. Equipment: Microscopes(light, binocular), centrifuges for separating parasites from samples, laboratory incubators for cultivating parasites, analyzers for studying biological samples. Tools: Scalpels, tweezers, scissors, pipettes (dispensers), loops for collecting samples, microscope slides (slides, coverslips). Educational materials: Collections of microslides with parasite samples, samples for macroscopic study (helminths, protozoan cultures), parasite models (volumetric). Chemical reagents: bswabs (e.g., hematoxylin, eosin), solutions for fixing and preserving specimens, disinfectants.
14.	Academic Integrity Policy	If a candidate submits another candidate's work as their own, such work will be canceled and retaken. In the case of plagiarism, the corresponding assignment will be retaken. In case of using textual borrowings without proper citation (academic plagiarism) - the work is canceled.
15.	Link to the course in Moodle system	https://cdn.snau.edu.ua/moodle/course/view.php?id=1877

LEARNING OUTCOMES BY EDUCATIONAL COMPONENT AND THEIR RELATIONSHIP WITH PROGRAM LEARNING OUTCOMES

Learning outcomes for OK: After studying the educational component, the student is expected to be able to	Program learning outcomes that the OK is aimed at achieving (indicate the number according to the numbering given in the profile) OP)3			How is RND4 assessed?
	PRN2	PRN4	PRN5	
DRN 1. Use tools, special devices, instruments, laboratory equipment and other technical means for carrying out the necessary manipulations during the performance of professional activities.	x	x	x	Case study and situation analysis
DRN 2. Conduct the selection, packaging, fixation and shipment of samples of biological material for laboratory research.	x	x		Participation in focus groups, simulation exercises
DRN 3. Organize, conduct and analyze laboratory and special diagnostic tests and analyze their results.	x	x	x	Case study and situation analysis
DRN 4. Prepare and defend an internship report in accordance with the requirements	x	x	x	Presentation report internship report

CONTENT OF THE EDUCATIONAL COMPONENT (COURSE PROGRAM)

Topic. List of issues that will be considered within the scope of practical training in the discipline "Parasitology and Invasive Animal Diseases"	Distribution within the overall time budget						Recommended reading
	Classroom work				Independent work		
	Lecture		P.z/semi.z				
	daytime	correspondence	daytime	correspondence	daytime	correspondence	
Topic 1. Rules for the selection, packaging and shipment of material for parasitological studies. General scheme and procedure for parasitological studies. Methods of postmortem diagnosis of parasitic diseases of animals						6	Textbooks,manuals: 1,2,5,6; Methodological support: 3,4; Other sources:11,12
Topic 2.Helminth oviscopic and helminthoscopic research methods. Methods of quantitative and qualitative determination of helminths. Methods of research of environmental objects and intermediate and additional hosts of pathogens of invasive diseases.						6	Textbooks,manuals: 1,2,5,6; Methodological support: 3,4; Other sources:11,12

Topic 3. Helminthological research methods. Special research methods for helminthiasis of animals. Features of veterinary-sanitary examination for diseases of parasitic etiology. Features of preventive and therapeutic treatments of animals for helminthiasis						6	Textbooks, manuals: 1,2,5,6; Methodological support: 3,4; Other sources: 11,12
Topic 4. Features of diagnostics of diseases caused by arthropods. Methods of acarological research. Differential diagnostics of acaroses and entomoses of animals. Features of carrying out therapeutic and prophylactic treatments of animals for arachno-entomoses						6	Textbooks, manuals: 1,2,5,6; Methodological support: 3,4; Other sources: 11,12
Topic 5 Features of diagnostics of diseases caused by protozoa. Methods of research for various pathogens of diseases caused by protozoa. Differential diagnostics of animal protozoa. Features of carrying out therapeutic and prophylactic treatments of animals for protozoa						6	Textbooks, manuals: 1,2,5,6; Methodological support: 3,4; Other sources: 11,12
Total						30	

