MODULE SYLLABUS

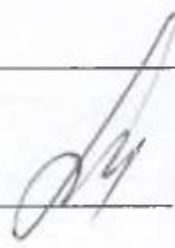# Anatomy with Latin veterinary terminology

(compulsory)

Implemented in the "Veterinary medicine" Academic Program

Area of specialization 211 "Veterinary medicine"

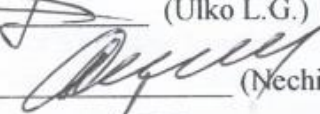**at the second (master's) level of higher education**

Sumy-2021

Author: _____ (**Yevheniia Livoshchenko** Associate Professor)

Module syllabus agreed at the Anatomy, Normal and Pathological Physiology Department meeting	Minutes No 8 dated June 14 2022
	Head of Anatomy, Normal and Pathological Physiology Department _____ (Kambur MD)

Approved by:

Guarantor of the Academic program _____ (Ulko L.G.)

Dean of the Faculty of Veterinary Medicine _____ (Nechiporenko O.L.)

Syllabus review (attached) is provided by : _____ (Petrov R.V.)

_____ (Plyuta L.V.)

Representative of the Department of Education Quality assurance, licensing and accreditation _____ (N. Baranik)

Registered in electronic data base _____ 20.06. _____ 2022

Syllabus review data:

The academic year in which changes are made	The Academic program attachment number with changes description	Changes revised and approved		
		Minutes No and date of the department meeting	Head of Department	Guarantor of the Academic program
2024 - 25	N 1	Протокол N 17 від 04.06.24		

1. MODULE OVERVIEW

1.	Title	**Anatomy with Latin veterinary terminology**		
2.	Faculty/Department	Faculty of Veterinary Medicine/ Anatomy, Normal and Pathological Physiology Department		
3.	Type (compulsory or optional)	compulsory		
4.	Program(s) to which module is attached (to be filled in for compulsory types)	211 - Veterinary medicine/ Faculty of Veterinary Medicine		
6.	Level of the National Qualifications Framework	7		
7.	Semester and duration of module	1 Semester /1-15; 2 Semester /1-15; 3 Semester /1-18		
8.	ECTS credits number	14		
9.	Total workload and time allotment	Directed study		Self-directed study
		Lectures	Practicals	Labs	
		50 14/30/6	**46** 46/0/0	**92** 16/60/16	**232**/188 74/90-44/68
10.	Language of instruction	English		
11.	Module leader	Associate Professor **YEVHENIIA LIVOSHCHENKO**		
12.	Module leader contact information	Faculty of Veterinary Medicine**.** Department of Anatomy, Normal and Pathological Physiology. G. Kondratieva Street 160/3, office 19, room 4. T.050-913-60-82		
13.	Module description	The discipline "Anatomy with Latin veterinary terminology" is one of the fundamental disciplines, which covers the structure of the body of animals of different species.		
14.	Module aim	The aim is to study the structure of the body of domestic animals in inseparable connection with its functions and development.		
15.	Module Dependencies (prerequisites, co-requisites, incompatible modules)	1. The educational component is based on zoology, Latin 2. The educational component is the basis for physiology, history, obstetrics, clinical diagnosis, therapy, surgery, veterinary examination and other sections of veterinary medicine. 3. Educational component incompatible with the economy, mechanization		
16.	The policy of academic integrity	During the study of the educational component, any manifestations of academic dishonesty are not allowed. Systems are tools for counteracting violations of academic integrity "Plagiarism check algorithm". In case of violations, the response is in accordance with the regulations on the academic integrity of participants in the educational process in Sumy NAU (https://snau.edu.ua/viddil-zabezpechennya-yakosti-osviti/zabezpechennya-yakosti-osviti/akademichna-dobrochesnist/). If a violation of academic integrity is detected, the completed task is not credited and is sent for re-execution		
17	Link in Moodle	https://cdn.snau.edu.ua/moodle/course/view.php?id=3149 https://cdn.snau.edu.ua/moodle/course/view.php?id=3163 https://cdn.snau.edu.ua/moodle/course/view.php?id=3164		

