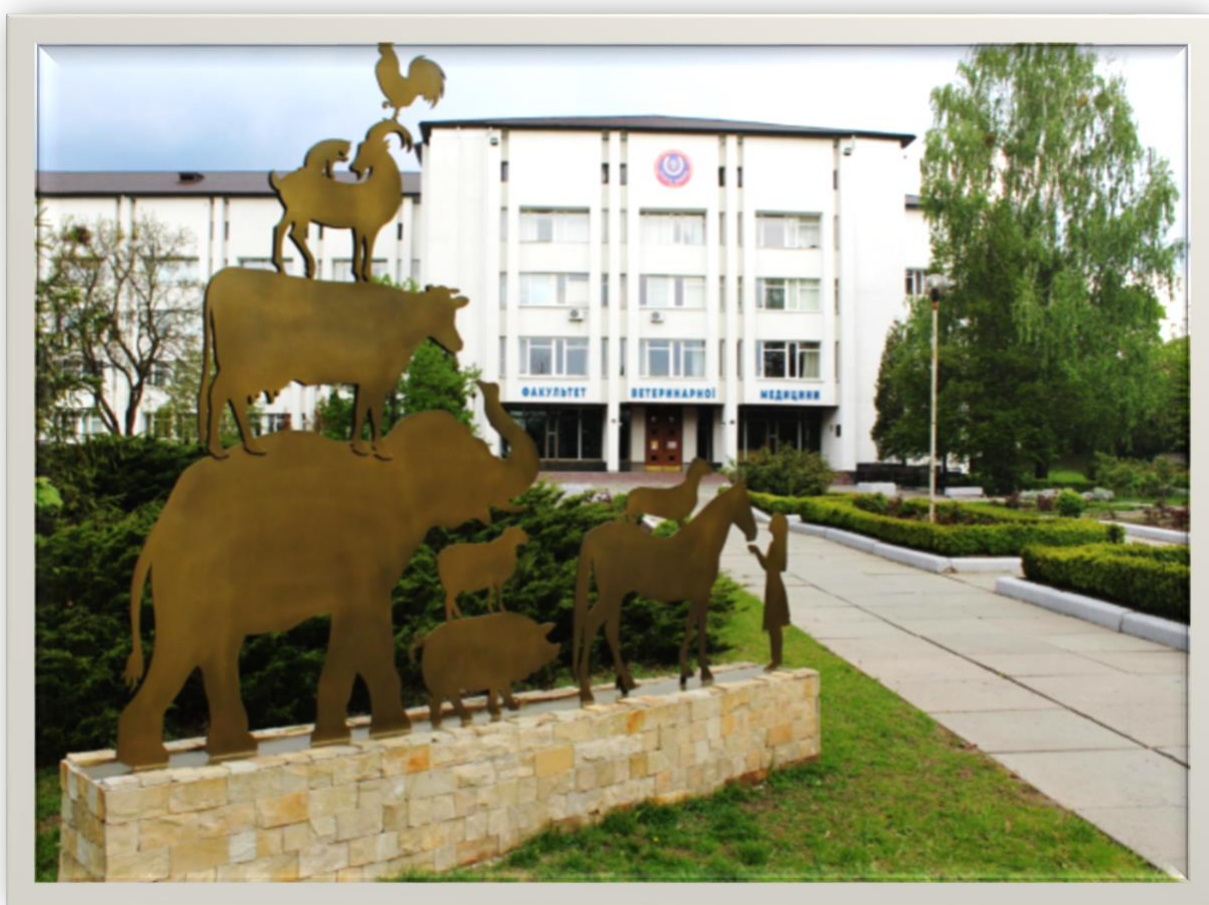




**Self-Evaluation Report 2024  
for  
European Association of Establishments for Veterinary Education  
(EAEVE)**



**Faculty of Veterinary Medicine  
of the  
National University of Life and Environmental Sciences of Ukraine**

ESEVT SOP version 8 June 2023,  
valid for the visit on 10-14 February 2025

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## Introduction

The National University of Life and Environmental Sciences of Ukraine (NUBiP of Ukraine) as a higher education institution of agricultural profile was founded in 1898 as the agricultural department of the Kyiv Polytechnic Institute, which was transformed into the Faculty of Agriculture (Agronomy) in 1918. On the basis of this faculty, in 1922, the Kyiv Agricultural Institute was established within the structure of the Kyiv Polytechnic Institute, which became an independent higher education institution in 1923. In 1954, the Kyiv Agricultural Institute was merged with the Ukrainian Forestry Institute into a single educational institution, the Ukrainian Agricultural Academy.

