NATIONAL UNIVERSITY OF LIFE AND ENVIRONMENTAL SCIENCES OF UKRAINE
Department of Animal and Food Hygiene
named after Professor A.K. Skorokhodko

APPROVED

by the Dean of the Faculty of Veterinary Medicine,
Associate Professor _____ Oleksandr VALCHUK
"__2__"___June___ 2026

CURRICULUM OF ACADEMIC DISCIPLINE
FOOD HYGIENE

Area of knowledge 21 "Veterinary Medicine"
Specialty 211 – "Veterinary Medicine"
Academic programme "Veterinary Medicine"
Faculty (Education and Research Institute)_ Veterinary Medicine
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Kyiv – 2026

Description of discipline «Food Hygiene»

Discipline, field of studying, specialty, education and qualification level	
Field of knowlrdge	21 Veterinary
Training direction	211 – «Veterinary Medicine»
Speciality	
Educational and qualification level	Master
Characteristics of discipline	
Type	Normative
General quantity of hours	150
Quantity of credits ECTS	5
Quantity of modules	4
Course work	+
Form of control	Semester test, exam
Indicators of discipline for full-time and correspondence forms of training	
	full-time form
Year of training	4, 5
Semester	8, 9
Lectures	45 hours
Practical lessons	
Laboratory lessons	60 hours
Independent work	45 hours
Individual tasks	-
The number of weekly hours for full-time studing student: auditorium 8 semester 9 semester independent work of the student	 4 hours 4 hours

1. Aim, objectives, competencies and program lerning outcomes of the discipline

Aim of the program is the acquisition of theoretical and practical knowledge on the food quality and safety, practical skills in conducting testings of the products and to prepare students for independent practical work.

Objectives - Based on the job description of a veterinarian every student should have the following basic knowledge:

- ensure production of safe products only benign for the population and raw materials for industry;
- ruled out poisoning people diseases common to humans and animals (antropozoonozamy), through food and industrial raw materials of animal origin;
- prevent the spread of bacterial, viral, parasitic diseases of farm animals through meat, meat products and waste products of slaughter;
- assist in the improvement of livestock by detecting diseases in animals are slaughtered in slaughterhouses and meat processing enterprises of all forms of ownership.

List of subjects that must be studied beforehand

CC 14: Anatomy of Farm Animals
CC 15 Cytology, histology, embryology
CC 22 Veterinary virology
CC 18 Biochemistry, including general physical chemistry
CC 19 Animal Physiology
CC 24 Animal welfare, ethology and professional ethics
CC 25 Pathophysiology of animals
CC 27 Clinical diagnosis of animal diseases
CC 28 Veterinary pharmacology
CC 29 Veterinary radiobiology
CC 30 Parasitology and infectious diseases

Acquisition of competencies:

integral competence (IC):

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 3. knowledge and understanding of the subject field and profession.

GC 7. Ability to conduct research at the appropriate level.

GC 9. Ability to make informed decisions.

GC 13. The ability to make decisions and take action whilst adhering to the principle that corruption and any other forms of misconduct are unacceptable.

professional (special) competences (SC):

SC 4. The ability to conduct clinical research with the aim of formulating conclusions about the condition of animals or establishing a diagnosis.

SC 7. Ability to organize and conduct laboratory and special diagnostic studies and analyze their results.

SC 8. 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 12. Ability to develop and implement measures aimed at protecting the population from diseases common to animals and humans.

SC 13. The ability to develop strategies for the prevention of diseases of various etiologies.

SC 19. Ability to carry out educational activities among industry workers and the population.

SC 20. Ability to organize, implement and control document flow during professional activity.

Program learning outcomes (PLO)

PLO 9. Develop measures aimed at protecting the population from diseases common to animals and humans.

PLO 12. Know the rules and legislative regulations regarding the supervision and control of production, storage, transportation and sale of products of animal and plant origin.

PLO 14. To understand the essence of the processes of production, storage and processing of biological raw materials.

Day One Competensies

Act in a way that shows understanding of the ethical and legal framework within which veterinarians should work, including professional-, animal welfare-, client-, public health-, societal- and environmental-related aspects.

