



COURSE SYLLABUS

«Clinical diagnosis of animal diseases»

Degree of higher education - Master's degree

Specialization 211 - "Veterinary medicine"

Educational programme «Veterinary medicine»

Academic year 3, semester 5,6

Form of study _ Full-time form of study _____ (full-time, part-time)

Number of ECTS credits 7

Language of instruction _ English _____ (Ukrainian, English, German)

Lecturer of the course
Contact information of the
lecturer (e-mail)
Course page on eLearn

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<https://elearn.nubip.edu.ua/course/view.php?id=5306>

<https://elearn.nubip.edu.ua/course/view.php?id=5307>

COURSE DESCRIPTION

(up to 1000 printed characters)

Clinical examination is a fundamental part of the process of veterinary diagnosis. The purpose of this course is to assist clinicians in performing a detailed clinical examination of the individual animal and to increase the awareness of more advanced techniques used in further investigations. The structure and content of the course should assist veterinary students in their understanding of animal clinical examination and circulatory system investigation. The course focuses on preparing students for education as research methods of the respiratory, digestive, urinary and nervous systems of the animal body and the blood system.

Competencies of the educational programme:

Integrative competency (IC):

- basic clinical, modern laboratory and instrumental methods of animal research;
- animal research protocols;
- clinical terminology;
- regulatory clinical indicators and their changes due to pathologies;

be able:

- independently conduct a clinical study of animals;
- analyze the obtained results of clinical observations, instrumental and laboratory studies;
- reflect, logically argue the definition of differential and final diagnosis for infectious and non-infectious diseases of a sick animal;
- communicate with clients, colleagues and support staff on professional issues, both in writing and orally;
- correctly draw up clinical documentation in accordance with the sequence according to the animal research protocol.

General competencies (GC):

- ZK 1. Ability to abstract thinking, analysis and synthesis.
- ZK 2. Ability to apply knowledge in practical situations.
- ZK 3. Knowledge and understanding of the subject field and profession.
- ZK 7. Ability to conduct research at the appropriate level.
- ZK 8. Ability to learn and master modern knowledge.
- ZK 9. Ability to make informed decisions.
- ZK 11. Ability to evaluate and ensure the quality of performed works.

Professional (special) competencies (PC):

- FC 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.
- FC 3. Ability to follow the rules of labor protection, asepsis and antiseptics during professional activity.
- FC 4. The ability to conduct clinical research with the aim of formulating conclusions about the condition of animals or establishing a diagnosis.
- FC 6. Ability to select, pack, fix and send samples of biological material for laboratory research.
- FC 7. Ability to organize, conduct and analyze laboratory and special diagnostic studies.
- FC 8. Ability to plan, organize and implement measures for the treatment of animals suffering from non-contagious, infectious and invasive diseases.
- FC 13. Ability to develop strategies for the prevention of diseases of various etiologies.

Program learning outcomes (PLO) of the educational programme:

In the process of studying the discipline "Clinical diagnosis of animal diseases", applicants of higher education must:

- master the techniques of handling animals, methods of their fixation and taming;
- master the methods of clinical research of animals, including physical, instrumental and laboratory methods;
- master the protocols and sequence of clinical examination of animal organs and systems;
- acquire certain skills and clinical competences during the establishment, study and determination of the main symptoms of internal diseases of animals of infectious and non-infectious etiology;
- learn the patient's clinical history;
- to acquire thinking skills, logical clinical argumentation when determining the differential and establishing the final diagnosis;
- master the method of dispensation of animals;
- acquire communication skills, both in written and oral form, with clients, colleagues, support staff;
- master the rules of professional ethics and deontology.

COURSE STRUCTURE

Topic	Hours (lecture/laboratory, practical, seminar)	Learning outcomes	Tasks	Assessment
Semester 1				
Module No. 1. General diagnosis				
Topic No. 1. Methods of clinical examination of an animal	2/6/4	Know the methods of clinical examination of an animal Be able to define symptoms and syndromes of diseases.	Submitting laboratory Taking tests Completing independent work (including in eLearn) Solving problems.	5
Topic No. 2 Symptoms and syndromes of diseases. Diagnosis. Prognosis	3/6/4			5
Topic No. 3. Study of the general condition of the animal	2/4/4			5
Module No. 2. Clinical examination of the cardiovascular system				
Topic 4. Basic methods of heart research	2/4/4	Know basic methods of heart research Define the heart tones, heart murmurs Use	Submitting laboratory Taking tests Completing independent work (including in eLearn) Solving	4
Topic 5. Study of heart tones by auscultation. Changes in heart tones due to pathologies	2/4/4			4
Topic 6. Heart murmurs	2/4/2			4
Topic 7. Additional studies of the heart	2/4/4			4

