NATIONAL UNIVERSITY OF LIFE AND ENVIRONMENTAL SCIENCES OF UKRAINE

Department of Internal Animal Diseases

"CONFIRMED"
Faculty of veterinary medicine
"____" _____ 2026

CURRICULUM
OF EDUCATIONAL PRACTICE ACADEMIC DISCIPLINE
«INTERNAL DISEASES OF ANIMALS»

Field of knowledge 21 «Veterinaria»

Specialty 211 – «Veterinary medicine»
Academic programme Veterinary medicine
Faculty of Veterinary Medicine

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Kyiv – 2026

Introduction

This syllabus has been developed for the clinical practicum in the course "Internal Diseases of Animals" for full-time Master's students (6-year program) in the Faculty of Veterinary Medicine at the National University of Life and Environmental Sciences of Ukraine. Internal Diseases of Animals is one of the core clinical disciplines in which students study the causes, mechanisms of development, course, methods of diagnosis, treatment, and prevention of non-infectious diseases of internal organs. This discipline helps students not only acquire knowledge of the most common and widespread internal diseases but also develop clinical reasoning. The methods and techniques used in the study of internal diseases of animals are also widely applied in the study of related specialized disciplines: *surgery, epizootology, and parasitology*.

1. Aim and assignment of practice

Aim: Consolidation of theoretical knowledge by students and the acquisition of practical skills in diagnosing, treating, and preventing internal diseases in animals.

Competences acquired:

Integral competence (IC):

- IC 1 Ability to solve complex tasks and problems in the field of veterinary medicine, which involves conducting research and/or implementing innovations and is characterized by the uncertainty of conditions and requirements.

General competence (GC):

- GC 1. Ability to abstract thinking, analysis and synthesis.
- GC 2. Ability to apply knowledge in practical situations.
- GC 3. Knowledge and understanding of the subject field and profession.
- GC 7. Ability to conduct research at the appropriate level.
- GC 8. Ability to learn and master modern knowledge.
- GC 9. Ability to make informed decisions.
- GC 11. Ability to evaluate and ensure the quality of performed works.
- GC 13. Ability to make decisions and take action while adhering to the principle that corruption and any other forms of misconduct are unacceptable.

Special (professional) competence (SC):

- SC 1. The ability to establish the features of the structure and functioning of cells, tissues, organs, their systems and body apparatuses of animals of various classes and species - mammals, birds, insects (bees), fish and other vertebrates.
- SC 2. The ability to use tools, special devices, devices, laboratory equipment and other technical means to carry out the necessary manipulations during the performance of professional activities.
- SC 3. Ability to follow the rules of labor protection, asepsis and antiseptics during professional activities.

- SC 4. The ability to conduct clinical research for the purpose of formulating conclusions about the condition of animals or establishing a diagnosis.
- SC 6. Ability to select, pack, fix and send samples of biological material for laboratory research.
- SC 7. Ability to organize, conduct and analyze laboratory and special diagnostic studies.
- SC 8. Ability to use specialized software tools to perform professional tasks.

Expected Learning outcomes (ELO):

ELO 3. Collect anamnestic data during registration and examination of animals, make decisions regarding the choice of effective methods of diagnosis, treatment and prevention of animal diseases.

ELO 4. Collect anamnestic data during the registration and examination of animals; make decisions regarding the selection of effective methods for the diagnosis, treatment, and prevention of animal diseases.

ELO 7. Formulate conclusions regarding the effectiveness of selected methods and means of animal husbandry, feeding, and treatment; the prevention of infectious and non-infectious diseases; as well as production and technological processes at enterprises engaged in the husbandry, breeding, or exploitation of animals of various classes and species.

ELO 20. Be proficient in specialized software tools for performing professional tasks.

First day conpetences

1. Act in a way that shows understanding of the ethical and legal framework within which veterinarians should work, including professional-, animal welfare-, client-, public health-, societal- and environmental -related aspect.

4. Promote, monitor and contribute to maintaining health and safety of oneself, patients, clients, colleagues and the environment in the veterinary setting; demonstrate knowledge about the principles of quality assurance; apply principles of risk management in practice.

7. Prepare accurate clinical and client records, and case reports when necessary, in a form satisfactory to the relevant audiences.

8. Work effectively as a member of a multi-disciplinary team in the delivery of services and recognise the contribution of all team members.

9. Be able to review and evaluate literature and presentations critically.

10. Understand and apply principles of One Health to ensure veterinary Good Clinical Practice, and research-based and evidence-based veterinary medicine.