Demonstrate a basic knowledge of the organisation, management and legislation related to veterinary practice. Understand the economic and emotional context in which the veterinarian operates.

Promote, monitor and contribute to maintaining health and safety of oneself, patients, clients, colleagues and the environment in the veterinary setting; demonstrate knowledge about the principles of quality assurance; apply principles of risk management in practice.

Communicate effectively with clients, the public, professional colleagues and responsible authorities, using language appropriate to the audience concerned and in full respect of confidentiality and privacy.

Work effectively as a member of a multidisciplinary team in the delivery of services and recognise the contribution of all team members.

Be able to review and evaluate literature and presentations critically.

Understand and apply principles of One Health to ensure veterinary Good Clinical Practice, and research-based and evidence-based veterinary medicine.

Demonstrate ability to critically analyse evidence, cope with incomplete information, deal with contingencies, and adapt knowledge and skills to varied scenarios and contexts.

Use of professional capabilities to contribute to the advancement of veterinary knowledge and the One Health concept, in order to promote the health, safety and welfare of animals, people and the environment, as well as the United Nations Sustainable Development Goals.

Engage in self-audit and peer-group review processes on a regular basis in order to improve performance.

Obtain an accurate and relevant history of the individual animal or animal group, and its/their husbandry and environment.

Assess the physical condition, welfare and nutritional status of an animal or group of animals and advise the client on principles of husbandry, feeding, reproduction, production, welfare, individual health, herd health and public health.

Collect, preserve and transport samples, select appropriate diagnostic tests, interpret and understand the limitations of the test results.

Recognise signs of possible notifiable, reportable and zoonotic diseases as well as abuse of animals and take appropriate action, including notifying the relevant authorities.

Access the appropriate sources of data on information and legislation relating to animal care and welfare, animal movement, notifiable and reportable diseases, use of medicines, including responsible use of antimicrobials.

Report suspected adverse reactions through the appropriate channel.

Recommend and evaluate protocols for biosecurity, and apply these principles correctly.

Perform ante-mortem inspection of food-producing animals including paying attention to welfare aspects, systematic gross post-mortem examination, record observations, sample tissues, store and transport them.

Perform inspection of food and feed to correctly identify conditions affecting the quality and safety of products of animal origin, including related food technology.

Protect public health by identifying conditions that are directly or indirectly related to animals, their products and by-products, when they contribute to the protection, conservation and improvement of human health.

Advise on and implement preventive and eradication programmes appropriate to the disease and species, in line with accepted animal health, animal welfare, public health and environmental health standards.

2. Programme and structure of the discipline«Food Hygiene» for:

- full-time form of study;

Name of subject	Number of hours						
	weeks	total	including				
			Lect	Pract	Lab	Ind	S/w
1	2	3	4	5	6	7	8
Module 1. Introduction. The basic technology, hygiene and veterinary and sanitary examination of milk and diary products							
Introduction. General information about “Food hygiene with the basics of technology and standardization of products of animal origin”	1	1	1				
The main provisions of the laws of Ukraine "On Veterinary Medicine" and "On safety and quality of food"	1	2					2
Organoleptic and laboratory methods for milk quality determination.	1	2			2		
The chemical composition and technological properties of milk.	2	2	2				
Laboratory tests of milk quality parameters.	2	2			2		
Requirements for milk according to National Standard ДСТУ 3662-18	3	2			2		
Veterinary and sanitary examination and health assessment of milk in case of deasises and poisoning animals.	3	2	2				
Methods of milk fat content determination.	4	2			2		
Veterinary requirements for import to Ukraine of milk and dairy products.	4	2					2
Hygienic conditions for obtaining high-quality milk at farms.	4	2	2				
Determination of acidity and dry matter in milk.	5	2			2		
The impact of inhibitors on the quality of milk.	5	2					2
Veterinary control of milk quality and dairy products in food markets.	5	2	2				

