



MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
STATE BIOTECHNOLOGICAL UNIVERSITY

FACULTY OF VETERINARY MEDICINE
(name of educational and scientific institute/faculty)

APPROVED by
Head of the Internal diseases and
clinical diagnosis of animals

Department

O. V. MATSENKO
(signature) (surname and initials)

"20" June 2025 year

Department of "internal diseases and clinical diagnostics of animals"
(name of department)

WORKING PROGRAM
OF EDUCATIONAL DISCIPLINE

"VETERINARY DERMATOLOGY"
(code and name of academic discipline)

Level of higher education	<u>second</u> (name)
Field of study	<u>21 Veterinary medicine</u> (code and name)
Specialty	<u>211 Veterinary medicine</u> (code and name)
Educational program	<u>Veterinary medicine</u> (name)

1. Description of the academic discipline

Name of indicators	Characteristics of the academic discipline
	full-time education
Number of credits <u>3</u>	Discipline status
	optional
Parts - <u>2</u>	Year of education:
	<u>5-й</u>
Total numbers of hours <u>90</u>	Semester <u>7</u>
	Lectures
	<u>14 h</u>
	Practical, (seminar)
	<u>30 h</u>
	Self Work
	<u>46 h</u>
Hours for full-time education: classrooms - 44; independent work of the acquirer - 46.	Type of control:
	<i>differentiated test</i>

2. The aim and tasks of the discipline

The purpose of the discipline is to provide students with theoretical knowledge and practical skills in the methodology of clinical-laboratory data analysis, differential diagnosis, treatment, and prevention of skin diseases in animals.

The objectives of studying the discipline include acquainting students with the specifics of examining animals with skin diseases, establishing a diagnosis, carrying out treatment, mastering basic laboratory diagnostic methods in veterinary dermatology, and learning to interpret clinical and laboratory data.

The subject of the discipline is the essential theoretical knowledge and practical skills related to clinical and laboratory diagnostics of primary and secondary skin lesions, interpretation of results obtained, treatment of animals, and the development of preventive measures.

Prerequisite disciplines for successful mastering of the program include: *Histology, Physiology, Pathophysiology, Animal Biochemistry, Clinical Diagnostics of Animal Diseases, Internal Diseases of Animals*.

This academic discipline ensures the formation of the following program learning outcomes (according to the educational program for compulsory disciplines):

3. Program of educational discipline

Chapter I — Modern Diagnostics and Therapy of Skin Diseases in Animals

Topic 1 — Modern Diagnostics of Skin Diseases in Animals

Summary: Structure and basic functions of the skin in animals. Classification of skin diseases by etiology. Main diagnostic algorithms for dermatological conditions in animals. Biochemical and histopathomorphological markers of skin pathology. Diagnostic approach and clinical examination of animals with dermatological disorders. Special methods of skin examination and their interpretation. Clinical examination of companion animals with dermatologic conditions. Completing the “Dermatology History and Examination Sheet”. Rules for sampling materials for bacteriological, mycological, and cytological examinations, mastering diagnostic techniques, interpretation of laboratory results.

Recommended literature: [1–4, 6, 9]

Topic 2 — Dermatological Pharmacology

Summary: Study of pharmacological groups used in the treatment of dermatological diseases in animals: antimicrobial, antifungal, antiparasitic, anti-inflammatory, antipruritic, immunomodulatory agents, and topical preparations (ointments, sprays, shampoos, solutions). Overview of mechanisms of action, indications, contraindications, side effects, and principles of rational drug use in veterinary dermatology. Principles of dietary management in food allergy. General principles of differential diagnosis of pruritus and alopecia (decision-making algorithm).

