

Ministry of Education and Science of Ukraine
Sumy National Agrarian University
Faculty of Veterinary Medicine
Department of Veterinary and Sanitary Inspection, Microbiology, Hygiene and
Pathological Anatomy

MODULE SYLLABUS

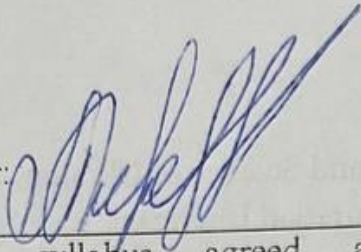
HAZARD ANALYSIS AND CRITICAL CONTROL POINTS (HACCP) SYSTEM

Implemented within the educational program 21 VETERINARY MEDICINE
in specialty **211 VETERINARY MEDICINE**

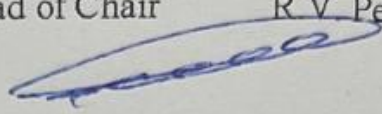
Level of higher education: the second master's level of higher education

Sumy-- 2026

Author:



Fotina T.I., doctor of vet. science, Professor

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| Module syllabus agreed at the Department of Veterinary and Sanitary Inspection, Microbiology, Hygiene and Pathological Anatomy | protocol dated 2.06.2026 № 15 |
| | The Head of Chair <u>R.V. Petrov</u>  |

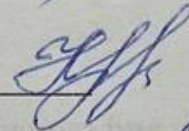
Agreed:

Guarantor of the educational program



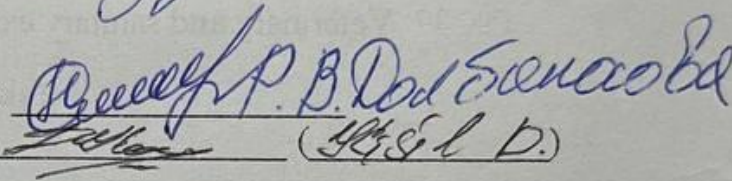
Oleksandr CHEKAN

Dean of the faculty,
where educational programs implemented



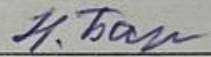
Lyudmila NAGORNA

Syllabus review (attached) is provided by:


P. B. Dod Senecoba (Ph.D.)

Representative of the Department of Education Quality assurance,
licensing and accreditation

(N. Baranik)



Registered in electronic data base

22.06

2026

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 |
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1. MODULE OVERVIEW

| | | | | | |
|------|---|---|---------------------|------------|-----------------|
| | Name OK | Hazard Analysis and Critical Control Points (HACCP) system | | | |
| 2. | Faculty / department | Faculty of Veterinary Medicine | | | |
| 3. | Type (compulsory or optional) | compulsory | | | |
| 4. | Program(s) to which module is attached (to be filled in for compulsory types) | Veterinary medicine 211 | | | |
| 5. | Module can be suggested for (to be filled in for optional types) | Veterinary medicine 211 The second master's level of higher education | | | |
| 6. | Level of the National Qualifications Framework | 7 | | | |
| 7. | Semester and duration of study | 12 rd semester, 15 weeks | | | |
| 8. | ECTS credits number | 5 | | | |
| 9. | Total workload and time allotment | Contact work (classes) | | | Individual work |
| | | Lectures | Practical / seminar | Laboratory | |
| 10. | 3d semester | 30 | | 46 | 74 |
| 11. | Language of instruction | English | | | |
| 12. | Module leader | Fotina Tetiana | | | |
| 11.1 | Contact Information | Sumy NAU, Faculty of Department of Veterinary and Sanitary Inspection, Microbiology, Hygiene and Pathological Anatomy. Room. 65 a tif_ua @ meta.ua | | | |
| 13. | General description of the educational component | <p>Structure consists of the following sections:</p> <p>General principles of European legislation in the field of food safety. Activities of the European Food Safety Authority (EFSA). Activities of the International Organization for Standardization (ISO).</p> <p>Legislation in the field of market surveillance. The system of rapid exchange of information on products presenting a serious risk, and notification procedures for its updates.</p> <p>Criteria for food safety. Microbiological criteria. Contaminants in food products. Pesticide residues. Food safety control.</p> <p>Classification of regulatory documents related to food safety.</p> <p>"The ability and willingness to organize and control technological processes for production, processing, storage, transportation and sale of products of animal origin".</p> | | | |
| 14. | The purpose of the educational component | formation of future specialists with deep theoretical knowledge how Conduct a pre-slaughter veterinary examination of animals and birds. Conduct post-mortem veterinary and sanitary inspection of carcasses and internal organs of animals and birds. Take samples, preserve material, arrange and send to the veterinary laboratory for physical and chemical, bacteriological, virological, | | | |