Determination of milk proteins and ketones. Milk temperature treatment determination	6	2			2		
EU requirements for milk and dairy products.	6	3					3
Methods of microbiological investigation of milk.	7	2			2		
The main sources of microbial contamination of milk.	7	3					3
Determining the total bacterial count.	8	2					2
Methods of determining the quality of dairy products and cheeses.	8	2			2		
Fundamentals of standardization, quality management and certification.	9	3					3
Methods of butter testing.	9	2			2		
Colloquium	9	1			1		
Total		***45***	***9***		***19***		***17***
Module 2. Veterinary-sanitary examination of products of animal and vegetable origin							
Veterinary and sanitary examination of honey and other bee products..	10	2	2				
Laboratory methods for determining the quality of honey.	10	4			4		
Additional methods for determining quality and safety of bee products.	11	3					3
Veterinary hygiene and examination of fish and other aquatic organisms.	11	2	2				
Methods for determining the freshness of the fish.	12	2			2		
Veterinary requirements for import to Ukraine of food fish and other seafood.	12	4					4
Veterinary hygiene and examination of poultry eggs.	13	4	2		2		
Veterinary hygiene and examination of some egg products.	13	2					2
Veterinary hygiene and examination of plant food	14	2			2		
Determination of nitrates in foods of plant origin	14	4					4
Colloquium	15	1			1		
Total		***30***	***6***		***11***		***13***
Module 3. Animal slaughter, transportation, technology slaughtering and primary processing. Hygiene and control of slaughter products							
Slaughter animals, transportation and identification of fatness categories	1	4	4				
Requirements for the transport of slaughter animals and supporting documents	1	2			2		
Veterinary requirements for import of slaughtered animals to Ukraine	1	1					1
Premicess for processing of slaughtered animals and veterinary and sanitary demands. Acceptance of slaughtered	2-3	4	4				

animals.							
Research lymph nodes and carcasses of slaughtered animals	2-3	4			4		
Liarage requierments	3	1					1
The basic technology and hygiene of slaughtered animals and poultry processing	4	2	2				
Veterinary-sanitary examination of animal fats	4-5	4			4		
Study regulations on the organization of Veterinary food control	4-5	2					2
Organization and Methods veterinary expertize after slaughter and carcasses of slaughtered animals	6	2	2				
Methods and techniques of research animal carcasses after slaughter.	6	2			2		
Veterinary-sanitary examination of offal	6	1					1
Colloquium	7	1			1		
Total		***30***	***12***		***13***		***5***
Module 4. MEAT COMPOSITION AND characteristics							
The morphology, chemical composition and characteristics of meat of different animal species	8	2	2				
Determining the species origin of meat	8-9	4			4		
Changes in the meat after slaughter	9	2	2				
Definition of meat freshness	10	2			2		
Definition of rabbits and poultry meat freshness	10	2					2
The basic technology of hygiene and preserving of meat and meat products	11-12	4	4				
Veterinary-sanitary examination of sausages and canned meat	11-12	2			2		
Technology of making sausages, meat, canned products	12	2					2
Meat post mortem examination of in cases of infectious diseases		2	2				
Methods for determining the meat from diseased and dead animals		2			2		
Veterinary-sanitary examination of products of slaughter animals with invasive disease		2	2				
Veterinary hygiene and exam of animals slaughter products for trichinosis		2			2		
Veterinary-sanitary examination of rabbits and poultry meat at invasion		1					1
Veterinary-sanitary examination of products of slaughter animals with non-communicable diseases or poisonings		2	2				
Veterinary hygiene and exam of animals slaughter products for cysticercosis		2			2		
The method of meat and meat products decontamination		1					1

Food borne diseases and its prevention		2	2				
Methods for determination of toxic substances in meat		2			2		
Veterinary hygiene and exam of game		4	2				2
Colloquium		1			1		
Total		***45***	***18***		***17***		***10***
Course work							
Totally hours	**150**		**45**		**60**		**45**