Recommended literature: [1–4, 7–12]

Chapter II — Dermatology of Companion Animals and Horses

Topic 3 Diagnosis and Treatment of Bacterial, Fungal, and Parasitic Skin Diseases in Animals

Summary: Clinical signs, diagnostic methods, and therapeutic strategies for bacterial, fungal, and parasitic dermatoses in animals. Principles of sample collection, cytology, microscopy, bacteriology, and antimicrobial susceptibility testing. Screening for dermatophytes and ectoparasites. Review of modern antiparasitic, antimicrobial, and antifungal treatment protocols; systemic and topical approaches; relapse prevention and antimicrobial stewardship.

Recommended literature: [1, 2, 14]

Topic 4 Diagnosis and Treatment of Allergic Skin Diseases

Summary: Types of allergic dermatoses in animals (atopic dermatitis, food hypersensitivity, flea and ectoparasite allergies). Clinical signs, differential diagnosis, diagnostic algorithm (parasite elimination, elimination diet, allergy testing). Modern therapy methods: antipruritic treatment, immunotherapy, dietary strategies, parasite control, long-term management of chronic dermatology patients.

Recommended literature: [1–8]

Topic 5 — Nutritionally-Induced and Autoimmune Skin Diseases

Summary: Skin disorders caused by nutritional imbalances, deficiencies or excesses of nutrients, vitamins, and minerals, as well as autoimmune mechanisms. Clinical signs, diagnostics, and therapeutic principles for essential fatty acid deficiency, zinc deficiency, vitamin imbalances, and mineral metabolism disorders; autoimmune dermatoses (pemphigus complex, lupus, vasculitis). Emphasis on dietary therapy, early diagnosis, immunomodulatory treatment, and long-term monitoring.

Recommended literature: [3, 5, 8, 9]

Topic 6 — Endocrine, Congenital, and Hereditary Skin Diseases

Summary: Dermatological manifestations of endocrine disorders (hypothyroidism, hyperadrenocorticism, sex hormone disorders), congenital and hereditary dermatoses. Clinical signs, diagnostic algorithms, laboratory and instrument-based confirmation methods, long-term treatment strategies. Special emphasis on alopecia, hair follicle dysplasia, ichthyosis, and other genetic dermatoses.

Recommended literature: [8–10]

Topic 7 — Differential Diagnosis of Equine Skin Diseases. Autoimmune and Drug-Induced Dermatopathies in Horses

Summary: Major dermatological disorders in horses and differential diagnostic approaches. Clinical signs, diagnostic strategies, and treatment of autoimmune dermatoses (pemphigus foliaceus, systemic and discoid lupus erythematosus, vasculitis) and drug-induced dermatitis. Review of diagnostic methods (cytology, biopsy, immunologic tests), anti-inflammatory and immunomodulatory therapies, clinical management and prevention of complications.

Recommended literature: [13–15]

4. Structure of the academic discipline

Name of sections and topics	Number of hours					
	Full-time					Selfwork
	Total hours	auditoriums				
		Total	including			
lectures			laboratorium	practical		
1	2	3	4	5	6	7
<i>Chapter 1 Modern diagnosis and therapy of skin diseases in animals</i>						
Topic 1 - Modern diagnosis of skin diseases in animals	12	6	2		4	6

Topic 2 - Dermatological pharmacology	18	10	2		8	8
<i>Together by chapter</i>	30	16	4		12	14
<i>Chapter 2 Dermatology of small pets and horses</i>						
Topic 3 – Diagnosis and treatment of animals for bacterial, fungal, parasitic etiology	8	4	2		2	4
Topic 4– Diagnosis and treatment of allergic people skin diseases	10	4	2		2	6
Topic 5 - Alimony and conditions autoimmune skin diseases	10	6	2		4	4
Topic 6 Endocrine, congenital and hereditary skin disease	10	4	2		2	6
Topic 7- Differential diagnosis of skin diseases in horses Autoimmune and allergic skin diseases in horses reactions of the skin to the action of medicines	22	10	2		8	12
<i>Together by chapter II</i>	60	28	10		18	32
Total hours	90	44	14		30	46