In August 1992, the Ukrainian State Agrarian University was established on the basis of the Ukrainian Agricultural Academy, which was granted national status and renamed the National Agrarian University by the Verkhovna Rada of Ukraine on 29 July 1994, Resolution No. 158. By the Resolution of the Cabinet of Ministers of Ukraine No. 945 of 30 October 2008, the National Agrarian University was renamed the National University of Life and Environmental Sciences of Ukraine (NUBiP of Ukraine), which is a research institution that carries out educational, research, scientific and innovative, training, production and information and consulting activities aimed at developing modern problems of life and environmental science, use, reproduction and balanced development of biological resources of terrestrial and aquatic ecosystems.

In 1995, it acquired the status of a state university, and since 2007 it has had the fourth (highest) level of accreditation, state ownership and is subordinated to the Ministry of Education and Science of Ukraine. As of 1 January 2024, the university had 19967 students enrolled in 3 educational and research institutes (Energy, Automation and Energy Saving, Forestry and Landscape Gardening, Continuing Education and Tourism) and 13 faculties (Veterinary Medicine, Agricultural, Plant Protection, Biotechnology and Ecology, Economics, Agricultural Management, Law, Land Management, Animal Husbandry and Water Bioresources, Pedagogy, Information Technology, Engineering and Design, Mechanical Engineering, Food Technology and Quality Management of Agricultural Products).

The VEE was established in 1920 to organise the educational process and scientific training of highly qualified and competitive veterinarians capable of solving non-standard issues, implementing innovative solutions, solving production problems, ensuring animal health and welfare, guaranteeing safe and high-quality food, and improving environmental protection.

The educational and research programmes of the VEE are accredited by the National Agency for Higher Education Quality Assurance.

The main challenges faced by the university are changes in legislation, reduced state funding, increased competition from other educational institutions, and the war.

The version of the ESEVT SOP dated 8 June 2023, which was valid for the previous visit on 10-14 February 2025, was used to write the SER 2024.

## **Area 1. Objectives, Organisation and Quality Assurance Policy**

**Standard 1.1: The VEE must have as its main objective the provision, in agreement with the EU Directives and ESG Standards, of adequate, ethical, research-based, evidence-based veterinary training that enables the new graduate to perform as a veterinarian capable of entering all commonly recognised branches of the veterinary profession and to be aware of the importance of lifelong learning.**

**The VEE must develop and follow its mission statement which must embrace the ESEVT Standards.**

The mission of the VEE is based on ensuring high quality education and research activities that meet both national and European standards, in particular ESEVT standards.

The objectives of the VEE include:

- organisation of educational activities in licensed specialities of veterinary medicine and accredited educational, professional and research programmes in accordance with the standards of higher education in Ukraine;
- training of applicants for higher education of the educational degree ‘Master’, educational and scientific degree Doctor of Philosophy and scientific degree Doctor of Sciences;
- development and implementation of scientific methods that ensure the diagnosis, prevention, treatment of animal diseases, and management of product quality and safety;
- training of students who are aware of the need for lifelong learning and adherence to the principles of academic integrity;
- promoting the development of Ukrainian higher education and the dissemination of scientific and practical knowledge that meets EU standards.

The University's mission and strategy are reflected in the University Development Programme ‘Holosiivskyi Initiative 2025’ and seeks to create, systematise, preserve and disseminate modern scientific knowledge to improve the quality of life of people; to train experts of the European and world level of intellectual and personal development [https://nubip.edu.ua/sites/default/files/u101/golosiyivska\\_iniciativa\\_2025\\_programa.pdf](https://nubip.edu.ua/sites/default/files/u101/golosiyivska_iniciativa_2025_programa.pdf). The strategic goals of the university and the faculty, which are reflected in the VEE development strategy for 5 years and for 1 year in accordance with the ‘Holosiivska Initiative 2025’, are extrapolated to the applicants of the VEE and should oblige them to: use the methods and approaches proposed (developed) by them to implement international standards for biosecurity, as well as bioethics in the diagnosis, prevention, treatment and maintenance of animal health in their further professional activities; participate in research projects of interdisciplinary

The VEE actively pursues its mission through continuous improvement of educational programmes, cooperation with international partners, implementation of the principles of the One Health concept, as well as ensuring a high level of human and logistical support.