| | | |
|-----|---|--|
| | | mycological, toxicological and radiometric research. Prepare smears-prints from samples, materials sent for bacteriological research and staining them by various methods. Conduct veterinary and sanitary examination livestock, beekeeping and aquatic products and give reasoned conclusion about their quality and biological safety. |
| 15. | Prerequisites for studying OK, the relationship with other educational components of OP | <ol style="list-style-type: none"> 1. The educational component is based on such OK as "Animal Genetics and Breeding", "Bioethics, Biosafety, Biosecurity and Ecology", "Normal and Pathological Physiology of Animals", "Parazitology". 2. The educational component is the basis for such OK as " Veterinary hygiene and sanitation of animals ", "Clinical and laboratory diagnosis of animal diseases", "Veterinary virusology", "Organization and economics of veterinary affairs", " Veterinary international and national legislation". 3. The main component is incompatible (does not have) |
| 16. | The policy of academic integrity | <ul style="list-style-type: none"> • attending classes. In case of skipping classes without good reason, the student must hand over to the teacher thematic situational tasks, • access to higher education for people with special needs. Applicants for higher education with special needs must inform the teacher of the discipline in advance. At the request of the survey, the acceptance of tests and presentations is carried out individually, in the time allotted for consultations (according to this syllabus), in the laboratory or online; • academic activity. Answers to situational tasks and questions of the thematic survey depend on the level of knowledge of the student and are carried out at his request. • laboratory classes. The use of a mobile phone, tablet or other mobile devices during the lesson (except as provided in the curriculum and guidelines of the teacher) is prohibited. <p>Prevention of academic plagiarism. Write-offs and plagiarism are not allowed; in case of dishonesty the work is not credited. <u>Plagiarism check algorithm</u> systems are also tools for counteracting violations of academic integrity. 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.</p> <p>Formation of skills of academic writing and thinking. Recommendations for making presentations. The tasks of independent work provided by the program must be completed in a timely manner, with correct reference to sources of information. During the preparation it is necessary to study the basic and reference literature, which will help to create a logical, meaningful report when presenting the presentation and competently answer the questions of classmates and the teacher. Under certain circumstances (skipping classes for good reasons, the introduction of distance learning, etc.) the student can send a presentation for assessment individually to the e-mail address specified in this syllabus.</p> |
| 17. | Educational | Veterinary and sanitary inspection, meat, meat products, milk, |

| | | |
|-----|--------------------|---|
| | component keywords | dairy products, fish, fish products, eggs, HACCP. |
| 18. | Access to Moodle. | https://cdn.snau.edu.ua/moodle/course/view.php?id=5697 |

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

| 3d semester MLOs: On successful completion of the module the learner will be able to: | Program learning outcomes to be achieved by the OK (indicate the number according to the numbering given in the OP) | | How assessed |
|--|---|---------|---|
| | PLO9 | PLOs 12 | |
| <p>MLO 1. General principles of European legislation in the field of food safety European food safety legislation is based on a “farm to fork” approach, meaning that food safety is ensured at every stage of the food chain — from primary production to the final consumer. The main principles include: High level of protection of human life and health Risk analysis as the basis for decision-making Traceability of food and feed products Responsibility of food business operators for food safety Transparency of decision-making processes Precautionary principle (preventive action in case of scientific uncertainty)</p> | + | + | survey of theoretical issues, performing tasks in laboratory and practical classes, testing, performing tasks of independent work |
| <p>MLO2. Concept of vulnerability assessment to food fraud Vulnerability assessment (Food Fraud Vulnerability Assessment) is a systematic approach used to determine how susceptible a product or supply chain is to intentional fraud. Objective: identify weak points in the supply chain assess the risk of economically motivated fraud prevent adulteration before it occurs Main vulnerability factors: economic attractiveness of the product (high-value ingredients) complexity of the supply chain history of fraud involving the product lack or weakness of supplier control ease of substitution, dilution, or mislabeling</p> | | + | survey of theoretical issues, performing tasks in laboratory and practical classes, testing, performing tasks of independent work |
| <p>MLO 3 Objective To understand and apply in practice: the concepts of leadership and policy in the food safety management system; actions for responding to risks and opportunities; management of resources, working environment, and communication. Requirements of ISO 22000:2018 The ISO 22000:2018 standard defines requirements for a food safety management system, including: risk-based thinking; leadership and commitment of top management; process planning and control; resource management; effective communication within the supply chain; continuous system improvement. Differences between ISO 22000:2018 and ISO 22000:2005 Key changes include: introduction of a risk-based approach; strengthened role of top management (leadership); alignment with the High Level Structure (HLS); clearer integration of HACCP and PRP principles; greater emphasis on the organizational context; updated requirements for communication and management of change.</p> | + | + | survey of theoretical issues, performing tasks in laboratory and practical classes, testing, performing tasks of independent work |