5. Theoretical lessons (lectures)

No .	The name of the topic of the lesson	Hours
		d/f
<i>Chapter 1 Modern diagnosis and therapy of skin diseases in animals</i>		
1	Modern diagnosis of skin diseases in animals	2
2	Dermatological pharmacology	2
<i>Chapter 2 Dermatology of small pets and horses</i>		
3	Diagnosis and treatment of animals for bacterial, fungal, parasitic etiology	2
4	Diagnosis and treatment of allergic people skin diseases	2
5	Alimony and conditions autoimmune skin diseases	2
6	Endocrine, congenital and hereditary skin disease	2
7	Differential diagnosis of skin diseases in horses Autoimmune and allergic skin diseases in horses reactions of the skin to the action of medicines	2

Total	10
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6. Practical classes (if provided)

No.	The name of the topic of the lesson	Hours
		d/f
Chapter 1 Modern diagnosis and therapy of skin diseases in animals		
1	Procedure for examining animals for skin diseases. Special methods of diagnostic examination of the skin and their analysis.	4
2	Bacteriological, mycological and cytological studies in dermatology	2
3	Features of pharmacotherapy for skin lesions. Dietary nutrition in dermatology.	2
4	Diagnostic studies of animals for pruritus and alopecia	2
5	Skin diseases in animal.	2
6	Modern diagnosis and therapy of animals for skin diseases in animals; solving situational problems	2
Chapter 2 Dermatology of small pets and horses		
7	Diagnosis and treatment of animals for skin diseases bacterial, fungal, parasitic etiology	2
8	Diagnosis and treatment of allergic skin diseases	2
9	Food-related skin diseases	2
10	Autoimmune skin diseases.	2
11	Endocrine, congenital and hereditary skin diseases (diagnosis, symptoms and treatment)	2
12	Diagnosis and treatment of horses for inflammatory skin lesions	2
13	Differential diagnosis of allergic skin diseases in horses (atopy, photosensitization).	2
14-15	Dermatology of small pets and horses: solving situational problems	4
	Total	30

7. Self-study work

№	Name of the subject of the lesson	Number of hours
		d/f
1	General principles of differential diagnosis of itching.	6
2	Algorithm for differential diagnosis of alopecia	8
3	Psychogenic skin diseases and skin diseases caused by the environment: diagnosis of acrodermatitis, biting and licking of paws, primary contact dermatitis, photodermatoses. General typical symptoms of hormonal disorders of the skin., hypoandrogenism in males, hyposomatotropism).	12

4	Diagnosis and treatment of immune-related diseases in dogs: medicinal rash, erythema multiforme.	8
5	Urticaria (hives) in horses, equine papillomatosis: diagnosis and treatment.	12
	Together	46

8. Methods teaching

1. Lectures occupation.
2. Practical occupation.
3. Laboratory occupation.
4. Independent occupation.

9. Control methods

- ❖ oral survey;
- ❖ test control;
- ❖ test;

During the current and final control, standardized computer tests are used as a means of assessing the results of learning in the discipline.

The final semester control (credit) is determined by the sum of the actually scored rating points from the current control and the individual educational and research task.

Current control is carried out during the semester by means of surveys (oral or test), as well as checking the quality of mastering the topics of independent work.

When selecting the criteria for assessing the student's mastery of the discipline program, the program implementation and mastery of the material in terms of lecture and laboratory classes, as well as the performance of independent work provided for by the program, were taken into account.

All types of control (oral survey, written survey, test survey) are closely related and are organized in such a way as to stimulate effective independent work of applicants and ensure an objective assessment of the level of their knowledge.

After completing the study of the discipline (part of the discipline), the final control is carried out in the form of an exam (test) and the applicant can score from 60 to 100 points inclusive during the semester at the control points.

10. Distribution of points received by applicants

In the process of studying the course, the success of applicants is determined by conducting current and final controls (credit and exam).