TEACHING AND LEARNING METHODS

DRN	Teaching methods(work that will be carried out by the teacher during classroom lessons, consultations)	Number hours	Teaching methods(what types of learning activities should the student perform <u>independently</u>)	Number of hours*
DRN 1.	Conducting safety briefings when using special devices, instruments, laboratory equipment and other technical means.	4	-	-
DRN 2	Conducting the selection, packaging, fixation and shipment of samples of biological material for laboratory research.	4	To select, package, and fix biological material for coproovoscopic and hemolarvoscopic acarological studies.	6
DRN 3..	Conducting laboratory and special diagnostic tests for helminthiasis, arachnoentomosis and protozoosis in animals, determining the extent and intensity of the invasion	4	Conduct coproovoscopic, hemolarvoscopic acarological studies and determine the extensiveness and intensity of the invasion	6
DRN 4.		-	Prepare and defend an internship report in accordance with the requirements	6

EVALUATION BY EDUCATIONAL COMPONENT

((SUMMATIVE ASSESSMENT))

No.	Summative assessment methods	Points/Weight in Overall Score	Date of compilation
1.	Preparation of documents for internship and instruction in occupational safety and health (internship diary)	10 points/10%	1st week
2.	Implementation of the internship program. Gathering material for writing a report on the internship in parasitology and invasive animal diseases.	30 points/30%	During the internship
3.	Writing and preparing an internship report. Requirements for the internship report: The student prepares a report based on the internship diary at the end of the internship period; The report summarizes the results of the work carried out in the discipline "Parasitology and Invasive Animal Diseases", obtained by the student in the process of completing the tasks of the educational practice with a full analysis of the results obtained and conclusions; In the conclusions, formulate your own opinion on the fundamental positive or negative facts of the organization of production processes in the livestock sector, which have a direct impact on the well-being of animals with regard to invasive diseases.	35 points/35%	4th week
4.	Presentations, answers and joint reports discussion	25 points/25%	4th week
	Total	100 points	

EVALUATION BY THE EDUCATIONAL COMPONENT (ASSESSMENT CRITERIA)

Component	Unsatisfactorily	Satisfactorily	Good	Perfectly
	0 points	1-7 points	7-9 points	10 points
Design documents for internship and briefing on occupational safety and health (internship diary)	The diary is missing and the presence of other control objects is not taken into account. An overall negative assessment is given for completing the internship.	Diary is drawn up in violation of the established requirements, does not contain the information provided for therein (in particular, regarding the content of the tasks performed).	The diary generally contains appropriate information, but is designed in violation of established requirements.	The diary is properly formatted and contains complete information about the intern's activities.
	0 points	1-15 points	16-26 points	27-30 points
Program execution practices.	The higher education applicant systematically violated the established deadlines for completing tasks. The requirements for the internship program have not been met.	The higher education applicant did not adhere to the internship schedule. Most of the requirements were met, but some points of the internship content were missing or not sufficiently disclosed.	The higher education applicant generally adhered to the internship schedule, but allowed deviations from the recommendations, while fulfilling all the requirements of the internship program.	The higher education applicant strictly adhered to the internship schedule. He conscientiously and on time fulfilled all the requirements of the internship program. He proposed his own solution to the assigned tasks, demonstrated activity, purposefulness, and creativity.
	0 points	1-15 points	16-29 points	30-35 points
Writing and editing an internship report	The report does not meet the established requirements for content, does not contain proper information about the content, form, and organization of activities carried out during the internship, and contains gross errors in content.	The internship program was completed satisfactorily, its results are reflected in the report, which contains certain inaccuracies or does not contain important information, or there are other significant comments regarding the content of the report.	The report generally covers the necessary information provided by the requirements, contains a high positive assessment of the manager, however, there are minor comments. From the content, it can be concluded that the internship program was completed in full and properly. in a way.	The report contains all the necessary information regarding the organization process and the results of the internship. The internship program was completed fully and properly.
	0 points	1-9 points	10-20 points	21-25 points
Report-presentation of the internship report	If there is a negative characteristic of the supervisor from the practice base or the supervisor from the department, a positive assessment of the practice is impossible. If the higher education applicant has not completed the practice program at least at one of the stages of the practice and received 0 points for the corresponding report, then the points received for other reports are not taken into account, and an overall negative assessment is given based on the results of the practice.	The higher education applicant does not provide satisfactory answers to the questions posed, is not familiar with the internship program or its individual parts, or makes gross errors that allow us to conclude that the internship program was not properly completed, indicating the lack of real results of the internship and the acquired practical skills and abilities.	The higher education applicant demonstrates appropriate knowledge, is mostly oriented towards the content of the submitted report and the internship program, however, there are some inaccuracies in the answers to the questions.	The higher education applicant demonstrates appropriate knowledge, is fluent in the content of the submitted report and the internship program as a whole, thereby confirming its completion; provides correct and reasoned answers to all questions from the internship program.