2. CORRELATION BETWEEN MODULE LEARNING OUTCOMES (MLOs) AND PROGRAM LEARNING OUTCOMES (PLOs)

MLOs: On successful completion of the module the learner will be able to:	PLOs		How assessed
	PLOs 1	PLOs 3	
MLO 1. Be able to read and write in Latin, emphasize; to make word-forming analysis and freely construct veterinary terms on the basis of the received knowledge. Find all directions and areas of the body on the animal. Be able to name them using Latin terminology.			Oral interview after studying the topic using native drugs. -testing, -performance of tasks of independent work
MLO 2. To find on a preparation components of bones of a skeleton, to reveal specific features of bones and to describe them using Latin terminology			Oral interview after studying the topic using native drugs. -testing; -performance of tasks of independent work
MLO 3. Find joints on an animal or skeleton. Find the connections of the axial and peripheral skeleton on the drug, and be able to describe them using Latin terminology.			Oral interview after studying the topic using native drugs. -testing; -performance of tasks of independent work
MLO 4. To find on the skin its layers and derivatives of the skin, to identify species and age features of both the skin and its derivatives. Be able to describe them using Latin terminology			Oral interview after studying the topic using native drugs. -testing; -performance of tasks of independent work
MLO 5. Find muscles on the drug, identify species features, and find muscle attachment points and their functions. Be able to name them and their functions using Latin terminology			Oral interview after studying the topic using native drugs. -testing; -performance of tasks of independent work
MLO 6. Find in the body the components of various systems and devices. Identify their species features, know the topography of organs. Be able to describe organs using Latin terminology.			Oral interview after studying the topic using native drugs. -testing, -performance of tasks of independent work
MLO 7. Find the components of the heart on the drug. Find all the main vessels and branches that branch off from them. Find all major lymph vessels and nodes. Know the structure of hematopoietic organs and organs of the endocrine system. Be able to describe them using Latin terminology			Oral interview after studying the topic using native drugs. -testing, -performance of tasks of independent work
MLO 8. Find the spinal cord, brain on the drug and their components. Find nerves and their branches on the drug and the animal, identify their topographic features. Be able to name them using Latin terminology			Oral interview after studying the topic using native drugs. -testing, -performance of tasks of independent work
MLO 9. Know the structure of analyzers. Find on the drug components of the senses to identify their species characteristics. Be able to describe them using Latin terminology			Oral interview after studying the topic using native drugs. -testing, -performance of tasks of independent work
MLO 10. Know the structure of poultry organs, determine the location of individual organs in different parts of the bird's body. Be able to describe them using Latin terminology			Oral interview after studying the topic using native drugs. -testing, -performance of tasks of independent work

3. MODULE INDICATIVE CONTENT
Autumn semester (1 year, 1 semester)

Topics	Distribution of hours				Learning resources
	Directed study			Self-directed study	
	Lectures	Practicals	Labs		
Topic. 1. Phonetics. Learning the Latin alphabet and rules of stress		14		10	No (from the list of Learning resources)
Topic. 2. Conjugation of Latin nouns.		14		10	
Topic 3. Veterinary terminology		18		10	
Topic 4. Biomorphological patterns of structure and development of the organism. The structure of the axial skeleton.	6		6	22	
Topic 5. Skeleton of the extremities.	2		6	12	
Topic 6. The structure of the skull.	2		4	10	
Topic 7. Syndesmology.	4				
TOTAL HOURS FOR AND SEMESTER	14	46	16	74	

Spring semester (1 year, 2 semester)

Topics	Distribution of hours					Learning resources
	Directed study			Self-directed	Educational practice:	
	Lectures	Practicals	Labs			
Spring semester (first year, second semester)						
Topic 1. Syndesmology.	-		4	6		
Topic 2. Dermatology.	6		4	8		
Topic 3. Myology.	4		20	6		
Topic 4. Digestive system	8		14	6		
Topic 5. Respiration apparatus.	4		4	6		
Topic 6. Genitourinary system	6		10	8		
Topic 7. The structure of the heart. Circulation in the fetus and adult animal	2		4	6		
Educational practice:						
Topic 1. Management. Acquaintance of students with rules of safety of work with live animals.					6	
Topic 2. Study on a live animal of body parts, projections of skeletal bones, joints and skin with its derivatives.					12	
Topic 3. Study of the location and relationship with the skeleton of the muscles in a living animal.					6	
Topic 4. Study of the location of the nervous and vascular systems on the body of the animal.					6	
Topic 5. Features of the structure and topography of the digestive and respiratory systems.					6	