Current testing, answers in class and control of independent work		Total score
Part 1	Part 2	60-100
T 1-2	T 3-7	
0-100	0-100	

$T_{_}, T_{_} \dots T_{_}$ – topics of the sections.

The grade received by a higher education applicant for conducting an ongoing (current) control (Oc) consists of the points that the applicant receives during testing (Tc), which are 30%; the points that the applicant receives during activity in classes (Ca), which are 40% and the points for mastering the independent work block (S), which are 30%.

$$Ts = Oc \times 0.3 + Tc \times 0.4 + Ca \times 0.3$$

In each section of the educational component, a current control is carried out (current control - Cc).

For applicants in the fall (spring) semester, when the final knowledge control is completed with an undifferentiated credit (NC), the final sum of points (Tc Points) is the arithmetic average of the points of four current controls of the fall (spring) semester:

$$NC \text{ Points} = (PC1 + PC2) / 2$$

According to the results of the semester control, the applicant is given a grade of "passed/not passed" on the national scale in the applicant's transcript.

11. Distribution of points received by applicants

Ongoing testing and independent work		Total score	
Part 1	Part 2	Total score of parts (P)	Exam (E)
T__1-2	T__3-7	((T1+T7.) /n) x 60 %	E x 40 %
0-100	0-100		
Total reiting score (TRS = Ot+E)		60-100	

$T_1, T_2 \dots$ - topics of sections,
 n - number of topics.

The grade that a higher education applicant receives for conducting an intermediate (current) control (CurC) consists of the points that the applicant receives during testing (T), which are 30%; the points that the applicant receives during activity in classes (Cl), which are 40%; and the points for mastering the independent work block (InW), which are 30%.

$$CurC = T \times 0.3 + Cl \times 0.4 + InW \times 0.3$$

In each section of the educational component, current control is carried out (**current control** - CurC).

For applicants in the fall (spring) semester, when the final knowledge test is completed with an undifferentiated credit (UDC), the final sum of points (UDC points) is the arithmetic average of the points of the four current tests of the fall (spring) semester:

$$UDC \text{ points} = (CurC \ 1 + CurC \ 2 + CurC \ 3 + \dots CurC \ 7) / 7$$

Based on the results of the semester control, the applicant's transcript is assigned a

"pass/fail" grade on the national scale.

The final control of the academic performance of applicants is carried out in the form of an exam based on the results of computer testing. The exam grade for the educational component (discipline) is determined on a 100-point scale.

The exam grade (EG) is 40% of the total final grade (FG).

$$EG = ETS \times 0,4$$

where: ES – exam score; ETS– exam testing scores, which account for 40% of the points scored during exam testing.

The final grade for the discipline is given on a 100-point scale. It is calculated as the average arithmetic value (AAV) of all the grades received by the student from the current control (CurC) of the assimilation of the material of the sections, with their subsequent conversion into points according to the following formula:

$$AAV = (\text{CurC chapter1})$$

$$\text{CurCS} = AAV \times 0,6$$

where: CurCS – current control scores, which make up 60% of the total final score; AAV is the arithmetic average value of all grades received by the student from the current control

The applicant can score up to 60 points inclusive at the control points of the mastery of the sections within 2 semesters.

Thus, the final grade (FG) is calculated using the formula:

$$FG = EG + \text{CurCS}$$

The results of the tests are displayed in the DBTU Moodle system. All forms of control are included in the 100-point assessment scale.

12. Scale: national and ECTS and criteria for assessment to determine the level of knowledge and skills

The control of students' knowledge and skills in the discipline is carried out in accordance with the use of the European system of transfer and accumulation of ECTS credits.

Basic provisions:

The total number of current control measures that a student must pass in the discipline is determined taking into account the number of credits in the discipline.

Based on the results of the current control measure, the student's level of assimilation of the educational material is assessed according to the national scale and the ECTS scale.