3.Topics of lectures

No.	Topic	Hours
	Module 1	
1	Introduction. General information about "Veterinary hygiene with the basics of technology and standardization of products of animal origin"	2
	The chemical composition and technological properties of milk.	2
	Veterinary and sanitary examination and assessment of milk in case of deasises and poisoning animals	2
	Sanitary conditions for obtaining high-quality milk at farms.	2
	Veterinary control of milk quality and dairy products in food markets	2
	Module 2	
	Veterinary and sanitary examination of honey and other bee products.	2
	Veterinary hygiene and examination of fish and other aquatic organisms.	2
	Veterinary hygiene and examination of poultry eggs	1
2	Module 3	
	Slaughter animals, transportation and identification of fatness categories	2
	Premicess for processing of slaughtered animals and veterinary and sanitary demands. Acceptance of slaughtered animals.	4
	The basic technology and hygiene of slaughtered animals and poultry processing	2
	Organization and methods of post-mostem inspection of carcasses of slaughtered animals	2
	Module 4	2
	The morphology, chemical composition and characteristics of meat of different animal species	2
	Changes in the meat after slaughter	2
	The basic technology and hygiene of meat and meat products preservation	4
	Meat post mortem examination of in cases of infectious diseases	4
	Veterinary-sanitary examination of products of slaughter animals with invasive disease	2
	Veterinary-sanitary examination of products of slaughter animals with non-communicable diseases or poisonings	2
	Food borne diseases and its prevention	2
	Veterinary hygiene and exam of game	2

4.Topic of laboratory (practical, seminars) classes

No.	Topic	Hours
1	***Module 1. Introduction. The basic technology, hygiene and veterinary and sanitary examination of milk and diary products***	

2	Organoleptic and laboratory methods for determining the quality of milk.	2
...	Laboratory tests of milk quality parameters.	2
	Requirements for milk according to National Standard 3662-18	2
	Methods of milk fat content determination.	2
	Determination of acidity and dry matter in milk.	2
	Determination of milk proteins and ketones. Milk temperature treatment determination	2
	Methods of microbiological investigation of milk.	2
	Methods of determining the quality of dairy products and cheeses.	2
	Methods of butter testing.	2
	Module 2. Veterinary-sanitary examination of products of animal and vegetable origin	
	Laboratory methods for determining the quality of honey.	4
	Methods for determining the freshness of the fish.	2
	Veterinary hygiene and examination of poultry eggs.	2
	Veterinary hygiene and examination of plant food	2
	Module 3. Animal slaughter, transportation, technology slaughtering and primary processing. Hygiene and control of slaughter products	
	Requirements for the transport of slaughter animals and supporting documents	2
	Research lymph nodes and carcasses of slaughtered animals	4
	Veterinary-sanitary examination of meat freshness	4
	Methods and techniques of research animal carcasses after slaughter.	2
	Module 4. Meat composition and characteristics and safety control	
	Determining the species origin of meat	4
	Definition of meat freshness	2
	Veterinary-sanitary examination of sausages and canned meat	2
	Methods for determining the meat from diseased and dead animals	4
	Veterinary hygiene and exam of animals slaughter products for trichinosis	4
	Veterinary hygiene and exam of animals slaughter products for cysticercosis	2
	Methods for determination of toxic substances in meat	2

5. Topics of self-study

No.	Topic	Hours
1	***Module 1. Introduction. The basic technology, hygiene and veterinary and sanitary examination of milk and diary products***	
2	The main provisions of the laws of Ukraine "On Veterinary Medicine" and "On safety and quality of food"	2
...	Veterinary requirements for import to Ukraine of milk and dairy products.	2
	The impact of inhibitors on the quality of milk.	2
	EU requirements for milk and dairy products.	2
	The main sources of microbial contamination of milk.	2

	Determining the total bacterial count in cup.	2
	Fundamentals of standardization, quality management and certification.	2
	Module 2. Veterinary-sanitary examination of products of animal and vegetable origin	
	Additional methods for determining quality and safety of bee products.	2
	Veterinary requirements for import to Ukraine of food fish and other seafood.	2
	Veterinary hygiene and examination of some egg products.	2
	Determination of nitrates in foods of plant origin	2
	Module 3. Animal slaughter, transportation, technology slaughtering and primary processing. Hygiene and control of slaughter products	
	Veterinary requirements for import of slaughtered animals to Ukraine	2
	Liarage requierments	2
	Study regulations on the organization of Veterinary food control	2
	Veterinary-sanitary examination of offal	2
	Module 4. Meat composition, characteristics and safety control	
	Definition of rabbits and poultry meat freshness	2
	Technology of making sausages, meat, canned products	2
	Regulations on organization veterinary control	2
	Veterinary-sanitary examination of rabbits and poultry meat at invasion	1
	The method of meat and meat products decontamination	3

6. Methods of assessing expected learning outcomes:
(select necessary or add)

- oral or written survey;
- interview;
- test;
- defending laboratory/practical, design/graphical works, projects;
- peer-to-peer assessment, self-assessment.