EVALUATION BY EDUCATIONAL COMPONENT (FORMATIVE ASSESSMENT)

No.	Elements of normative assessment	Date
1	Verbal feedback from practice managers and education seekers.	During the training internship in parasitology and invasive animal diseases
2	Review and discussion of the educational report by the supervisor and the student internship in parasitology and invasive animal diseasespractices.	After the end of the academic term internship in parasitology and invasive animal diseases
3	Oral feedback on the internship report.	After defending the internship report.

EVALUATION BY EDUCATIONAL COMPONENT (RATING SCALE (ESTS))

On a scale ECTS	On a 100-point scale	On a national scale	Definition*
AND	90-100	perfectly	perfectly – excellent performance with a small number of inaccuracies
B	82-89	good	very good – above average with a few minor errors
C	75-81		good – overall, the work was done correctly with a small number of errors
D	69-74	satisfactorily	satisfactorily – not bad, but with a significant number of shortcomings
E	60-68		enough – performance meets minimum criteria
FX	35-59	unsatisfactory with the possibility of reassembly	unsatisfactorily – you need to work before you get a positive assessment
F	0-34	unsatisfactory with mandatory retake	unsatisfactory –serious follow-up work with re-study of the course is needed

EDUCATIONAL RESOURCES (LITERATURE)

1. Manuals and textbooks

1. Kasyanenko I. O., Negreba Yu. V., Kasyanenko S. M. Helminthiasis of productive animals. Textbook. Sumy: SNAU 2025. –245 p. Approved by the Academic Council of Sumy National Agrarian University (Minutes No. 20 of May 26, 2025).
2. Risovany V.I., Nagorna L.V., Negreba Y.V., Panasenko O.S. Veterinary technologies for the prevention of parasitic diseases of animals. Textbook. Sumy. 2025. – 262p. Approved by the Academic Council of the Sumy National Agrarian University (protocol No. 20 dated May 26, 2025).

2. Methodological support

3. Kasyanenko O.I., Negreba Yu.V., Rysovany V.I., Mazur I.Ya. Laboratory diagnostics of animal parasitosis. Methodological guidelines for independent, individual work for students of 3,4,5 years of educational program 26 "Parasitology and invasive diseases of animals", full-time education, educational degree "master" 24s. Protocol No. 2 dated 11.11.2024.
4. Kasyanenko O.I., Negreba Yu.V., Rysovany V.I. Laboratory diagnostics of zoonotic diseases of productive animals. Methodological guidelines for independent, individual work for students of 3,4,5 courses of the educational program 211 "Veterinary Medicine" of the OPN "Veterinary Hygiene, Sanitation and Expertise", full-time study, educational degree "Master". 29 p. Protocol No. 2 dated 11.11.2024.

3. Basic

5. Galat V.F., A.V., Prus M.P., Soroka N.M. Parasitology and Invasive Animal Diseases: Textbook; ed. V.F. Galata K.: Higher Education, 2003.– 464 p.
6. Galat V.F., Berezovsky A.V., Prus M.P., Soroka N.M. Parasitology and invasive animal diseases. Practical course: Textbook. Kyiv: Higher Education, 2004. – 238 p.
7. Dakhno I.S., Galat V.F., Berezovsky A.V., Prus M.P., Soroka N.M. Atlas of Animal Helminths. Kyiv: Vetinform, – 2001. – 118 p.
8. Dakhno I.S., Dakhno Yu.I. Ecological helminthology: Textbook. Sumy: Kozatskyi val, 2010. – 220 p.
9. Prykhodko Yu.O., Ponomar S.L., Mazannyi O.V., Nikiforova O.V., Antipov A.A., Goncharenko V.P. Parasitology and invasive animal diseases Workshop (for independent work). Bila Tserkva.: OOO "Bila Tserkivdruk". 2011. 312p.