The number of points received by the student in the assessment of the final

control is correlated with the marks on the national scale and the ECTS scale in accordance with Table 1.

Table 1.

Rating scale

100-point scale	National scale	interpretation	ECTS scale
90 – 100	excellent	Excellent - excellent answer, the work is fulfilled with only a small number of errors	A
82 – 89	good	Very well - above average with a few errors	B
74 – 81		Well - in general the correct answer, the work with a certain number of serious errors	C
64 – 73	satisfactory	Satisfactorily – not bad, but with big number of errors	D
60 – 63		Quite satisfactorily – the work meets the minimum criteria	E
35– 59	unsatisfactory	Unsatisfactorily – with the possibility to pass again	FX
0-34		Unsatisfactorily – with compulsory passing of the work once again	F

Passing current tests is mandatory. A section is considered passed if the student has scored the minimum required number of points or more.

The results of the rating for the section are brought to the attention of students no later than the third working day after the control event and, in the absence of claims from the students, are considered final.

If the student does not agree with the decision to assign him rating points for the section, then he must immediately after their announcement file a written appeal to the head of the department and, within the specified period, take an oral attestation for the section before the commission. The composition of the appeal commission in each specific case is determined by the head of the department. The decision of the commission is final.

A student who did not appear for the current test has the right to take the missed current test during the assessment week.

The final rating of current performance in the discipline is calculated by averaging the ratings from all sections. The semester grade is given to the student taking into account the results of the final and current tests. The maximum number of points that a student can receive when studying a discipline is 100.

The exam involves a final test. If permission is granted for automatic exam enrollment, a student who has passed all current tests on time and has been certified with an "excellent" grade based on their results can receive a credit automatically. The semester grade in this case is the average grade for the sections.

The teacher is required to submit the completed credit and examination report to the academic department within the following deadline: for the exam - no later than the next business day after its completion.

The mastery of the independent work block is assessed on a scale according to the

following regulations (Table 2)

Table 2.

Assessment criteria (100-point system, oral interview).

The level of formation of a student's knowledge and skills in the academic discipline, both during the final and current control, is assessed on a 100-point scale with subsequent conversion of grades into the national scale and the ECTS grading scale.

№	Criteria	Maximum number of points	Description
1	Completeness of the answer	30 points	The answer covers all the main aspects of the question, reveals its content in accordance with the curriculum.
2	Correctness and accuracy of presentation	20 points	The answer does not contain factual, logical or terminological errors.
3	Consistency and logic	10 points	The answer is logically structured, without inconsistent or chaotic fragments.
4	Language and style of presentation	10 points	The expression is competent, clear, using professional terminology.
5	Independent thinking	10 points	The student demonstrates the ability to draw his own conclusions, analyze, compare, give examples.
6	Additional knowledge (outside the main program)	10 points	The answer contains references to modern sources, interdisciplinary connections, and the latest data.
7	Ability to answer additional questions	10 points	The student confidently responds to the teacher's clarifying or in-depth questions, provides additional arguments or examples.

The conversion of grades on a 100-point scale to the national scale and ECTS scale is carried out according to the table:

Total points for all types of learning activities	Mark according to ECTS scale	Mark according to national scale
90 – 100	A	excellent
82 – 89	B	good
74 – 81	C	
64 – 73	D	
60 – 63	E	satisfactory
35 – 59	FX	
0 – 34	F	

Activity in classes is assessed on a scale with a maximum of 100 points in accordance with the following regulations (Table 3)

Table 3.