7. **Teaching methods** ***(select necessary or add):***

- problem-based method;
- practice oriented studying method;
- case method;
- research based method;
- learning discussions and debates method;
- team work, brainstorm method
- gamification studying method.

8. Results assessment.

The student's knowledge is assessed by means of a 100-point scale converted into the national grades according to the "Exam and Credit Regulations at NULES of Ukraine" in force

8.1. Distribution of points by types of educational activities

Educational activity	Results	Assessment
Module 1.		
Laboratory work 1. DSTU raw milk	ELO 9, 12, 14. To know the definition of the discipline "Food Hygiene", the subject and methods of the discipline, the main laws on food safety. Know the main provisions of international and European regulations on food safety and quality. To have an understanding of the formation and development of veterinary and sanitary expertise and food hygiene, prominent scientists in the formation of veterinary and sanitary expertise. Know the chemical composition of cow's milk, its technological properties, as well as the chemical composition of milk from different species of animals. Know the requirements for milk according to DSTU 3662-18. Veterinary requirements for the import of milk and dairy products to Ukraine. Know the methods of milk sampling and preservation (according to DSTU ISO 707:2002, DSTU ISO 5538:2004, DSTU 4834:2007). Be able to conduct an organoleptic study and determine the density of milk (according to DSTU 6082:2009). Know the methods for determining the acidity and heat resistance of milk and be able to interpret them. Know how to determine the content of fat, moisture and solids in milk. Know how to determine the protein content of milk and the cheese suitability of milk. Know how to determine the purity of milk, be able to use various methods of determining the microbiological contamination of milk. Know what kind of milk can be considered natural, master the methods of detecting the facilitation of milk with inhibitory substances and dilution with water and/or collected milk.	**10**
Laboratory work 2. Determination of organoleptic parameters of milk, sampling, canning, determination of density		**10**
Laboratory work 3. Determination of acidity and heat resistance of milk		**10**
Laboratory work 4. Determination of fat, moisture, and solids content		**10**
Laboratory work 5. Determination of the protein content in milk and the cheese suitability of milk		**10**
Laboratory work 6. Determination of milk purity. Methods of microbiological control of milk		**10**
Laboratory work 7. Determination of milk naturalness		**10**
Module control work 1	Know the theoretical material for module 1	**30**
Total for module 1	-	**100**
Semester 8. Content module 2. Hygiene of milk and dairy products		
Laboratory work 8. Determination of milk proteins and ketones. Milk temperature treatment determination ï	PLO 9, 12, 14. Know what are the main measures to obtain high-quality milk. 12 golden rules of milking, basic means for processing milking equipment. Be able to plan and monitor compliance with hygiene requirements along the raw milk production chain in accordance with current legislation. Know the list of infectious diseases that prohibit the sale of milk, milk disinfection regimens, the nature	10
Laboratory work 9. Methods of determining the quality of dairy products cheeses		10
Laboratory work 10. Methods of determining the quality of dairy products and cheeses		10

