Academic degree- **Master**
Specialty **211 Veterinary medicine**
Academic programme **«Veterinary medicine»**
Year of education 6, semester 11
Form of education _full-time_
Number of ECTS credits 4
Language(s) of instruction Ukrainian

Lecturer of course	**Sharandak P.V.**
Contact information of the lecturer (e-mail)	**psharandak@nubip.edu.ua**
URL of the e-learning course on the NULES e-learning portal	https://elearn.nubip.edu.ua/course/view.php?id=2259 https://elearn.nubip.edu.ua/course/view.php?id=2260

ACADEMIC DISCIPLINE DESCRIPTION

Aim of the educational discipline "Special propaedeutics, therapy and prevention of internal diseases of animals" is to improve and deepen theoretical knowledge and obtain practical skills in the recognition of internal diseases of animals, organization of preventive and therapeutic measures depending on the chosen direction, as well as to prepare the master's student for independent work in the chosen discipline .

Objectives of the discipline:

• master modern methods of clinical and laboratory research for diagnosis and differential diagnosis of animal diseases;

• master modern methods of treatment and prevention of the most common internal diseases of animals;

• to acquire the skills of analysis, generalization of the material from the selected problem while writing the master's thesis.

Acquisition of competences:
integrated competency (IC):

− IC 1 The 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 competences (GC):
− GC 1. Ability to conduct research at an appropriate level.
− GC2 Ability to make informed decisions.

special (professional) competences (SC):

– SC 1. Ability to plan, organize and implement measures for the treatment of animals of various classes and species suffering from non-contagious, infectious and invasive diseases.
– SC 2. The ability to develop strategies for the prevention of diseases of various etiologies.

Expected Learning Outcomes (ELO):

- To establish a connection between the clinical manifestations of the disease and the results of laboratory studies.

- Develop quarantine and health measures, methods of therapy, prevention, diagnosis and treatment of diseases of various etiologies.

- Carry out educational activities among industry workers and the population.

ACADEMIC DISCIPLINE STRUCTURE

Topic	Hours (lecture/laboratory, practical, seminar)	Learning outcomes	Tasks	Assessment
1 semester.				
Module 1				
Topic 1. Special propedeutics animals with heart pathology..	2/2	The master should know the main symptoms, syndromes and principles of diagnosis and treatment of cardiorespiratory diseases Master the techniques of ultrasound of the heart and conduct electrocardiography in animals	Perform laboratory work #1. Write essays on each topic of independent work and send them to EEC.	Up to 10 points for the completed laboratory work and up to 8 points for the completed essay.
Topic 2. Special propedeutics animals with diseases of alimentary system.	2/2	The master should know the main symptoms, syndromes and principles of treatment for diseases of the digestive organs of animals.	Master the techniques of ultrasound, radiography, endoscopy of digestive organs in animals. Perform laboratory work #2. Write essays on each topic of independent work and send them to EEC	Up to 10 points for the completed laboratory work and up to 7 points for the completed essay.
Topic 3. Special	2/2	The master should	To master	Up to 10 points for

propedeutics animals with diseases of kidney and urinary tract.		know the topographical anatomy and structure of the urinary system in animals, as well as the principles of animal ultrasound for kidney and bladder diseases.	diagnostic techniques and principles of therapy for kidney and urinary tract pathologies in animals. Perform laboratory work #3. Write essays on each topic of independent work and send them to EEC.	the completed laboratory work and up to 8 points for the completed essay.
Topic 4. Special propedeutics animals with diseases of endocrine organs.	2/2	The master must know the main symptoms, syndromes and principles of diagnosis and treatment of diseases of the endocrine organs of animals. To master modern methods of diagnosing the pathology of the endocrine system in animals..	Determination of the level of hormones in the body of animals Perform laboratory work #4. Write essays on each topic of independent work and send them to EEC.	Make a test for modular control. Up to 10 points for the completed laboratory work and up to 7 points for the completed essay.
Testing of module 1			(including elearn)	30
Total of module 1	module			100
Модуль 2				
Topic 5. Immunopathology. Mechanism of development, methods of diagnosis and treatment.	2/2	The master should know the main symptoms, syndromes and principles of diagnosis and treatment of immunodeficiency and autoimmune diseases of animals.	Master the modern methods of determining the immune status of the animal organism. Perform laboratory work No. 5. Write essays on each topic of independent work and send them to	Up to 10 points for the completed laboratory work and up to 8 points for the completed essay.