Topics						Learning resources
Topic 6. Determining the location of the respiratory organs and urogenital system on a live animal.					6	
Topic 7. Summing up.					2	
TOTAL HOURS FOR 2 SEMESTERS	30	-	60	46	44	

Autumn semester (2 year, 3 semester*)*

Topics	Distribution of hours					Learning resources
	Directed study			Self-directed study	Educational	No
	Lectures	Practicals	Labs			
Topic 1. The structure of the heart. Circulation in the fetus and adult animal	2		2	10		
Topic 2. Vessels of the great circle of blood circulation. Lymphatic system..			4	**10**		
Topic 3. Central nervous system	2		2	**10**		
Topic 4. Cranial and spinal nerves.			2	**10**		
Topic 5. Autonomic nervous system.			2	**10**		
Topic 6. Sense organs.	2		2	**10**		
Topic 7. Anatomy of a bird.			2	**8**		
TOTAL HOURS FOR 3 SEMESTERS	**6**		**16**	**68**		
Total for the course	50	46	92	**188**	**44**	

4. TEACHING AND LEARNING METHODS

MLOs	Teaching methods (directed study)	Hours	Learning methods (self-directed study)	Hours
MLO 1. Be able to read and write in Latin, emphasize; to make word-forming analysis and freely construct veterinary terms on the basis of the received knowledge. Find all directions and areas of the body on the animal. Be able to name them using	Methods of teaching by source of knowledge: Verbal: story, explanation, conversation (heuristic and reproductive), lecture, instruction. Visual: demonstration, illustration. Active methods: (use of technical teaching aids, use of training and control tests) Interactive teaching methods: (use of multimedia technologies, spreadsheets.	46	Methods of teaching by source of knowledge: Verbal: work with a book (reading, translation, writing, taking notes, making tables, graphs, reference notes), Visual: observation. Teaching methods by the nature of the logic of cognition (analytical, synthesis methods, inductive method, deductive method, translational method). Active methods (mind maps, brainstorming, crossword puzzles, debates, round tables, binary classes, business and role-playing games, group research). Interactive learning technologies (use of multimedia technologies, dialogue learning, student cooperation (cooperation)	30

Latin terminology.				
MLO 2. To find on a preparation components of bones of a skeleton, to reveal specific features of bones and to describe them using Latin terminology	Methods of teaching by source of knowledge: Verbal: story, explanation, conversation (heuristic and reproductive), lecture, instruction. Visual: demonstration, illustration. Active methods: (use of technical teaching aids, use of training and control tests) Interactive teaching methods: (use of multimedia technologies, spreadsheets.	26	Methods of teaching by source of knowledge: Verbal: work with a book (reading, translation, writing, taking notes, making tables, graphs, reference notes), Visual: observation. Teaching methods by the nature of the logic of cognition (analytical, synthesis methods, inductive method, deductive method, translational method). Active methods (mind maps, brainstorming, crossword puzzles, debates, round tables, binary classes, business and role-playing games, group research). Interactive learning technologies (use of multimedia technologies, dialogue learning, student cooperation (cooperation)	44
MLO 3. Find joints on an animal or skeleton. Find the connections of the axial and peripheral skeleton on the drug, and be able to describe them using Latin terminology.	Methods of teaching by source of knowledge: Verbal: story, explanation, conversation (heuristic and reproductive), lecture, instruction. Visual: demonstration, illustration. Active methods: (use of technical teaching aids, use of training and control tests) Interactive teaching methods: (use of multimedia technologies, spreadsheets.	8	Methods of teaching by source of knowledge: Verbal: work with a book (reading, translation, writing, taking notes, making tables, graphs, reference notes), Visual: observation. Teaching methods by the nature of the logic of cognition (analytical, synthesis methods, inductive method, deductive method, translational method). Active methods (mind maps, brainstorming, crossword puzzles, debates, round tables, binary classes, business and role-playing games, group research). Interactive learning technologies (use of multimedia technologies, dialogue learning, student cooperation (cooperation)	6
MLO 4. To find on the skin its layers and derivatives of the skin, to identify species and age features of both the skin and its derivatives. Be	Methods of teaching by source of knowledge: Verbal: story, explanation, conversation (heuristic and reproductive), lecture, instruction. Visual: demonstration, illustration. Active methods: (use of technical teaching aids, use of training and control tests)	10	Methods of teaching by source of knowledge: Verbal: work with a book (reading, translation, writing, taking notes, making tables, graphs, reference notes), Visual: observation. Teaching methods by the nature of the logic of cognition (analytical, synthesis methods, inductive method, deductive method, translational method).	8