Laboratory work 11. Methods of butter testing	of mastitis, factors, and the veterinary value of milk with mastitis. Understand the significance of zoonoses and foodborne animal diseases for human health, know the principles of analysis and risk assessment. Know the regulations on the production of drinking milk, classification of drinking milk, technological processes of drinking milk production, packaging, labeling, transportation of drinking milk. Knowledge of hygienic requirements along the drinking milk production chain in accordance with current legislation To know the regulatory legal acts concerning fermented milk products, their classification, nutritional value, general characteristics of milk as a raw material for dairy products. To know the classification of fermented milk products, the basics of fermented milk production technology, the main types of starter cultures in the production of fermented milk products, the production scheme of sour cream and cottage cheese. Knowledge of hygienic requirements along the chain of production of fermented milk products in accordance with current legislation. To know the classification of cheeses, the concept of cheese suitability, raw materials for cheese production, general technological operations of cheese production, Knowledge of hygienic requirements along the cheese production chain in accordance with applicable law. Know the classification of butter, requirements for raw materials for the production of butter, general technological operations of butter production. Knowledge of hygienic requirements along the butter production chain in accordance with applicable law Know the classification of canned milk, requirements for raw materials for the production of canned milk, canned milk. Knowledge of hygienic requirements along the canned milk production chain in accordance with current legislation. Master the methods of detecting the presence of abnormal milk and quality control of milk pasteurization. To master the methods of research of dairy and fermented milk products (according to DSTU 2212:2003; DSTU 4539:2006; DSTU4540:2006; DSTU 4418:2005; DSTU 4417:2005; DSTU 4554:2006). Master the basics of hard rennet cheese production technology, learn how to conduct	10
Laboratory work 12. Laboratory methods for determining the quality of honey		10
Laboratory work 13. Methods for determining the freshness of the fish		10
Laboratory work 14. Veterinary hygiene and examination of poultry eggs		10

	cheese examination: take samples for research, determine organoleptic indicators and establish the main physical and chemical parameters using laboratory methods To master the methods of butter research (organoleptic, moisture content, table salt, determination of falsifications). DSTU 4399:2005 Know the main provisions of DSTU 2661:2010. Drinking cow's milk. Be able to conduct an organoleptic evaluation of cow's drinking milk, determine the compliance of labeling and packaging of drinking milk in accordance with the General Technical Conditions of DSTU 2661:2010 (sections 8 and 9). Know the main provisions of DSTU 4399:2005 "Butter". Be able to determine the acidity of the fat phase of butter in degrees Kettstofer. Know the basic requirements for kefir according to DSTU 4417: 2005 "Kefir. Technical specifications". Be able to determine the indicators of kefir according to DSTU 4417:2005, determine the organoleptic quality indicators of kefir (consistency, taste, smell), visual inspection of appearance, color, quality of packaging and labeling. Know the basic requirements for hard cheeses according to DSTU 6003:2008 "Hard cheeses. General technical conditions". Calculate the energy value of cheese. Familiarize yourself with the provisions of DSTU 4404:2005. Canned milk products. Sterilized condensed milk in cans. General technical conditions. Be able to conduct an organoleptic evaluation of sterilized condensed milk in cans and determine the mass concentration of nisin.	
Module control work 2	Know the theoretical material for module 2	30
Total for module 2	-	100
In total, for 8 semesters, academic work, including tests for modules		70
Credit		30
Total (8th semester)		100
Semester 9. Module 3 Requirements for slaughter animals, their transportation, processing facilities, inspection of slaughter animals		
Laboratory work 15. Requirements for the transport of slaughter animals and supporting documents	PLO 9, 12, 14. Determine the pre-slaughter condition of animals and poultry and their categories of fatness; veterinary and sanitary principles of preparation of animals and poultry for slaughter and technologies for their processing. To master the organization and methods of post-	20
Laboratory work 16. Research lymph nodes and carcasses of slaughtered animals		20