| | | | |
|--|---|---|---|
| <p>PDCA Principle (Plan–Do–Check–Act) Plan: identify risks, objectives, and processes; Do: implement processes; Check: monitor and analyze results; Act: improve the system. ISO High Level Structure (HLS) This is a unified structure for ISO standards that ensures: a consistent logic across all ISO management system standards; easier integration of different management systems; common clauses (context, leadership, planning, support, operation, performance evaluation, improvement).+</p> | | | |
| <p>MLO 4. Implementation of HACCP systems in the production, processing, and storage of milk and dairy products. Requirements for raw materials, processing, storage, and distribution. Characteristics of biological, chemical, and physical hazards associated with milk and dairy products.</p> | + | + | survey of theoretical issues, performing tasks in laboratory and practical classes, testing, performing tasks of independent work |
| <p>MLO 5. Develop and implement a HACCP system for the production, processing, and storage of food products of plant origin. Requirements for raw materials, processing, storage, and distribution. Characteristics of biological, chemical, and physical hazards associated with food products of plant origin.</p> | + | + | survey of theoretical issues, performing tasks in laboratory and practical classes, testing, performing tasks of independent work |
| <p>MLO 6. Conduct an analysis of the HACCP system in the production, processing, and storage of bee and poultry products. Requirements for raw materials, processing, storage, and distribution. Specific features of biological, chemical, and physical hazard factors for food products of apiculture and poultry farming.”</p> | + | + | survey of theoretical issues, performing tasks in laboratory and practical classes, testing, performing tasks of independent work |

MODULE INDICATIVE CONTENT 3d semester

| Topics | Distribution of hours | | | Learning resources |
|---|-----------------------|---------------------|----|---------------------|
| | Directed study | Self-directed study | | |
| | Lectures | lab | | Learning resources) |
| <p>Topic 1 Historical aspects of the creation of international food legislation. Introduction. Historical aspects. Codex Alimentarius. Codex Alimentarius Commission Codex Alimentarius Commission.</p> | 4 | 8 | 20 | 1,7,8. |
| <p>Topic 2 HACCP, or the Hazard Analysis and Critical Control Points system. What HACCP is. The origin of HACCP. Advantages of implementing HACCP systems. HACCP and the specifics of small and medium-sized enterprises.</p> | 6 | 8 | 10 | 2, 3,8. |
| <p>Topic 3 Overview of the national and international regulatory and legal framework of food legislation. Legislative aspects. General information.</p> | 6 | 8 | 10 | 4, 5, 12. |
| <p>Topic 4. Good Manufacturing Practice (GMP). Standard sanitation operating procedures at meat processing enterprises. Prerequisite programs and preparatory steps for the development and implementation of HACCP systems. Implementation of the HACCP system.</p> | 4 | 8 | 10 | 5, 6,13. |
| <p>Topic 5. New approaches to the technology of obtaining and veterinary control over the quality and safety of milk and dairy products. Chemical composition and technological properties of milk. Veterinary and sanitary examination and sanitary assessment of milk for diseases and poisoning of animals.</p> | 6 | 8 | 10 | 1, 4, 7, 9. |
| <p>Topic 6. A brief overview of European legislation on the hygiene and safety of meat products. The General Food Law.</p> | 4 | 6 | 14 | 4,5,9 |
| Total 90 | 30 | 46 | 74 | |