able to describe them using Latin terminology	Interactive teaching methods: (use of multimedia technologies, spreadsheets.		Active methods (mind maps, brainstorming, crossword puzzles, debates, round tables, binary classes, business and role-playing games, group research). Interactive learning technologies (use of multimedia technologies, dialogue learning, student cooperation (cooperation)	
MLO 5. Find muscles on the drug, identify species features, and find muscle attachment points and their functions. Be able to name them and their functions using Latin terminology	Methods of teaching by source of knowledge: Verbal: story, explanation, conversation (heuristic and reproductive), lecture, instruction. Visual: demonstration, illustration. Active methods: (use of technical teaching aids, use of training and control tests) Interactive teaching methods: (use of multimedia technologies, spreadsheets.	24	Methods of teaching by source of knowledge: Verbal: work with a book (reading, translation, writing, taking notes, making tables, graphs, reference notes), Visual: observation. Teaching methods by the nature of the logic of cognition (analytical, synthesis methods, inductive method, deductive method, translational method). Active methods (mind maps, brainstorming, crossword puzzles, debates, round tables, binary classes, business and role-playing games, group research). Interactive learning technologies (use of multimedia technologies, dialogue learning, student cooperation (cooperation)	6
MLO 6. Find in the body the components of various systems and devices. Identify their species features, know the topography of organs. Be able to describe organs using Latin terminology.	Methods of teaching by source of knowledge: Verbal: story, explanation, conversation (heuristic and reproductive), lecture, instruction. Visual: demonstration, illustration. Active methods: (use of technical teaching aids, use of training and control tests) Interactive teaching methods: (use of multimedia technologies, spreadsheets.	46	Methods of teaching by source of knowledge: Verbal: work with a book (reading, translation, writing, taking notes, making tables, graphs, reference notes), Visual: observation. Teaching methods by the nature of the logic of cognition (analytical, synthesis methods, inductive method, deductive method, translational method). Active methods (mind maps, brainstorming, crossword puzzles, debates, round tables, binary classes, business and role-playing games, group research). Interactive learning technologies (use of multimedia technologies, dialogue learning, student cooperation (cooperation)	20
MLO 7. Find the components of the heart on the drug. Find	Methods of teaching by source of knowledge: Verbal: story, explanation, conversation (heuristic and	10	Methods of teaching by source of knowledge: Verbal: work with a book (reading, translation, writing, taking notes,	16

all the main vessels and branches that branch off from them. Find all major lymph vessels and nodes. Know the structure of hematopoietic organs and organs of the endocrine system. Be able to describe them using Latin terminology	reproductive), lecture, instruction. Visual: demonstration, illustration. Active methods: (use of technical teaching aids, use of training and control tests) Interactive teaching methods: (use of multimedia technologies, spreadsheets.		making tables, graphs, reference notes), Visual: observation. Teaching methods by the nature of the logic of cognition (analytical, synthesis methods, inductive method, deductive method, translational method). Active methods (mind maps, brainstorming, crossword puzzles, debates, round tables, binary classes, business and role-playing games, group research). Interactive learning technologies (use of multimedia technologies, dialogue learning, student cooperation (cooperation)	
MLO 8. Find the spinal cord, brain on the drug and their components. Find nerves and their branches on the drug and the animal, identify their topographic features. Be able to name them using Latin terminology	Methods of teaching by source of knowledge: Verbal: story, explanation, conversation (heuristic and reproductive), lecture, instruction. Visual: demonstration, illustration. Active methods: (use of technical teaching aids, use of training and control tests) Interactive teaching methods: (use of multimedia technologies, spreadsheets.	8	Methods of teaching by source of knowledge: Verbal: work with a book (reading, translation, writing, taking notes, making tables, graphs, reference notes), Visual: observation. Teaching methods by the nature of the logic of cognition (analytical, synthesis methods, inductive method, deductive method, translational method). Active methods (mind maps, brainstorming, crossword puzzles, debates, round tables, binary classes, business and role-playing games, group research). Interactive learning technologies (use of multimedia technologies, dialogue learning, student cooperation (cooperation)	30
MLO 9. Know the structure of sense organs. Find on the components of the senses to identify their species characteristics. Be able to describe them using Latin terminology	Methods of teaching by source of knowledge: Verbal: story, explanation, conversation (heuristic and reproductive), lecture, instruction. Visual: demonstration, illustration. Active methods: (use of technical teaching aids, use of training and control tests) Interactive teaching methods: (use of	4	Methods of teaching by source of knowledge: Verbal: work with a book (reading, translation, writing, taking notes, making tables, graphs, reference notes), Visual: observation. Teaching methods by the nature of the logic of cognition (analytical, synthesis methods, inductive method, deductive method, translational method). Active methods (mind maps, brainstorming, crossword puzzles, debates, round tables, binary	10