The VEE is an integral part of the university, which provides education in accordance with the Standard for the training of specialists (approved on 24.04.2019 by the Order of the Ministry of Education and Science No. 558 with its update on 31.01.2022). The speciality ‘Veterinary Medicine’ is regulated (Order of the Ministry of Education and Science of 22.05.2020 No. 673). The educational and professional programme was updated in 2018 (Order of NUBiP of 20.04.2018 №384) and approved by the decision of the Academic Council of NUBiP of Ukraine (Protocol №10 of 30.05.2018). Taking into account the results of a survey of applicants, the academic community, and employers (<https://nubip.edu.ua/node/1165/5>), the training programme was updated in 2022. The educational programme is designed to take into account the trends in the development of veterinary science, due to the need for society to develop and improve methods, schemes for the diagnosis, treatment and prevention of animal diseases in the context of globalisation, food security and safety, modernisation of the field of knowledge ‘Veterinary Medicine’, raising standards and improving the quality of life.

**Standard 1.2: The VEE must be part of a university or a higher education institution providing training recognised as being of an equivalent level and formally recognised as such in the respective country.**

**The person responsible for the veterinary curriculum and the person(s) responsible for the professional, ethical, and academic affairs of the Veterinary Teaching Hospital (VTH) must hold a veterinary degree. The decision-making process, organisation and management of the VEE must allow implementation of its strategic plan and of a cohesive study programme, in compliance with the ESEVT Standards.**

Each faculty is a structural unit of the university with its own infrastructure: <https://nubip.edu.ua/structure/fvm>.

The VEE is governed by the Academic Council, which includes the Dean, his deputies, heads of student self-government bodies and other elected representatives. The Academic Council is responsible for organising the educational and scientific process, approving curricula, educational and professional and educational and scientific programmes, as well as considering methodological and organisational issues. It also determines research topics, approves dissertation topics, and recommends supervisors and consultants.

The Dean's Office is the working body of the VEE, which consists of the Dean, his/her deputies and secretaries. The VEE is headed by the Dean, who is appointed by the Rector of the University in consultation with the VEE staff for a term of up to five years, in accordance with the University Statute and applicable law. Deputy deans are appointed by order of the rector on the proposal of the dean.

Table 1.2.1. Information about the university management and departments

Details	National University of Life and Environmental Sciences of Ukraine
Address, telephone number	Ukraine, Kyiv, Heroyiv Oborony Str., 15, +38(044) 527-82-05
Website address	<a href="https://nubip.edu.ua">https://nubip.edu.ua</a>
Email address	e-mail: <a href="mailto:rectorat@nubip.edu.ua">rectorat@nubip.edu.ua</a>
Rector	Vadym A. Tkachuk, Doctor of Economic Sciences, Professor, Holder of the title "Excellence in Agricultural Education of Ukraine", Honoured Worker of Education of Ukraine, Member of the European Association of Agricultural Economists and Grow Abroad World Alliance
President	Stanislav M. Nikolaienko, Academician of the National Academy of Pedagogical Sciences and National Agrarian Sciences of Ukraine, Doctor of Pedagogical Sciences, Professor
The official body that carries out control and licensing	Ministry of education and science of Ukraine 01135, Kyiv, 10 Peremohy Str., <a href="https://mon.gov.ua">https://mon.gov.ua</a>
Licences of NUBiP of Ukraine	<a href="https://registry.edbo.gov.ua/university/7/specialities/">https://registry.edbo.gov.ua/university/7/specialities/</a>
Educational programmes of NUBiP of Ukraine:	<a href="https://registry.edbo.gov.ua/university/7/study-programs/?q=2">https://registry.edbo.gov.ua/university/7/study-programs/?q=2</a>
Vice-Rector for Scientific and Pedagogical Work and Digital Transformation	Olena G. Glazunova, PhD in pedagogics, Professor
Vice-Rector for Scientific and Pedagogical Work and International Affairs	Oleksandr M. Labenko, Doctor of Economic Sciences, Associate Professor
Vice-Rector For Scientific and Educational Activities and Development	Serhii M. Kvasha, Doctor of Economic Sciences, Professor, Academician of the National Academy of Agricultural Sciences, Honoured Worker in Science and Technology of Ukraine, Holder of the title "Excellence in Education of Ukraine"
Vice-Rector For Scientific Work and Innovation Activities	Oksana L. Tonkha, Dr. of Agricultural Sciences, Professor
Vice-Rector for Educational, Research and Production Issues of Development and Administration	Volodymyr D. Yevtushenko, PhD in Economics, Associate Professor
Vice-Rector for Scientific and Pedagogical Work and Economic Affairs	Tetiana O. Kostiuk, PhD in Economics, Associate Professor