Topic 8. Investigation arteries and veins Arrhythmias. Analysis of clinical cases with pathology of the cardiovascular system	2/2/2	additional methods of the heart examination	problems	4
Total for 1 semester				35
Module No. 3. Clinical examination of the respiratory tract				
Topic 9. Significance, scheme and methods of research of the respiratory system	2/4/4	Know the significance, scheme and methods of research of the respiratory system	Submitting laboratory Taking tests Completing independent work (including in eLearn) Solving problems	3
Topic 10. Detailed examination of upper respiratory tract and chest	2/2/4			4
Topic 11. Auscultation of the lungs	2/4/4			2
Module No. 4. Clinical examination of the alimentary system				
Topic 12. Examination of feed and water intake. Appetite, chewing and belching and their changes	2/6/6	Be able to do the examination of feed and water intake, appetite, chewing and belching and their changes	Submitting laboratory Taking tests Completing independent work (including in eLearn) Solving problems	4
Topic 13. Examination of the forestomach and abomasum. Examination of liver	2/8/4			4
Topic 14. Examination of stomach, pharynx, gastric juice, and stomach contents.	2/8/4			2
Module No. 5. Clinical examination of the urinary system and the nervous system				
Topic 15. Examination of kidneys and bladder	2/4/4	Analyze a urine Know the methods of examination of kidneys and bladder	Submitting laboratory Taking tests Completing independent work (including in eLearn) Solving problems	2
Topic 16. Appearance and analysis of urine	4/4/4			4
Topic 17. Examination of the nervous system	2/8/2			4
Topic 18. Study of sensitivity, reflexes, coordination of movements, convulsions, paresis and paralysis and their diagnostic value.	2/2/1			2
Module No. 6. Examination of blood				
Topic 19. Examination of blood system	4/6/6	Be able to do examination of blood system	Submitting laboratory Taking tests Completing independent work (including in eLearn) Solving problems	2
Topic 20. Examination of blood morphology and the immune system	2/4/6			3
Topic 21. Conclusion of the educational discipline "Clinical diagnosis of animal diseases"	2/2/0			

Total for 2 semester	35
Exam	30
Total for course	100

ASSESSMENT POLICY

<i>Policy regarding deadlines and resits:</i>	Assignments submitted after the deadline without valid reasons will be graded lower. Resitting of modules will be allowed with the permission from the lecturer and in the presence of valid reasons (e.g. medical reasons).
<i>Academic honesty policy:</i>	Cheating during tests and exams is strictly prohibited (including the use of mobile devices). Coursework and research papers must contain correct citations for all sources used.
<i>Attendance policy:</i>	Class attendance is mandatory. In case of objective reasons (such as illness or international internships), individual learning may be allowed (in online format by the approval of the dean of the faculty).

SCALE OF ASSESSMENT OF STUDENT KNOWLEDGE

Student rating, points	National grade based on exam results	
	exams	credits
90-100	excellent	passed
74-89	good	
60-73	satisfactory	
0-59	unsatisfactory	not passed

RECOMMENDED SOURCES OF INFORMATION

1. Clinical examination of organs and systems of animals. Training Manual / For the training of specialists in the field of knowledge "Veterinary Medicine" of higher education institutions / [M. Tsvilikhovskiy, O. Yakymchuk, M. Maryniuk, I. Yakymchuk, O. Berezovska]; for ed. M.I. Tsvilikhovskiy. K.: CP "KOMPRINT", 2018. 370 p.
2. Клінічна діагностика хвороб тварин. / Левченко В.І., Судаков М.О., Мельник Й.Л., Чумаченко В.Ю. та ін. - К.: Урожай.- 1995. - 368 с.
3. Клінічна діагностика внутрішніх хвороб тварин / За ред. В.І. Левченко. Біла Церква. 2004. 607с
4. Клінічна діагностика внутрішніх хвороб тварин / За ред. В.І. Левченко. Біла Церква. 2017. 544 с
5. Цвіліховський М.І., Бондар В.О., Якимчук О.М., Маринюк М.О. Практикум з клінічної діагностики хвороб тварин К.: «ЦП»КОМПРИНТ», 2017. 307 с.
6. Клінічне дослідження екзотичних тварин. Навчальний посібник. / Козачок В.С., Скиба О.О., Цвіліховський М.І. К.: Арістей. 2010. 248 с.

Additional literature:

7. Цвіліховський М.І., Якимчук О.М., Бондар В.О., Маринюк М.О., Обруч М.М., Якимчук І.М. Клінічне дослідження органів і систем тварин: навчальний посібник. К.: "ЦП"КОМПРИНТ". 2017. 382 с.
8. Цвіліховський М.І., Якимчук О.М., Маринюк М.О., Бондар В.О.,

Якимчук І.М., Іванченко Н.Ю. Клінічна діагностика хвороб тварин. Частина 1. Інструментальні методи дослідження серця тварин: навчальний посібник. К.: "ЦП"КОМПРИНТ". 2017. 126 с.

9. Цвіліховський М.І., Береза В.І., Костенко В.М., Бойко Н.І., Голопура С.І., Грушанська Н.Г., Якимчук О.М. Спеціальна пропедевтика, терапія і профілактика внутрішніх хвороб тварин: навчальний посібник. К.: "ЦП"КОМПРИНТ", 2017. 607 с.

Information resources

www.nbuv.gov.ua/ – Національна бібліотека України імені В. І. Вернадського

www.dnsgb.com.ua – Національна Наукова Сільськогосподарська Бібліотека Національної Академії Аграрних Наук