	multimedia technologies, spreadsheets.		classes, business and role-playing games, group research). Interactive learning technologies (use of multimedia technologies, dialogue learning, student cooperation (cooperation)	
MLO 10. Know the structure of poultry organs, determine the location of individual organs in different parts of the bird's body. Be able to describe them using Latin terminology	Methods of teaching by source of knowledge: Verbal: story, explanation, conversation (heuristic and reproductive), lecture, instruction. Visual: demonstration, illustration. Active methods: (use of technical teaching aids, use of training and control tests) Interactive teaching methods: (use of multimedia technologies, spreadsheets.	2	Methods of teaching by source of knowledge: Verbal: work with a book (reading, translation, writing, taking notes, making tables, graphs, reference notes), Visual: observation. Teaching methods by the nature of the logic of cognition (analytical, synthesis methods, inductive method, deductive method, translational method). Active methods (mind maps, brainstorming, crossword puzzles, debates, round tables, binary classes, business and role-playing games, group research). Interactive learning technologies (use of multimedia technologies, dialogue learning, student cooperation (cooperation)	8

5. ASSESSMENT
5.1. Diagnostic assessment
5.2. Summative assessment
5.2.1. Intended learning outcomes methods:

No	Summative assessment methods	Grades	Deadline
Autumn semester			
1.	Thematic survey	20 points/ 20 %	Weekly
2.	Execution of tasks in laboratory-practical classes	20 points /20 %	According to the schedule
3	Testing	15 points/ 15 %	For 7-8 weeks
4	Report with a presentation on the subject of independent study of the discipline	45 points / 45%	According to the schedule of delivery of modules
Spring semester			
1.	Thematic survey	20 points/ 20 %	Weekly
2.	Execution of tasks in laboratory-practical classes	20 points /20 %	According to the schedule
3	Testing	15 points/ 15 %	For 7-8 weeks
4	Report with a presentation on the subject of independent study of the discipline	30 points / 30%	According to the schedule of delivery of modules
5	Writing a education practice diary	15 points / 15 %	According to the schedule of educational practice

5.2.2. Grading criteria

Autumn semester

Summative assessment method	Unsatisfactory	Satisfactory	Good	Excellent
Thematic survey	*<12* points	*12-15* points	*15-18* points	*20* points
	The student can play only individual fragments of the course.	Most requirements are met, but some components are missing or insufficiently disclosed, there is no analysis of other approaches to the issue	All requirements of the task are fulfilled	All requirements of the task are fulfilled, creativity, thoughtfulness is shown, own solution of a problem is offered
Execution of tasks in laboratory-practical classes	*<12* points	*12-15* points	*15-18* points	*20* points
	Task requirements not met	Most of the tasks are performed using the basic theoretical principles, the student has difficulty explaining the rules for solving laboratory-practical problems. Execution of individual control tasks is significantly formalized, there is no deep understanding of the work	The student has mastered the basic material, and understands and performs laboratory-practical tasks, has suggestions on the direction of their solutions. Understands the main provisions that are decisive in the course, can solve similar problems that were discussed with the teacher, but admits a small number of inaccuracies. The student has mastered the basic material, and understands and performs laboratory-practical tasks, has suggestions for their solutions. Understands the main provisions that are decisive	The applicant implements the theoretical material of the discipline in the performance of laboratory and practical work, is able to analyze and compare the results obtained on the basis of acquired knowledge, skills, practical skills in this discipline