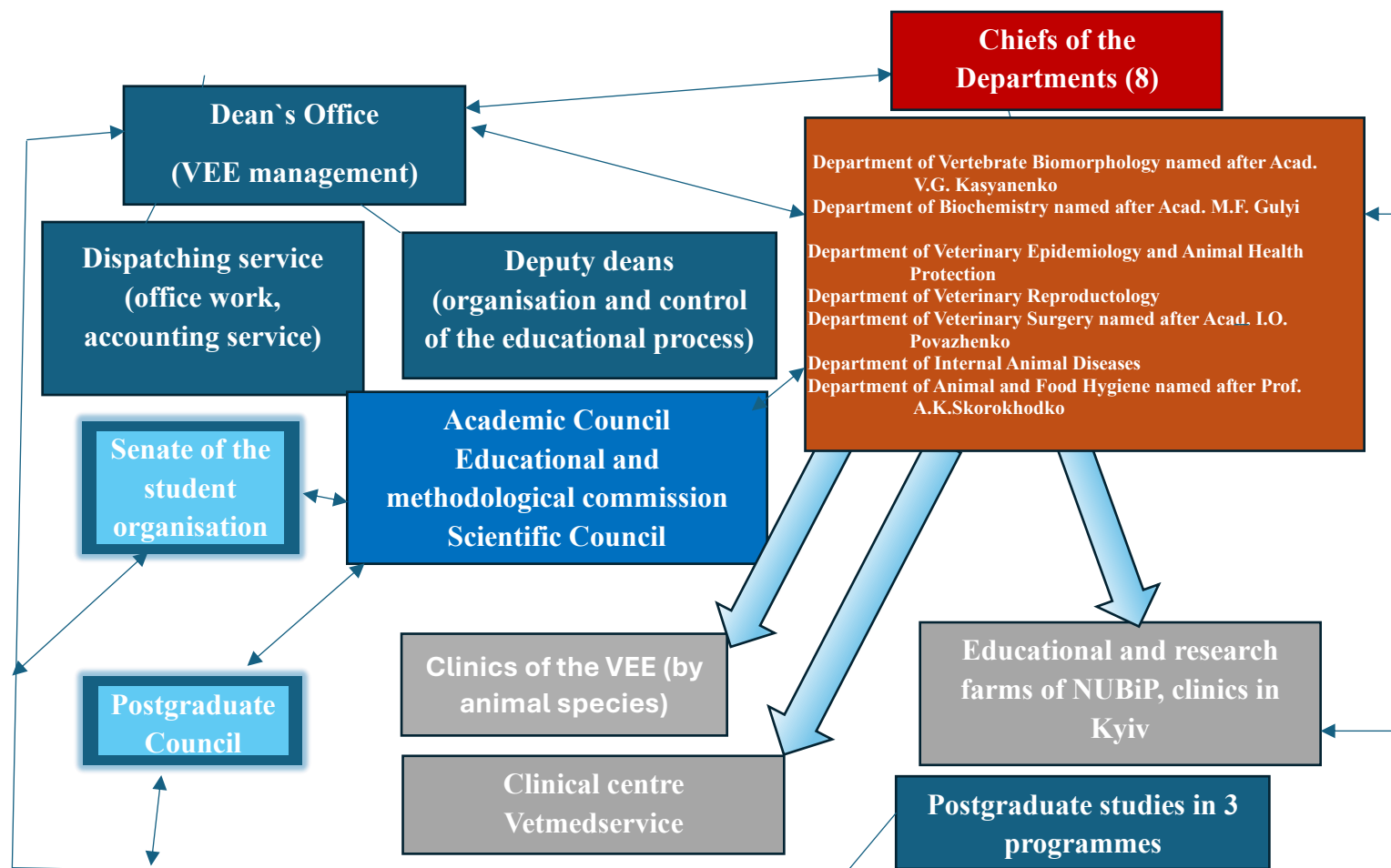


Fig. 1.2.1 The organisational chart of the VEE

Each faculty is a structural unit of the university with its own infrastructure:  
<https://nubip.edu.ua/structure/fvm>.

The VEE is governed by the Academic Council, which includes the Dean, his deputies, heads of student self-government bodies and other elected representatives. The Academic Council is responsible for organising the educational and scientific process, approving curricula, educational and professional and educational and scientific programmes, as well as considering methodological and organisational issues. It also determines research topics, approves dissertation topics, and recommends supervisors and consultants.

The Dean's Office is the working body of the VEE, which consists of the Dean, his/her deputies and secretaries. The VEE is headed by the Dean, who is appointed by the Rector of the University in consultation with the VEE staff for a term of up to five years, in accordance with the University Statute and applicable law. Deputy deans are appointed by order of the rector on the proposal of the dean.

Table 1.2.2. Structure of the VEE

8 departments	Department of Vertebrate Biomorphology named after Acad. V.G. Kasyanenko Department of Biochemistry named after Acad. M.F. Gulyi Department of Veterinary Epidemiology and Animal Health Protection Department of Veterinary Reproductology Department of Veterinary Surgery named after Acad. I.O. Povazhenko Department of Internal Animal Diseases Department of Animal and Food Hygiene named after Prof. A.K. Skorokhodko
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Scientific and research institute	Animal Health
8 research laboratories	<ul style="list-style-type: none"> <li>✓ Training and Research Laboratory ‘Centre for Animal Reproduction with Sperm and Embryo Bank’</li> <li>✓ Educational and scientific laboratory of Veterinary Haematology</li> <li>✓ Interdepartmental educational and scientific laboratory of veterinary diagnostic research</li> <li>✓ Educational and scientific production laboratory ‘Centre of Biomorphological