ACTIVITY ASSESSMENT SCALE IN CLASSES

ECTS	National scale	Points	Score interpretation
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scale			
A	Excellent	90-100	the student works actively during classes, provides complete answers to the teacher's questions and shows a deep mastery of the material, is able to express his own opinion when discussing situational tasks, demonstrates the ability to independently and reasonably present the material, analyze phenomena and facts, make independent generalizations and conclusions, correctly completes educational tasks, has a full synopsis of theoretical material, regularly visits the Moodle system
B	Very well	82-89	the student works actively during the lessons, the questions are covered in full, the presentation of the material is logical, substantiated by facts, with references to literary sources, the coverage of the questions is completed with conclusions, the student has shown the ability to analyze facts and events, as well as to complete educational tasks. However, there are inaccuracies in the answers, some minor errors, the presence of a full summary of the theoretical material, regular visits to the Moodle system
C	Well	74-81	the student works actively during the lessons, the questions are covered in full, the presentation of the material is logical, substantiated by facts, with references to literary sources, the coverage of the questions is completed with conclusions, the student has shown the ability to analyze facts and events, as well as to complete educational tasks. However, there are inaccuracies in the answers, some minor errors, there is insufficient reasoning when presenting the material, there is an incomplete synopsis of the theoretical material, partial access to the Moodle system
D	Satisfactorily	64-73	The student has generally mastered the essence of the issues on the topic, demonstrates knowledge of the lecture material and educational literature, tries to analyze facts and events, draw conclusions and solve situational problems. However, in class he behaves passively, responds only to the teacher's call, gives incomplete answers to questions, makes gross mistakes when covering theoretical material, incomplete notes on theoretical material, partial access to the Moodle system
E	Quite	60-63	the student lacks understanding of the main essence

	satisfactorily		of the questions, conclusions, generalizations, demonstrated inability to solve situational problems, incomplete note-taking of theoretical material, partial access to the Moodle system
FX, F	Unsatisfactorily	0-59	lack of desire to participate in the discussion of issues, lack of notes, irregular visit to the Moodle system

Example: a student wrote the test tasks of the current control for 85 points. Multiply by 0.3. The result for the tests is 25.5 points. For independent work, the student received 88 points. Multiply by 0.3. The result for it is 26.4 points. For activity in classes - the student received 74 points. Multiply by 0.4. We get 29.6. In total, the number of points for the current control is 81.5 points. We average towards a larger number and get 82 points, which is equal to good B.

Regarding the final certification of the student, the result obtained for the student's current work (average value for 4 sections, multiplied by 0.6) and the final test work (multiplied by 0.4) is taken into account.

Example: Chapter I – 83 points, Chapter II – 95 points. The sum of the points for the sections is $178 / 2 = 89.0$ points – this is the average value. Next, $89.0 \times 0.6 = 53.4$ points. The student wrote the final exam with 91 points. $91 \times 0.4 = 36.4$ points. Therefore, the total number of points for the discipline is $53.4 + 36.4 = 89.8$. We average towards a larger number and get 90 points, which is equal to a good or A grade.

13. Methodical software

1. Workbook for laboratory classes in the discipline "Veterinary Dermatology", Module I / Matsenko O. V.– Kh., 2021. - 47 p.
2. Workbook for laboratory classes in the discipline "Veterinary Dermatology",
3. Module II / Matsenko O. V.– Kh., 2021.- 47 p.

14. Recommended literature

Main literature:

1. Bellwood B., Andrasik-Catton M. Veterinary Technician's Handbook of Laboratory Procedures. – 2014. – 171 p.
2. Cafarchia, C., Figueredo, LA, & Otranto, D. (2013). Fungal diseases of horses. Veterinary microbiology, , 167 (1-2), 215-234.
3. Canine and Feline Dermatology Atlas
4. Coyner, K. S. (Ed.). (2019). Clinical atlas of canine and feline dermatology. John Wiley & Sons.
5. Ettinger, S. J., Feldman, E. C., & Cote, E. (Eds.). (2024). Textbook of Veterinary Internal Medicine-Inkling E-Book: Ettinger's Textbook of Veterinary Internal Medicine-eBook. Elsevier health sciences.
6. Hnilica, K. A., & Patterson, A. P. (2016). Small Animal Dermatology-E-Book: A Color Atlas and Therapeutic Guide. Elsevier Health Sciences.
7. Kerr M.G. Veterinary Laboratory Medicine, second edition. – Blackwell Science, 2002. – 368 p.

