



## SYLLABUS OF THE EDUCATIONAL COMPONENT

### VETERINARY ENDOCRINOLOGY

<b>speciality</b>	<b>211 Veterinary medicine</b>	<b>mandatory or optional</b>	<b>Optional</b>
<b>educational program</b>	<b>Veterinary medicine</b>	<b>faculty</b>	<b>Veterinary medicine</b>
<b>educational degree</b>	<b>Master's degree</b>	<b>department</b>	<b>Internal diseases and clinical diagnosis of animals</b>

#### TEACHER

#### Sobakar Yuliia Viktorivna



Higher education - veterinary medicine specialty  
 Scientific degree - candidate of veterinary sciences 16. 00. 01 - diagnosis and therapy of animals  
 Academic title - Associate Professor of the Department of Internal Diseases and Clinical Diagnosis of Animals  
 Work experience - 12 years

#### Indicators of professional activity on the subject of the course:

- author of 10 methodological developments;
- experience of scientific work of 12 years;
- participant of scientific and methodical conferences.

<b>phone number</b>	<b>0935583055</b>	<b>e mail</b>	<b>Zemlanoy1980@gmail.com</b>	<b>support</b>	<b>Moodle <a href="http://moodle.btu.kharkiv.ua/course/view.php?id=410">http://moodle.btu.kharkiv.ua/course/view.php?id=410</a></b>
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#### GENERAL INFORMATION ABOUT THE EDUCATIONAL COMPONENT

<b>Aim</b>	providing students with theoretical knowledge and practical skills in the methodology of data analysis of clinical and laboratory research, differential diagnosis, treatment and prevention of diseases of endocrine organs in animals.
<b>Format</b>	lectures, practical classes, independent work, individual tasks, laboratory work, team work

<b>Form of control</b>	3 ECTS credits (90 hours): 14 hours of lectures, 30 hours of laboratory hours, 46 hours of independent work; current control (2 chapters); final control - differentiated assessment.
<b>Requirements</b>	timely completion of laboratory and practical tasks, activity, teamwork
<b>Enrollment conditions</b>	according to the curriculum

## COMPLEMENTS THE STANDARD OF EDUCATION AND THE EDUCATIONAL PROGRAM

<b>Competenții</b>	<p>GC1. Ability to abstract thinking, analysis and synthesis</p> <p>GC2. Ability to apply knowledge in practical situations</p> <p>GC7. Ability to conduct research at the appropriate level</p> <p>ZC9. Ability to make informed decisions</p> <p>GC11. Ability to evaluate and ensure the quality of performed works</p> <p>SC2. The ability to use tools, special devices, devices, laboratory equipment and other technical means for carrying out the necessary manipulations during professional activity</p> <p>SC3. The ability to observe the rules of labor protection, asepsis and antiseptics during professional activity.</p> <p>SC4. The ability to conduct clinical research in order to formulate conclusions about the condition of animals or establish a diagnosis</p> <p>SC6. Ability to select, pack, fix and send samples of biological material for laboratory research</p> <p>SC7. Ability to organize and conduct laboratory and special diagnostic studies and analyze their results</p> <p>SC8. Ability to plan, organize and implement measures for the treatment of animals of various classes</p> <p>SC 13. The ability to develop strategies for the prevention of diseases of various etiologies.</p> <p>SC16. The ability to protect the environment from pollution by livestock waste, as well as materials and means of veterinary use</p>	<b>Program learning outcomes</b>	<p>PLO1 Know and correctly use the terminology of veterinary medicine</p> <p>PLO2 Use information from domestic and foreign sources to develop diagnostic, treatment and business strategies</p> <p>PLO3 Determine the essence of physico-chemical and biological processes that occur in the body of animals in normal and pathological conditions</p> <p>PLO5 Establish a connection between the clinical manifestations of the disease and the results of laboratory studies</p> <p>PLO6 Develop quarantine and health measures, methods of therapy, prevention, diagnosis and treatment of diseases of various etiologies</p> <p>PLO7 Formulate conclusions regarding the effectiveness of selected methods and means of keeping, feeding and treating animals, prevention of contagious and non-contagious diseases, as well as production and technological processes at enterprises for keeping, breeding or exploiting animals of various classes and species</p> <p>PLO 15. Know the rules of storage of various pharmaceuticals and drugs, ways of their enteral or parenteral use, understand the mechanism of their action, interaction and complex action on the animal body</p>
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## STRUCTURE OF THE EDUCATIONAL COMPONENT

### Chapter 1 General pathogenetic mechanisms of development diseases of endocrine organs. Diseases of the endocrine part of the pancreas.

<b>Lecture 1</b>	General pathogenetic mechanisms of the development of diseases of endocrine organs.	<b>LPL1</b>	The purpose and tasks of the discipline, its importance in the formation of special knowledge and skills of specialists. Methods of determining hormones in biological substrates for the purpose of diagnosis. Preparation of samples for research.	<b>Self work</b>	The role of the hypothalamus in regulating the functions of endocrine organs. Etiology, pathogenesis, symptoms, diagnosis and treatment of diabetes insipidus . The role of the pituitary gland in the etiology and pathogenesis of the disease. Violation of the function of the pineal gland. The importance of hormones of the mucous membrane of the alimentary canal in the processes of digestion and metabolism
		<b>LPL-2</b>	Laboratory diagnosis of diabetes. Determination of glucose and insulin in the blood of animals..		
<b>Lecture2</b>	Diseases of the endocrine part of pancreas.	<b>LPL 3</b>	Informativeness of clinical and special research methods for the purpose of diagnosing diabetes.		
		<b>LPL 4</b>	Treatment of sick animals with diabetes mellitus and control of its effectiveness.		
		<b>LPL 5</b>	Solving situational tasks. Diabetes mellitus.		
		<b>LPL 6</b>	Chapter I. General pathogenetic mechanisms of development diseases of endocrine organs. Diseases of the endocrine part of the pancreas.		