Technologies’</li> <li>✓ Educational and scientific laboratory ‘Centre for Geospatial Veterinary Epidemiology</li> <li>✓ Educational and scientific laboratory ‘Centre for Cellular Technologies in Veterinary Medicine’</li> <li>✓ Educational and scientific laboratory ‘Blood Bank’</li> <li>✓ Research Laboratory of Microbiology, Virology and Immunobiotechnology</li> </ul>
Interdepartmental clinics (VTH)	- VetMedservice Educational, Research and Production Clinical Centre

Table 1.2.3: Information about the management of the VEE

Details	Faculty of Veterinary Medicine
Address, telephone number	Ukraine, Kyiv, Vystavkova Str., 16, Tel.:+38044-527-823-31 +38044-527-82-98
Website address	<a href="https://nubip.edu.ua/structure/fvm">https://nubip.edu.ua/structure/fvm</a>
Email address	e-mail: <a href="mailto:dekanat_vetmed@nubip.edu.ua">dekanat_vetmed@nubip.edu.ua</a> <a href="mailto:dekanat_vetmed1@nubip.edu.ua">dekanat_vetmed1@nubip.edu.ua</a>
Head of the VEE (dean)	Mykola I. Tsvilikhovskiy, Doctor of Sciences (Biology), Professor, Academician of the National Academy of Sciences of Ukraine
Deputy deans responsible for the veterinary medicine curriculum, practical training and work with students	Serhii S. Derkach, PhD, Associate Professor Yurii V. Zhuk, PhD, Associate Professor Taras L. Savchuk, PhD, Associate Professor
Guarantor of the educational and professional programme ‘Veterinary Medicine’ of the Master's degree programme	Nataliia G. Grushanska, PhD, Doctor of Sciences (Veterinary Medicine), Professor
Guarantor of the educational and scientific programme ‘Non-Communicable Pathology’ of the third educational degree Doctor of Philosophy (PhD)	Serhii I. Holopura, PhD, Doctor of Sciences (Veterinary Medicine), Associate Professor
Guarantor of the educational and scientific programme ‘Infectious pathology’ of the third educational degree Doctor of Philosophy (PhD)	Maryna V. Galat, PhD, Doctor of Sciences (Veterinary Medicine), Professor
Chairman of the Bioethics Commission	Oleg P. Melnyk, PhD, Doctor of Sciences (Veterinary Medicine), Doctor of Veterinary Sciences, Professor