8. Kobluk, C. N., Ames, T. R., & Geor, R. J. (Eds.). (1995). *The horse: diseases and clinical management. Volume 1* (pp. xv+-735).
9. Morris, D. O., & Kennis, R. A. (2013). Clinical dermatology, an issue of veterinary clinics: small animal practice (Vol. 43, No. 1). Elsevier Health Sciences.
10. Scott, D. W. (2018). Color atlas of farm animal dermatology. John Wiley & Sons.
11. Scott, D. W., & Miller, W. H. (2010). Equine dermatology-E-book. Elsevier Health Sciences.
12. Гот, GM (2020). Atlas of dermatology of dogs and cats. Grupo Asís Biomedica SL.

Additional literature:

1. Animal Endocrinology and Medicine Research https://www.mdpi.com/journal/animals/special_issues/Animal_Endocrinology_and_Medicine_Research?utm_source=chatgpt.com
2. Bellwood B., Andrasik-Catton M. Veterinary Technician's Handbook of Laboratory Procedures. – 2014. – 171 p.
3. Bourguignon, E., Guimarães, L. D., Ferreira, T. S., & Favarato, E. S. (2013). Dermatology in dogs and cats. Insights from Veterinary Medicine, 1, 3-34.
4. Clinical Endocrinology of Companion Animals https://download.e-bookshelf.de/download/0000/7124/54/L-G-0000712454-0002365992.pdf?utm_source=chatgpt.com
5. Color Atlas of Farm Animal Dermatology. Danny W. Scott. John Wiley and Sons LTD, 2018. 254 p. <https://www.wiley.com/en-us/Color+Atlas+of+Farm+Animal+Dermatology%2C+2nd+Edition-p-9781119250579>
6. Coyner, K. S. (Ed.). (2019). Clinical atlas of canine and feline dermatology. John Wiley & Sons.
7. Goth, G. M. (2020). Canine and Feline Dermatology Atlas. Grupo Asís Biomedica SL.
8. Heinrich, N. A., Eisenschenk, M., Harvey, R. G., & Nuttall, T. (2018). Skin diseases of the dog and cat. CRC Press.
9. Hnilica, K. A., & Patterson, A. P. (2016). Small Animal Dermatology-E-Book: A Color Atlas and Therapeutic Guide. Elsevier Health Sciences.
10. Kaneko J., Harvey J., Bruss M. Clinical Biochemistry of Domestic Animals, 6th Edition. – Academic Press, 2008. – 928 p.
11. Kerr M.G. Veterinary Laboratory Medicine, second edition. – Blackwell Science, 2002. – 368 p.
12. Scott, D. W. (2018). Color atlas of farm animal dermatology. John Wiley & Sons.
13. Yager, J. A. (2007). Small Animal Dermatology: A Color Atlas and Therapeutic Guide. The Canadian Veterinary Journal, 48(12), 1287.

15. Electronic informational resource (Link)

To prepare for classes with the aim of more fully mastering the discipline, students can use the following electronic sites:

1. Management of Allergic Skin Diseases in Dogs and Cats Guidelines https://www.aaha.org/wp-content/uploads/globalassets/02-guidelines/2023-aaha-management-of-allergic-skin-diseases-in-dogs-and-cats-guidelines/resources/2023-aaha-management-of-allergic-skin-diseases-guidelines.pdf?utm_source=chatgpt.com
2. Diagnostics and Therapy in Veterinary Dermatology https://www.edu-veterinar.ro/files/download/prezentari/ghiduri-practice/9781119278368.pdf?utm_source=chatgpt.com

16. Changes and additions
(to methodological support and recommended literature)

What is removed from the work program	What is entered in the work program	Date of consideration by the department