				EEC.	
Topic 6. Cardiorespiratory syndromes. The mechanism of their occurrence, methods of diagnosis and treatment.	2/2	The master must know the main cardiorespiratory syndromes and the principles of diagnosis and treatment of heart and lung diseases in animals.	Master modern protocols for determining the state of shock in animals and emergency aid for various types of shock. Perform laboratory work #6. Write essays on each topic of independent work and send them to EEC.	Up to 10 points for the completed laboratory work and up to 7 points for the completed essay.	
Topic 7. Neurology. General principles of diagnosis, treatment and prevention.	2/2	The master should know the main symptoms, syndromes and principles of diagnosis and treatment of neurological diseases in animals.	To master such methods of diagnosing neurological diseases of animals as: MRI, CT, Encephalorgamma, as well as to learn how to interpret the obtained results. Perform laboratory work #7. Write essays on each topic of independent work and send them to EEC.	Up to 10 points for the completed laboratory work and up to 8 points for the completed essay.	
Topic 8. Special propedeutics, diagnostics, therapy and prevention for allergic and autoimmune skin diseases.	1/1	The master should know the main symptoms, syndromes and principles of diagnosis and treatment of non-contagious dermatological	Master the algorithms of diagnosis and differential diagnosis of dermatological skin diseases and conduct	Up to 10 points for the completed laboratory work and up to 7 points for the completed essay.	

		diseases in animals.	dermatological research. Perform laboratory work #8. Write essays on each topic of independent work and send them to EEC.	
Testing for module 2			(including elearn)	30
Total for module 2				100
Education work for 8 semestr $(M_1+M_2)/2*0,7$				**70 (≥42)**
Test			(including elearn)	**30**
Total for course				**100**

ASSESSMENT POLICY

Deadlines and exam retaking policy:	*EXAMPLE* Works that are submitted late without valid reasons will be assessed with a lower grade. Module tests may be retaken with the permission of the lecturer if there are valid reasons (e.g. a sick leave).
Academic integrity policy:	*EXAMPLE* Cheating during tests and exams is prohibited (including using mobile devices). Term papers and essays must have correct references to the literature used
Attendance policy:	*EXAMPLE* Attendance is compulsory. For good reasons (e.g. illness, international internship), training can take place individually (online by the faculty dean's consent)

SCALE FOR ASSESSING STUDENTS 'KNOWLEDGE AND SKILLS

Student's rating, points	National grading of exams and credits	
	exams	**credits**
90-100	excellent	pass
74-89	good	
60-73	satisfactorily	
0-59	unsatisfactorily	fail

RECOMMENDED SOURCES OF INFORMATION
Basic

1. Спеціальна пропедевтика, терапія і профілактика внутрішніх хвороб тварин : навч. посібник / М. І. Цвіліховський та ін. ; за ред. М. І. Цвіліховського. Київ : НУБіП України, 2023. 248 с.

Secondary

1. Stephen J. Ettinger, Edward C. Feldman, Etienne Cote Textbook of Veterinary Internal Medicine. Elsevier Health Sciences, 2016. 2736 p.

2. R.A. McPherson, M.R. Pincus Henry's Clinical diagnosis and management by laboratory methods. Elsevier. 2022. 1663 p.

3. Richard W. Nelson, C. Guillermo Couto Small Animal Internal Medicine. Elsevier; 6th edition, 2019. 1608 p.

4. Leah Cohn, Etienne Cote Cote's Clinical Veterinary Advisor: Dogs and Cats. Mosby, 2019. 1680 p.

11. Information resourses

1. http://dspace.nubip.edu.ua:8080/jspui/ – Electronic library of NUBiP of Ukraine

2. http://www.nbuv.gov.ua/e-journals/nd/ – Scientific reports of the National University of Bioresources and Nature Management of Ukraine

3. http://www.nbuv.gov.ua/ – National Library of Ukraine named after V.I. Vernadskyi

4. https://www.merckvetmanual.com/Merck Veterinary Manual