11. Demonstrate ability to critically analyse evidence, cope with incomplete information, deal with contingencies, and adapt knowledge and skills to varied scenarios and contexts.

16. Obtain an accurate and relevant history of the individual animal or animal group, and its/their husbandry and environment.

19. Develop appropriate treatment plans and administer treatment in the interests of the animals under their care with regard to the resources available and to appropriate public health and environmental considerations.

20. Attend in an emergency and perform first aid in common animal species. Prioritise situational urgency and allocate resources accordingly.

24. Use basic diagnostic equipment and carry out an examination effectively as appropriate to the case, in accordance with good health and safety practice and current regulations. Understand the contribution of digital tools and artificial intelligence in veterinary medicine.

27.Prescribe and dispense medicines correctly and responsibly in accordance with legislation and latest guidance.

28. Advise on and implement preventive and eradication programmes appropriate to the disease and species, in line with accepted animal health, animal welfare, public health and environmental health standards.

2. Base of Educational Practice

Educational Practice for the course “Internal Diseases of Animals” is conducted under the supervision of faculty members from the Department of Therapy and Clinical Diagnostics at the educational and research farms of the National University of Life and Environmental Sciences of Ukraine (Velykosnitynske, Agronomic Research Station, Vorzel), at the hippodrome, the “Pushcha-Vodytsia” agricultural enterprise, in the training laboratories of the Department of Internal Animal Diseases and the Department of Equine Science, and at farms of various forms of ownership, provided they are capable of ensuring the practical training conditions specified in this program.

3. Organization of the Internship

The internship for the course “Internal Diseases of Animals” is aligned with the curriculum of the higher education institution and is conducted in accordance with the Regulations on Student Internships at Higher Education Institutions of Ukraine, which provide for the training of junior veterinary physicians in practical , organizational and managerial, therapeutic and preventive, and research activities aimed at preventing and treating animal diseases, protecting the population from diseases common to humans and animals, and producing high-quality livestock products and raw materials from a veterinary and sanitary standpoint.

The internship is organized by faculty members of the department (two instructors per group). The primary form of student work organization is in teams. Depending on production capacity, student teams of 3–7 members are formed, and team leaders are selected from among the most qualified students. Before the start of the practicum, the instructor conducts a general safety briefing for the group of students on safety procedures for examining and assisting animals, and assigns daily tasks to the group. During the practicum, the instructor advises students and team leaders, who in turn advise team members. Through the team leaders, the instructor monitors the completion of practicum tasks. The training practicum program is carried out through

direct participation in production processes, as well as the study of accounting and reporting documentation and other documents.

4. Internship Content

The internship content focused on students acquiring skills in animal handling and restraint techniques, which are essential for conducting diagnostic procedures as well as therapeutic and preventive measures

APPROXIMATE THEAMTIC PLAN OF THE INTERNSHIP

Topic No	Topic Title	Total Hours	Including Classroom
1	Preliminary information about sick animals	2	2
2	Complete clinical examination of control groups of animals	6	6
3	Continuation of clinical examination of control groups of animals	4	4
4	Collection of blood samples for morphological and biochemical studies from animals in the control groups.	4	4
5	Practicing certain therapeutic techniques (metal detection of the forestomachs in ruminants, gastric lavage in monogastric animals, novocaine block techniques, autohemotherapy, parenteral methods of drug administration, etc.).	4	4
6	Conducting morphological and biochemical analyses of blood samples from animals in the control groups.	3	3
_	Preparation of a veterinary examination report, including recommendations for the treatment and prevention of internal diseases in animals.	2	2
Total		**25**	**25**

4.1. Individual Training Sessions

During the clinical rotation, the student is required to:

– participate in the health screening of the farm;
– study the clinical presentation of diseases on the farm;
– study the farm's experience in treating animals;
– provide care for a sick animal;
– write a medical record, the number of which corresponds to the serial number in the farm's sick animal registry;
– at the end of the internship, prepare a report in the form of an information sheet analyzing all work performed by the student (a sample is provided at the end of the work program);
– submit the information sheet, as well as submit and defend the medical record.

– complete individual research assignments on topics related to the department's research areas.

4.2 Methodological Guidelines

To assist with the preparation of the dairy for the academic internship in the discipline "Internal Diseases of Animals" where they must record the results of their own examinations and research performed on animals.