METHODS OF TEACHING AND TEACHING 3d semester

| MLOs | Teaching methods (directed study) | Learning methods (self-directed study) | Hours |
|---|---|---|-------|
| <p>MLO1. General principles of European legislation in the field of food safety European food safety legislation is based on a “farm to fork” approach, meaning that food safety is ensured at every stage of the food chain — from primary production to the final consumer. The main principles include: High level of protection of human life and health Risk analysis as the basis for decision-making Traceability of food and feed products Responsibility of food business operators for food safety Transparency of decision-making processes Precautionary principle (preventive action in case of scientific uncertainty)</p> | <p>Methods of teaching by source of knowledge: <i>Verbal:</i> story, explanation, conversation (heuristic and reproductive), lecture, instruction. <i>Visual:</i> demonstration, illustration, observation. Active methods: (use of technical teaching aids, use of training and control tests) Interactive teaching methods: (use of multimedia technologies).</p> | <p>Methods of teaching by source of knowledge: <i>Verbal:</i> work with a book (reading, translation, writing, taking notes, making tables, graphs, reference notes), <i>Visual:</i> observation. Teaching methods by the nature of the logic of cognition (analytical, <i>synthesis methods</i>, and <i>inductive method</i>, <i>deductive method</i>, <i>translational method</i>). Active methods (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))</p> | 12 |
| <p>MLO 2. Concept of vulnerability assessment to food fraud Vulnerability assessment (Food Fraud Vulnerability Assessment) is a systematic approach used to determine how susceptible a product or supply chain is to intentional fraud. Objective: identify weak points in the supply chain assess the risk of economically motivated fraud prevent adulteration before it occurs Main vulnerability factors: economic attractiveness of the product (high-value ingredients) complexity of the supply chain history of fraud involving the product lack or weakness of supplier control ease of substitution, dilution, or mislabeling</p> | <p>Methods of teaching by source of knowledge: <i>Verbal:</i> story, explanation, conversation (heuristic and reproductive), lecture, instruction. <i>Visual:</i> demonstration, illustration, observation. Active methods: (use of technical teaching aids, use of training and control tests) Interactive methods will present ting : (use of multimedia technologes. of</p> | <p>Methods of teaching by source of knowledge: <i>Verbal:</i> work with a book (reading, translation, writing, taking notes, making tables, graphs, reference notes), <i>Visual:</i> observation. Teaching methods by the nature of the logic of cognition (analytical, <i>synthesis methods</i>, and <i>inductive method</i>, <i>deductive method</i>, <i>translational method</i>). Active methods (brainstorming, crossword puzzles, debates, round tables, binary classes, business and role-playing games, group research). Interactive technologies teach ting (use of multimedia technology, learning dialogue, cooperation of students (cooperation).</p> | 12 |
| <p>MLO 3 Concept of vulnerability assessment to food fraud Vulnerability assessment (Food Fraud Vulnerability</p> | <p>Methods of teaching by source of knowledge: <i>Verbal:</i> story, explanation, conversation (heuristic and reproductive), lecture, instruction.</p> | <p>Methods of teaching by source of knowledge: <i>Verbal:</i> work with a book (reading, translation, writing, taking notes, making tables, graphs, reference</p> | 12 |