Multiple selection test	*<12* points	*12-15* points	*15-18* points	*20* points
			in the course, can solve similar problems by those discussed with the teacher, but allows a small number of inaccuracies.	
	The student gives the correct answer to several questions ($\leq 33\%$ of the correct answers).	The student has certain knowledge provided in the program of the discipline, has the basic provisions studied and gives the correct answer to several questions (34-59% of the correct answers).	The student is generally well versed in the material, knows the basic provisions of the material, and gives the correct answer to several questions (60-89% of the correct answers).	The student demonstrates complete and solid knowledge of the study material in the amount that corresponds to the program of the discipline, correctly answers the test questions (90-100% of correct answers).
Design and presentation of self-developed material	*<9* points	*10-19* points	*20-39* points	*40–45* points
	The student does not have a complete understanding of the material on the discipline. The student did not perform independent study of the material.	Despite the fact that the student completed the curriculum, but some components are missing or insufficiently developed, the student worked passively.	Knows the basic provisions that are crucial in performing independent work / individual tasks. Errors in the answers are not significant.	All requirements, tasks are fulfilled, creativity, thoughtfulness is shown, own solution of a problem is offered.

Spring semester

Summative assessment method	Unsatisfactory	Satisfactory	Good	Excellent
Thematic survey	*<12* points	*12-15* points	*15-18* points	*20* points
	The student can play only individual fragments of the course.	Most requirements are met, but some components are missing or insufficiently disclosed, there is no analysis of other approaches to the issue	All requirements of the task are fulfilled	All requirements of the task are fulfilled, creativity, thoughtfulness is shown, own solution of a problem is offered
Execution of tasks in	*<12* points	*12-15* points	*15-18* points	*20* points
	Task requirements not met	Most of the tasks are performed	The student has mastered the	The applicant implements the

laboratory-practical classes		using the basic theoretical principles, the student has difficulty explaining the rules for solving laboratory-practical problems. Execution of individual control tasks is significantly formalized, there is no deep understanding of the work	basic material, and understands and performs laboratory-practical tasks, has suggestions on the direction of their solutions. Understands the main provisions that are decisive in the course, can solve similar problems that were discussed with the teacher, but admits a small number of inaccuracies. The student has mastered the basic material, and understands and performs laboratory-practical tasks, has suggestions for their solutions. Understands the main provisions that are decisive in the course, can solve similar problems by those discussed with the teacher, but allows a small number of inaccuracies.	theoretical material of the discipline in the performance of laboratory and practical work, is able to analyze and compare the results obtained on the basis of acquired knowledge, skills, practical skills in this discipline
Multiple selection test	*<12* points	*12-15* points	*15-18* points	*20* points
	The student gives the correct answer to several questions (≤ 33% of the correct answers).	The student has certain knowledge provided in the program of the discipline, has the basic provisions studied and gives the correct answer to several questions (34-59% of the correct answers).	The student is generally well versed in the material, knows the basic provisions of the material, and gives the correct answer to several questions (60-89% of the	The student demonstrates complete and solid knowledge of the study material in the amount that corresponds to the program of the discipline, correctly answers the test questions

			correct answers).	(90-100% of correct answers).
Design and presentation of self-developed material	*<9* points	*10-19* points	*20-39* points	*40–45* points
	The student does not have a complete understanding of the material on the discipline. The student did not perform independent study of the material.	Despite the fact that the student completed the curriculum, but some components are missing or insufficiently developed, the student worked passively.	Knows the basic provisions that are crucial in performing independent work / individual tasks. Errors in the answers are not significant.	All requirements, tasks are fulfilled, creativity, thoughtfulness is shown, own solution of a problem is offered.

5.3. Formative assessment

Formative exercises are designed to enable students to develop particular aspects of their learning, prior to summative assessments. Formative exercises are designed to help students use feedback and self-reflection to manage and develop their learning so that they can see how to improve their work.

No	Formative Assessment elements	Date
	Autumn semester	
1.		
2.		
…		
	Spring semester	
1.		
2.		
…		

Self-assessment can be used both an element of formative and summative assessment.

6. LEARNING RESOURCES
6.1. Key resources
6.2. Guidelines
6.3. Additional resources
6.4. Computer Applications and soft