	СИЛАБУС ДИСЦИПЛІНИ
3 5 3 3 3 3 3 3 3 3 3 3	«VETERINARY MICROBIOLOGY»
НУБІП ВИСТЕТ	Ступінь вищої освіти - Магістр Спеціальність 211 Ветеринарна медицина Освітня програма Рік навчання 2, семестр 3 Форма навчання денна Кількість кредитів ЄКТС 6 Мова викладання англійська
Лектор курсу	Козловська Ганна Володимирівна
Контактна інформація	annakozlovska@i.ua
лектора (e-mail)	
Сторінка курсу в eLearn	https://elearn.nubip.edu.ua/course/view.php?id=1151

опис дисципліни

The purpose of "Veterinary Microbiology" teach students to explore the morphology, physiology, genetics of microorganisms, their role in the cycle of matter in nature, in animal pathology, human and plants.

This course includes: An Introduction to the study of bacteria, viruses, fungi, and protozoa. Topics include History of Microbiology, Prokaryotic and Eukaryotic cells, Classification, Microscopy, Staining techniques, and Microbial growth and nutrition. Materials will include PowerPoint presentations, links to videos, lecture notes at the eLearn. The course will take a 1 semester to complete. The course will be structured in such a way that there will be a progression from one concept to the next, although each lesson will be a stand-alone. It will include laboratory aspects associated with Microbiology.

СТРУКТУРА КУРСУ

Теми	Години (лекції/ лабораторні/ самостійні)	Результати навчання	Завдання	Оціню- вання
		3 семестр		
		Module 1.		
Theme 1. Introductory lecture. Subject and problems of microbiology.	2/4/8	Must know: the subject and objectives of microbiology; history of microbiology as a science. Must be able to: use a light microscope; prepare bacterial preparations for microscopy using simple staining methods.	Pass the laboratory work. Perform independent work (including on eLearn).	70
Theme 2. Morphology and	2/6/8	Must know: taxonomy, morphology of bacteria, chlamydia, mycoplasmas, rickettsia.	Pass the laboratory work.	

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systematics of		Must be able to: use complex	Perform	
microorganisms.		staining methods to study the	independent	
		morphology of microorganisms	work	
		and their differentiation; to study	(including	
		bacteria in a living state.	on eLearn).	
Theme 3.	2/4/12	Must know: the structure of the	Pass the	
Morphology of		mycelial body of microscopic	laboratory	
microscopic		fungi; features of morphology of	work.	
fungi and basics		phyco- and mycomycetes. Methods	Perform	
of their		of reproduction of fungi; pathogens	independent	
		of mycoses and mycotoxicosis.	work	
taxonomy.				
		Must be able to own the technique	(including	
25.1.1		of mycological research.	on eLearn).	• • • • • • • • • • • • • • • • • • • •
Module 1.	1		Testing	30
			(including	
			on eLearn).	
Total 1.	49			100
		Module 2.		
Theme 4.	2/4/8	Must know: the chemical	Pass the	
Physiology of		composition of microorganisms,	laboratory	
microorganisms		the mechanism of their nutrition,	work.	
		reproduction and respiration; the	Perform	
		role of microbial enzymes.	independent	
		Must be able to prepare / sterilize	work	
		utensils, tools, nutrient media for	(including	
		bacteriological research.	on eLearn).	
Theme 5.	2/4/8		Pass the	
Genetics of	2/4/8	Must know: about the organization		
		of genetic material in bacteria;	laboratory	
microorganisms		forms of variability; genetic	work.	
		recombination.	Perform	
		Must be able to have the technique	independent	
		of bacteriological research, to	work	
		allocate a "pure culture" of bacteria.	(including	
			on eLearn).	
Theme 6.	2/4/8	Must know: the microflora of	Pass the	
Ecology of		water, air, soil, animal body, man;	laboratory	
microorganisms.		types of relationships of bacteria	work.	
		with other organisms.	Perform	
		Must be able to take samples of	independent	
		water, soil and air and carry out	work	
		their bacteriological examination;	(including	
			` _	
		determine the sensitivity of bacteria	on eLearn).	
		to antibiotics.		
		Analyze the results of the sanitary-		
		microbiological assessment of		
		objects.		
Theme 7.	2/4/8	Must know: types of infection,	Pass the	
7701 1 · · · · · · · ·		stages of the infectious process,	laboratory	
The doctrine of		factors of pathogenicity of	work.	
infection and		microorganisms, mechanisms of	Perform	
immunity		infection transmission; types of	independent	
		immunity, forms of immunity.	work	
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		Must be able to identify bacteria by	(including	
		phenotypic characteristics and determine their pathogenicity.	on eLearn).	
Module 2.	2	i U	Testing (including on eLearn).	
Total 2.	56			100
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Theme 8. The causative agent of anthrax. Pathogenic cocci.	2/4/4	Must know: biological characteristics of the anthrax pathogen, immunity, means of specific prevention and therapy of anthrax; modern methods of lab. diagnostics. Must be able to take samples of material for backscatter; detect and identify pathogens. Analyze the results of bacteriological studies.	Pass the laboratory work. Perform independent work (including on eLearn).	
Theme 9. Pathogens of anaerobic infections.	2/4/4	Must know: Biological properties of pathogens blackleg, anaerobic infections of sheep, malignant edema, tetanus, botulism, necrobacteriosis. Laboratory diagnosis of diseases, means of prevention. Must be able to take samples of material for backscatter; detect and identify pathogens. Analyze the results of bacteriological studies.	Pass the laboratory work. Perform independent work (including on eLearn).	
Theme 10. Pathogenic enterobacteria.	2/4/4	Must know: biological characteristics of salmonella, Escherichia, etc. species of enterobacteria, modern methods of laboratory diagnosis of these diseases. Must be able to take samples of material for backscatter; detect and identify pathogens. Analyze the results of bacteriological studies.	Pass the laboratory work. Perform independent work (including on eLearn).	
Theme 11. Brucella and the causative agent of tularemia	2/2/2	Must know: the characteristics of the causative agent of brucellosis, the peculiarities of immunity; bacteriological, serological and allergic diagnosis of brucellosis. Possibilities of specific prevention of infection.	Pass the laboratory work. Perform independent work (including on eLearn).	