4. Additional sources

10. Verbytskyi P.I., Dostoevsky. P.I. Handbook of veterinary medicine. Kyiv.: Urozhay, 2004. 1280 p.
11. Galat V.F., Berezovsky A.V., Soroka N.M. Prus M.P. Invasive diseases of pigs: Educational. Kyiv: NAU, 2006. 94 p.
12. Galat V.F., Berezovsky A.V., Soroka N.M. Prus M.P. Invasive diseases of horses: A study guide Kyiv: NAU, 2008. 154 p.

13. Boch J., Supperer R. Veterinarne dizinische Parasitologic. Berlin und Hamburg.: Verlag Paul Parey, 2002. 906 p.

5. Other sources

14. .Evstafieva, V. O.; Kasyanenko, O. I.; Negreba, Y. V.; Kyrychko, B. P.; Levytska, V. A.; Gavryk, K. A. Ovocide efficacy of the disinfectant Germecide-VS against eggs of *Trichuris* spp. nematodes isolated from cattle. Scientific Messenger of Lviv National University of Veterinary Medicine & Biotechnologies Series: Veterinary Sciences, 2023, Vol 25, Issue 110, DOI 10.32718/nvlvet11018
15. . Kasyanenko, O. I.; Negreba, Yu. V.; Kasyanenko, O. I. Determination of the effectiveness of the veterinary drug "VORMIKIL paste" in helminthic invasion in carnivorous animals. Bulletin of Sumy National Agrarian University. Series "Veterinary Medicine", issue 1 (64), 2024, 30-36, DOI <https://doi.org/10.32782/bsnau.vet.2024.1.5>
16. .Panasenکو O.S.; Nazarenko S.M., Rysovany V.I., Negreba, Yu. V.; Ivashyna K.V. Prevalence of rabbit eymeriosis associations in the Sumy region and pathomorphological assessment. Bulletin of Sumy National Agrarian University. Series "Veterinary Medicine", issue 4 (67), 2024, 77-83. doi:<https://doi.org/10.32782/bsnau.vet.2024.4.11>
17. Monitoring of canine heartworm disease in Sumy region. Scientific and technical bulletin of the National Institute of Veterinary Medicine and Feed Additives. Lviv 23 (1). 98-104. doi: 10.36359/scivp.2022-23-1.14

6. Software

- Computers with software for practical work
- Microsoft PowerPoint – Data Visualization Microsoft Power BI – Data Analytics and Visualization
- Multimedia projector, flipchart and screen;
- Moodle distance learning and monitoring system

Review of the work program (syllabus) of the teaching practice
OK 28 Parasitology and invasive animal diseases

Developed by the teachers of the department: Vitaliy RYSOVANNYI
Julia NEGREB

Parameter by which the work program (syllabus) of the educational component is evaluated by the guarantor or a member of the project team	Yes	No	Comment
Learning outcomes by educational component (DRL) The NRC is responsible.			
Learning outcomes by educational component (DRL) They comply with the prescribed PRN (for mandatory OK).			
The learning outcomes for the educational component provide The ability to measure and evaluate their level of achievement.			

Member of the OP project team_____

(name)

(First Name Last Name)(signature)

Parameter by which the work program (syllabus) of the educational component is evaluated by the teacher of the relevant department	Yes	No	Comment
General information about the educational component is sufficient.			
Learning outcomes by educational component (LE) The NRC is responsible.			
Learning outcomes by educational component (LE) make it possible to measure and assess the level of their achievement.			
Results teaching (DRN) related to competencies students, not the content of the discipline (contain knowledge, skills, abilities, and not the topics of the discipline's curriculum).			
The content of the OC is formed in accordance with the structural and logical scheme.			
Learning activities (teaching and learning methods) enable students to achieve expected learning outcomes (ELOs).			
The educational component involves learning through research that is appropriate and sufficient for the appropriate level of higher education.			
The assessment strategy for the interdisciplinary component complies with the University/Faculty policy.			
The provided assessment methods allow assessing the degree of achievement of learning outcomes by educational component.			
Load students there are adequate the volume of the educational component.			
The recommended learning resources are sufficient to achieve the learning outcomes (LOEs).			
The literature is relevant.			
The list of learning resources contains the software products necessary to achieve the DRL.			

Reviewer (department lecturer)_____