Topic Title	Location of classes	Number of Hours
Educational practice in the discipline "Internal Diseases of Animals" (the topics are refrected in the tentative thematic practice plan)	Veterinary clinics "ZOOLUX", "ALDENVET", "Velykosnitynske" named after O.V. Muzychenko, "Agronomic Research Station"	25

4.3. Material and Technical Support

While completing their clinical practicum assignments, students make use of the material and technical resources of the department and the practicum site.

4.4. Teaching and Learning Resources

During completing individual assignments, students may use the following teaching and learning materials provided by the department.

1. Рання діагностика, терапія і профілактика патології обміну речовин у великої рогатої худоби / В. Ю. Чумаченко та ін. Київ : 1999. 18 с.
2. Ендоскопія органів системи травлення у свійських тварин. Цвіліховський М.І., Якимчук О.М., Костенко В.М., Грушанська Н.Г., Омельчун С.І. К., «ЦП «Компринт», 2020. 19 с.
3. Зміни показників крові тварин за патології. Цвіліховський М.І., Якимчук О.М., Маринюк М.О., Якимчук І.М. К., «ЦП «Компринт», 2022. 49 с.
4. Методичні вказівки до практичних занять "Мікроскопічні дослідження осадів сечі сільськогосподарських тварин" (для студентів вищих навчальних закладів аграрного профілю) / М. І. Цвіліховський та ін. Київ: ВЦ НАУ, 2000. 37 с.
5. Діагностика пороків серця : методичні вказівки / М. І. Цвіліховський та ін. Київ : Вид. центр НАУ, 2004. 36 с.
6. Диференціальна діагностика, лікування та профілактика хвороб органів дихання у тварин : методичні вказівки / М. І Цвіліховський, О.І. Павленко, В.Я. Колесник, С.П. Долецький. Київ : Вид. центр НАУ, 2005. 54 с.
7. Методологічна оцінка клінічних та імунологічних досліджень у діагностиці, лікуванні і профілактиці хвороб імунної системи : методичні вказівки / М. І. Цвіліховський та ін. Київ : Вид. центр НАУ, 2005. 34 с.
8. Ендоскопія шлунково-кишкового такту у собак і котів : методичні вказівки / М. І. Цвіліховський та ін. Київ : Вид. центр НАУ, 2005. 20 с.
9. Методологічна оцінка клінічних і гематологічних показників в діагностиці, лікуванні та профілактиці анемій у тварин : методичні вказівки / М. І. Цвіліховський та ін. Київ : Вид. центр НАУ, 2005. 38 с.

10. Special Animal Examination : методичні вказівки / M. I.Tsvilikhovsiy and other. Київ : Вид. центр НАУ, 2006. 38 с.

5. Forms and Methods of Supervision

Supervision of the practicum is carried out by faculty members of the department (two instructors per group). The primary form of student work organization is in teams. Depending on operational capabilities, student teams of 3–7 members are formed, and team leaders are selected from among the most qualified students. Before the start of the practicum, the instructor conducts a general safety briefing for the group of students regarding the examination and care of animals, and assigns daily tasks to the group. During the practicum, the instructor advises students and team leaders, who in turn advise team members. Through the team leaders, the instructor monitors the completion of practicum tasks.

- Upon completion of the practicum, the instructor receives reports from all teams.
- Veterinary medicine specialists from the farm also participate in the organization and supervision of the practicum.
- Students are provided with the necessary instructional materials.
- Students complete individual research assignments on topics related to the department's research areas.

6. Report Requirements

Upon completion of the practicum according to the schedule, students submit to instructors an informational report on the completion of tasks received during the practicum and a completed medical record for the animals.

7. Summary of the internship

The summary of the internship is conducted in accordance with the academic schedule, as per the order of the Dean's Office of the Faculty of Veterinary Medicine at the National University of Life and Environmental Sciences of Ukraine

Information Sheet

on the completion of assignments during the clinical practicum for the course "Internal Animal Diseases"
by a Master's student ____ year _____ group
of the Faculty of Veterinary Medicine, National University of Life and Environmental Sciences of Ukraine

_____

Place of practice _____

Practice period_____

Practice results

№ п/п	Title of work	Quantity
1	**Completed the following tasks**	
	a)	
	b)	
	c)	
	etc.	
2	**Acquired skills**	
	a)	
	b)	
	c)	
	etc.	
3	Conducted research on the topic:	
	1	

Practice evaluation _____
Practice supervisor _____