### Chapter 2 Diseases of adrenal, thyroid and parathyroid glands

<b>Lecture 3</b>	Diseases of the adrenal glands: hormonally active tumors of the adrenal glands; chronic adrenal insufficiency; primary hyperaldosteronism.	<b>LPL 7</b>	Diagnosis and treatment of animals for adrenal gland diseases. Diagnosis and provision of medical care. Demonstration of slides and a video film on the pathology of the adrenal glands..	<b>Selfwork</b>	1 Determination of the functional state of the adrenal glands and the main causes of their pathology. The role of adrenal hormones in the mechanisms of development of ketosis in cows.
<b>Lecture 4</b>	Endocrine forms of obesity. Classification..	<b>LPL 8</b>	Diagnosis and treatment of animals for adrenal gland diseases. Diagnosis and provision of medical care. Demonstration of slides and a video film on the pathology of the adrenal glands..		2 The main syndromes of diseases of the thyroid glands. Mechanisms of formation and functions of thyroid hormones. The

<b>Lecture 5</b>	Assistance in acute adrenal insufficiency. Diseases of the thyroid gland: hypothyroidism.	<b>LPL 9</b>	Working out in practice diagnostic measures for diseases of the adrenal glands.		role of iodine in thyroid function disorders.  3.Diseases of the thyroid gland: Diffuse toxic goiter, thyroiditis, toxic adenoma and cancer of the thyroid gland.
		<b>LPL 10</b>	Laboratory diagnosis of diseases of the adrenal glands. Methods of determining the hormones of the cortical part of the adrenal glands in the blood of animals		
<b>Lecture 6</b>	Assistance in thyrotoxic and hyperparathyroid crisis. Hypoparathyroid tetany.	<b>LPL 11</b>	Laboratory diagnosis of diseases of the adrenal glands. Methods of determining the hormones of the cortical part of the adrenal glands in the blood of animals		
<b>Lecture 7</b>	Diabetology. Diet therapy for endocrine diseases.	<b>LPL 12</b>	Laboratory diagnosis of diseases of the adrenal glands. Methods of determination of hormones of the cerebral part of the adrenal glands in the blood of animals.		
		<b>LPL 13</b>	Methods of diagnosing diseases of the thyroid gland. Animal studies. Hypothyroidism. Diffuse toxic goiter..		
		<b>LPL 14</b>	Treatment of sick animals with pathology of the thyroid gland.		
		<b>LPL 15</b>	Treatment of sick animals with pathology of the thyroid gland. Film about thyroidal pathology. Solving situational tasks. Hypothyroidism, hyperthyroidism. Chapter II Diseases of adrenal glands, thyroid and parathyroid glands.		

## MAIN LITERATURE

Literature	<p>1. Veterynarna klinichna biokhimiia: pidruchnyk /V.I. Levchenko ta in.; za red. V.I. Levchenka i V.V. Vlizla. 2-he vyd., pererob ita dop. Bila Tserkva, 2019. – 416 s.</p> <p>2. Vnutrishni khvoroby tvaryn: pidruchnyk / [Levchenko V.I., Kondrakhin I.P., Vlizlo V.V. ta in.]; za red. V.I. Levchenka. – Bila Tserkva, 2015. – Ch. 2. – 610 s.</p> <p>3. Edward Feldman, Richard Nelson, Claudia Reusch, J. Catharine Scott-Moncrieff. Canine and Feline Endocrinology, Elsevier. 2014.- 654 p.</p> <p>4. Kliniko-laboratorni ta spetsialni metody doslidzhennia sobak i kotiv za khvorob endokrynnoi systemy. Metodychni rekomendatsii dlia zdobuvachiv fakultetu veterynarnoi medytsyny i slukhachiv Instytutu pisliadyploumnoi osvity / Sobakar Yu. V., Matsenko O. V., Mohilovskyi V. M. ta in. - Kh., 2024.- 81 s.</p>	Methodical support	<p>1. Robochyi zoshyt dlia laboratornykh zaniat z dystsypliny «Veterynarna endokrynolohiia», Modul I /Sobakar Yu. V.– Kh., 2022.- 47 s.</p> <p>2. Robochyi zoshyt dlia laboratornykh zaniat z dystsypliny «Veterynarna endokrynolohiia», Modul II /Sobakar Yu. V.– Kh., 2022.- 41 s.</p>
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EVALUATION SYSTEM			
	SYSTEM	SCORE	ACTIVITY THAT EVALUATED
Final assessment (differentiated credit, exam)	100-point ECTS (standard)	до 100	40% – final testing, 60% – student’s ongoing work during the semester
Final assessment (non-graded)	100-point ECTS (standard)	до 100	100% – averaged score for all course sections
Section Assessment	Cumulative 100-point scale	до 30	30% – answers to test questions
		до 30	30% – performance on the independent study block
		до 40	40% – student activity during classes (oral responses)

NORMS OF ACADEMIC ETHICS AND CHARITY	
All participants in the educational process (including those seeking education) must adhere to the code of academic integrity and the requirements prescribed in the provision "On academic integrity of participants in the educational process of SBU": show discipline, education, respect each other's dignity, show kindness, honesty, responsibility..	