Laboratory work 17. Veterinary-sanitary examination of meat freshness	slaughter inspection and organs of slaughtered animals, poultry, commercial wildlife at enterprises, laboratories of veterinary expertise of agro-food markets, supermarkets, food industrial refrigerators; to master modern research methods; have a scientifically based sanitary assessment of raw materials and products of animal origin; be able to draw up veterinary documents; determine the freshness of meat; recognize meat obtained from sick animals, conduct its veterinary and sanitary assessment.	20
Laboratory work 18. Methods and techniques of research animal carcasses after slaughter.		10
Module control work 3	Know the theoretical material for module 3	30
Total for module 3	-	100
Semester 9. Content module 4: Chemical composition of autolysis, meat preservation, inspection for infectious and parasitic diseases		
Laboratory work 20. Inspection of animal slaughter products for trichinosis	PLO 9, 12, 14. Have an understanding of the chemical composition, biological value and commodity evaluation of meat and other slaughtered animal products. Have an understanding of meat autolysis. Know the veterinary and sanitary assessment of products of animal origin for infectious, invasive, diseases, their prevention and prevention of consumption. Be able to: carry out veterinary and sanitary measures; resolve issues of sanitary and hygienic research and veterinary and sanitary welfare of food and raw materials of animal origin; have the organization and methodology of post-slaughter veterinary and sanitary examination of carcasses and organs of slaughtered animals, poultry, commercial wild animals at enterprises, laboratories of veterinary examination of food markets, supermarkets, food industrial refrigerators; have modern methods of research on veterinary examination; have a scientifically sound sanitary assessment of raw materials and products of animal origin. To carry out veterinary and sanitary measures; to solve issues of sanitary and hygienic research and veterinary and sanitary welfare of food products and raw materials of animal origin; to have modern methods of food research; to have a scientifically sound sanitary assessment of raw materials and products of animal origin.	20
Laboratory work 21. Veterinary hygiene and exam of animals slaughter products for cysticercosis		10
Laboratory work 22. Інспектування продуктів забою тварин при інших паразитарних хворобах		10
Laboratory work 23. Determining the species origin of meat		10
Laboratory work 24. Inspection of sausage products		10
Laboratory work 25 . Inspection of canned goods		10
Module control work 4.		30
Total for module 4		100
Class work	**(M1 + M2+M3+M4)/4*0,7 ≤ 70**	
Exam/credit	**30**	
Total for year	**(Class work + exam) ≤ 100**	

8.2.

8.3. Scale for assessing student's knowledge

Student's rating, points	National grading (exam/credits)
90-100	excellent
74-89	good
60-73	satisfactory
0-59	unsatisfactory

8.4. Assessment policy

Deadlines and exam retaking rules	*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 rules	*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 rules	*EXAMPLE:* Attendance is compulsory. For good reasons (e.g. illness, international internship), training can take place individually (online by the faculty dean's consent)

9. Teaching and learning aids

- e-learning course of the discipline (*https://elearn.nubip.edu.ua/course/view.php?id=1881)*;
- lectures and presentations (in electronic form);
- textbooks, manuals, tutorials;
- guidelines for studying a discipline by full-time students.

10. Recommended sources of information

1. Gidelines on veterinary and sanitary examination with the basics of technology and standardization of meat and meat products Yakubchak OM, Kozak MV, Vlasenko VV, Oliynyk LV, Zagrebelny VO ., Taran TV, Adamenko LV, Galaburda MA, Bilyk RI
2. The procedure for sampling and identification of samples for veterinary and sanitary control of food and feed Yakubchak OM, Mezhenskaya NA, Tkachuk SA, Bilyk RI
3. Microbiology of milk and dairy products with the basics of veterinary examination. Edited by Kasyanchuk VV
4. Special biochemistry: a textbook for students of higher educational institutions [Edited by the corresponding member of NAAS SD Melnichuk.] Authors: SD Melnychuk, C.B. Khizhnyak, VI Tsvilikhovsky, Grishchenko, VA Tomchuk, EA Derkach, N.M. Melnykova, L.G. Kalachnyuk, G.I. Kalachnyuk, O.M. Tupytska, VA - Kyiv, 2014. - 371 p.
5. Sustainable Development Strategy: European Horizons [Electronic resource]: Textbook / Yakymenko, L. Petrashko, T. Dyman, O. Salavor, E. Shapovalov, M. Galaburda, O. Nychyk, O. Martyniuk. - K.: NUFT, 2022. - 337 p.
6. Shenaur O.V.: Fundamentals of food safety and HACCP system in restaurant business establishments: a textbook.. – Rivne, 2023. – 94 p.

7. International Finance Corporation. Food Safety Toolkit; International Finance Corporation, Washington, DC, 2016. https://doi.org/10.1596/30897.
8. Food Safety in the 21st Century: Public Health Perspective; Dudeja, P., Gupta, R. K., Minhas, A. S., Eds.; Academic Press is an imprint of Elsevier: Amsterdam, 2017.
9. International Finance Corporation. Food Safety Handbook: A Practical Guide for Building a Robust Food Safety Management System; Washington, DC: World Bank, 2020. https://doi.org/10.1596/978-1-4648-1548-5.
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