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Всього за курс				100
Екзамен				30
Всього за 3 сем	естр/навчалі	ьна робота		70
Total 4.	39			100
			on eLearn).	
Module 4.	2		Testing (including	
Madula 4	2.	bacteriological studies.	Tastina	
		Analyze the results of		
		identify the pathogen.		
		material for backscatter; detect and		
		Must be able to take samples of		
		and therapy.		
		of cultivation, means of prevention		

ПОЛІТИКА ОЦІНЮВАННЯ

Політика щодо	Роботи, які здаються із порушенням термінів без поважних	
дедлайнів та	причин, оцінюються на нижчу оцінку. Перескладання модулів	
перескладання:	відбувається із дозволу лектора за наявності поважних причин	
	(наприклад, лікарняний).	
Політика щодо	Списування під час модульних робіт та екзаменів заборонені	
академічної	(у т.ч. із використанням мобільних девайсів).	
доброчесності:		
Політика щодо	Відвідування занять є обов'язковим. За об'єктивних причин	
відвідування:	(наприклад, хвороба, міжнародне стажування) навчання може	
	відбуватись індивідуально (в он-лайн формі за погодженням із	
	деканом факультету).	

ШКАЛА ОЦІНЮВАННЯ СТУДЕНТІВ

 \mathbf{R} нр = $(\mathbf{M}1 + \mathbf{M}2 + \mathbf{M}3 + \mathbf{M}4)/4$ \mathbf{x} 0,7, де

R нр $\,-\,$ рейтинг з навчальної роботи,

М1,М2,М3,М4 – бали за модуль.

Для визначення рейтингу студента із засвоєння дисципліни R дис (до 100 балів) одержаний рейтинг з атестації (до 30 балів) додається до рейтингу студента з навчальної роботи R нр (до 70 балів): R дис = R нр + R ат

Рейтинг здобувача вищої освіти, бали	Оцінка національна за результати складання екзаменів заліків		
	екзаменів	заліків	
90-100	відмінно	зараховано	
74-89	добре		
60-73	задовільно		
0-59	незадовільно	не зараховано	