| | | | |
|--|--|--|----|
| <p>Assessment) is a systematic approach used to determine how susceptible a product or supply chain is to intentional fraud.</p> <p>Objective: identify weak points in the supply chain assess the risk of economically motivated fraud prevent adulteration before it occurs</p> <p>Main vulnerability factors: economic attractiveness of the product (high-value ingredients) complexity of the supply chain history of fraud involving the product lack or weakness of supplier control ease of substitution, dilution, or mislabeling</p> | <p><i>Visual:</i> demonstration, illustration, observation.</p> <p>Active methods: (use of technical teaching aids, use of training</p> | <p>notes), <i>Visual:</i> observation.</p> <p>Teaching methods by the nature of the logic of cognition (analytical, <i>synthesis methods</i>, and <i>inductive method, deductive method, translational method</i>).</p> <p>Active methods (brainstorming, crossword puzzles, debates, round tables, binary classes, business and role-playing games, group research).</p> <p>Interactive technologies teach ting</p> | |
| <p>MLO 4. Develop and implement a HACCP system for the production, processing, and storage of food products of plant origin. Requirements for raw materials, processing, storage, and distribution. Characteristics of biological, chemical, and physical hazards associated with food products of plant origin.</p> | <p>Methods of teaching by source of knowledge: <i>Verbal:</i> story, explanation, conversation (heuristic and reproductive), lecture, instruction. <i>Visual:</i> demonstration, illustration, observation. Active methods: (use of technical teaching aids, use of training and control tests) Interactive methods will present ting : (ie use of multimedia technologies, spreadsheets.</p> | <p>Methods of teaching by source of knowledge: <i>Verbal:</i> work with a book (reading, translation, writing, taking notes, making tables, graphs, reference notes), <i>Visual:</i> observation. Teaching methods by the nature of the logic of cognition (analytical, <i>synthesis methods</i>, and <i>inductive method, deductive method, translational method</i>).</p> <p>Active methods (brainstorming, crossword puzzles, debates, round tables, binary classes, business and role-playing games, group research).</p> <p>Interactive technologies teach ting (use of multimedia technology, learning dialogue, cooperation</p> | 24 |
| <p>MLO 5. New approaches to the technology of obtaining and veterinary control over the quality and safety of milk and dairy products.</p> | <p>Methods of teaching by source of knowledge: <i>Verbal:</i> story, explanation, conversation (heuristic and reproductive), lecture, instruction. <i>Visual:</i> demonstration, illustration, observation. Active methods: (use of technical teaching aids, use of training and control tests) Interactive methods will present ting : (ie use of multimedia technologies, spreadsheets.</p> | <p>Methods of teaching by source of knowledge: <i>Verbal:</i> work with a book (reading, translation, writing, taking notes, making tables, graphs, reference notes), <i>Visual:</i> observation. Teaching methods by the nature of the logic of cognition (analytical, <i>synthesis methods</i>, and <i>inductive method, deductive method, translational method</i>).</p> <p>Active methods (brainstorming, crossword puzzles, debates, round tables, binary classes, business and role-playing games, group research).</p> <p>Interactive learning technologies (use of multimedia technologies, dialogue learning, student cooperation</p> | 12 |

| | | | |
|---|---|--|-----------|
| <p>MLO 6 Conduct an analysis of the HACCP system in the production, processing, and storage of bee and poultry products. Requirements for raw materials, processing, storage, and distribution. Specific features of biological, chemical, and physical hazard factors for food products of apiculture and poultry farming.”</p> | <p>Methods of teaching by source of knowledge: <i>Verbal:</i> story, explanation, conversation (heuristic and reproductive), lecture, instruction. <i>Visual:</i> demonstration, illustration, observation. Active methods: (use of technical teaching aids, use of training and control tests) Interactive methods will present ing : (ie use of multimedia technologies, spreadsheets.</p> | <p>Methods of teaching by source of knowledge: <i>Verbal:</i> work with a book (reading, translation, writing, taking notes, making tables, graphs, reference notes), <i>Visual:</i> observation. Teaching methods by the nature of the logic of cognition (analytical, <i>synthesis methods</i>, and <i>inductive method, deductive method, translational method</i>). Active methods (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</p> | <p>18</p> |
|---|---|--|-----------|

5. ASSESSMENT

5.1. Diagnostic assessment

5.2. Summative assessment

5.2.1. Intended learning outcomes methods: 3d semester

| № | Summative assessment methods | Grades | Deadline |
|----|--|------------------|--|
| 1. | Thematic survey | 20 points / 20 % | Weekly |
| 2. | Execution of tasks in laboratory- practical classes | 35 points / 35 % | According to the schedule |
| 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 |

5.2.2. Grading criteria

| Summative assessment method | Unsatisfactory | Satisfactorily | Good | Excellent |
|---|---|--|---|---|
| Thematic survey | <p><12 points</p> <p>The student can play only individual fragments of the course.</p> | <p>12-15 points</p> <p>Most requirements are met, but some components are missing or insufficiently disclosed, there is no analysis of other approaches to the issue</p> | <p>15-18 points</p> <p>All requirements of the task are fulfilled</p> | <p>20 points</p> <p>All requirements of the task are fulfilled, creativity, thoughtfulness is shown, own solution of a problem is offered</p> |
| Execution of tasks in laboratory- practical classes | <p><12 points</p> <p>Task requirements not met</p> | <p>12-15 points</p> <p>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</p> | <p>15-18 points</p> <p>The student learned the basic material, and understands and performs laboratory- practical tasks and has suggestions for the direction of their solutions. Understands the main provisions that are decisive in the course, can solve similar problems with those discussed with the teacher, but allows a small</p> | <p>20 points</p> <p>Competitor realism is a theoretical ground material discipline in carrying laboratory- practical work, able to analyze and correlate the results obtained from the discipline acquired knowledge, skill</p> |

| | | | | |
|--|--|--|--|---|
| | | | number of inaccuracies . | Is , practical skills |
| Multiple choice test | ≤ 5 points | 6-9 points | 10–13 points | 14-15 points |
| | The student gives the correct answer to several questions (\leq 33% of the correct answers) . | The student has some knowledge provided in the program of the discipline, has the basic provisions being studied and gives the correct answer to several questions (34-59% of 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 report independently of the processed 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 is not performed independently is processing material. | Despite the fact that the program of discipline complied by student, but some components are missing, a student worked passively. | Know the basic and provisions of the discipline, but not 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. |

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.

| № | Formative Assessment elements | | Date | |
|------------------------------------|--|-----------------------|--|------------------|
| | 3d semester | | | |
| 1 | Oral feedback after studying topics 1 - 3 , 6-8 | | 3 weeks | |
| 2 | Written feedback after studying topics 4 - 5 | | 8 weeks | |
| 3 | Written feedback from the teacher while working on laboratory-practical tasks | | Within 1 week after execution | |
| 4 | Oral feedback from the teacher after the story with a presentation on the topic of independent study of the discipline | | During classes | |
| № | Summative assessment methods 4 th semester | Grades | Deadline | |
| | Autumn semester | | | |
| 2. | Thematic survey | 20 points / 20 % | Weekly | |
| 3. | Execution of tasks in laboratory- practical classes | 35 points / 35 % | According to the schedule | |
| 5. | Report with a presentation on the subject of independent study of the discipline | 45 points / 45 % | According to the schedule of delivery of modules | |
| Summative assessment method | Unsatisfactory | Satisfactorily | Good | Excellent |

| | | | | |
|--|--|--|--|--|
| Thematic survey | <i><12 points</i> | <i>12-15 points</i> | <i>15-18 points</i> | <i>20 points</i> |
| | 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 | <i><12 points</i> | <i>12-15 points</i> | <i>15-18 points</i> | <i>20 points</i> |
| | 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 learned the basic material, and understands and performs laboratory-practical tasks and has suggestions for the direction of their solutions. Understands the main provisions that are decisive in the course, can solve similar problems with those discussed with the teacher, but allows a small number of inaccuracies . | Competitor realism is a theoretical ground material discipline in carrying laboratory-practical work , able to analyze and correlate the results obtained from the discipline acquired knowledge , skills , practical skills |
| Multiple choice test | <i>≤ 5 points</i> | <i>6-9 points</i> | <i>10–13 points</i> | <i>14-15 points</i> |
| | The student gives the correct answer to several questions (≤ 33% of the correct answers) . | The student has some knowledge provided in the program of the discipline, has the basic provisions being studied and gives the correct answer to several questions (34-59% of 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 report independently of the processed material | <i>< 9 points</i> | <i>10 - 19 points</i> | <i>20 - 39 points</i> | <i>40 - 45 points</i> |
| | The student does not have a complete understanding of the material on the discipline. The student is not performed independently in processing material. | Despite the fact that the program of discipline complied by student, but some components are missing, a student worked passively. | Know the basic and provisions with crucial at 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. |

6. LEARNING RESOURCES

Main Literature

1. Veterinary and sanitary examination with the basics of technology and standardization of livestock products / O.M. Yakubchak, VI Khomenko, SD Melnychuk and others. - Kyiv: LLC "Bioprom", 2005. 799 p.

2. Workshop on veterinary and sanitary examination with the basics of technology and standardization of livestock and crop products / O.M. Yakubchak and others. Kyiv: Bioprom Company, 2012. 256 p.
3. Yatsenko I. V., Bohatko N. M., Bukalova N. V., Bibin I. A., Fotina T. I. Hygiene and Examination of Products of Primary Processing of Slaughter Animals: Textbook. Kharkiv: Nova Ideolohiia, 2019. 268 p.
4. Yatsenko I. V., Bohatko N. M., Bukalova N. V., Bibin I. A., Fotina T. I. Hygiene of Plant Food Products: Textbook. Kharkiv, 2025. 321 p.
5. Yatsenko I. V., Bohatko N. M., Bulhakova N. V., et al. Hygiene and Examination of Edible Aquatic Organisms and Their Processed Products. Part 1: Hygiene and Examination of Fishery Products: Textbook. Kharkiv: Disa Plus, 2017. 680 p.
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