**Standard 1.3: The VEE must have a strategic plan, which includes a SWOT analysis of its current activities, short- and medium-term objectives, and an operating plan with a timeframe and indicators for its implementation. The development and implementation of the VEE’s strategy must include a role for students and other stakeholders, both internal and external, and the strategy must have a formal status and be publicly available.**

The Strategic Plan of the VEE (annex 18) is in line with the development programme of the National University of Veterinary Medicine of Ukraine ‘Holosiivska Initiative - 2025’, which was developed in accordance with the requirements of the current legislation on development programmes, recommendations of the Ministry

of Education and Science of Ukraine, experience of implementing such programmes by other universities and scientific achievements of the University's scientists. The plan is aimed at ensuring sustainable development and improvement of educational, scientific and professional activities in accordance with national and European standards and other regulatory requirements.

Table 1.3.1. SWOT analysis (Approved together with the materials of the strategic plan at the meeting of the Academic Council of the VEE (Protocol No. 4 of 22 November 2024)):

<b>Strengths:</b>	<b>Weaknesses:</b>
Being part of a university with guaranteed state funding, research university status and commitment to sustainable development	Insufficient funding for some research projects
Working in a university specialising in life sciences	The need to modernise some study programmes
High level of student and stakeholder engagement	Limited resources to expand the laboratory facilities
Modern equipment and innovative facilities of education	The need to strengthen the digitalisation of document management and the provision of educational services
Highly qualified and motivated staff	
Excellent national accreditation in 2023	
Integration of the One Health concept into the educational process	
Continuing education with diversified postgraduate programmes	
Strong commitment to bioethics - initiative to establish a bioethics committee and membership of 5 professors	
High culture of academic integrity	
Opportunity for students to choose subjects of their preference from the university catalogue	
<b>Opportunities:</b>	<b>Threats:</b>
Location in the largest metropolis of the country in a region with a high concentration of animals of all species, including those kept in zoos and shelters	War
Location in a region with a high density of research institutions with good cooperation and opportunities for the best research projects	Changes in legislation
Intra-university cooperation through the formation of 'interdepartmental laboratories' to strengthen cooperation in undergraduate and graduate education and research	Reduction of state funding
ESEVT Accreditation of the VEE	Increased competition from other educational institutions
Internships for teaching staff, students, and postgraduates under international academic mobility programmes	Legal regulation of teaching capacity determines the number of students based on the mandatory teaching load
Collaboration with external institutions (NAAS, NAMS, universities, etc.) on teaching and research to strengthen cooperation in postgraduate education and research	Legally restricted selection of students  Legally limited financial compensation for staff

**Standard 1.4: The VEE must have a policy and associated written procedures for the assurance of the quality and standards of its programmes and awards. It must also commit itself explicitly to the development of a culture which recognises the importance of quality, and QA within the VEE. To achieve this, the VEE must develop and implement a strategy for the continuous enhancement of quality.**



**The VEE must have a policy for academic integrity, i.e. the expectation that all staff and students act with honesty, trust, fairness, respect and responsibility.**

An important area of activity at NUBiP of Ukraine is the creation and development of an internal quality assurance system. The policy of NUBiP of Ukraine in the field of quality assurance of higher education and a set of regulatory documents of the university are presented in the following documents: 'Regulations on the System of Quality Assurance of Educational Activities and Quality of Higher Education at the National University of Life and Environmental Sciences of Ukraine',

'Regulations on electronic assessment of residual knowledge of students of NUBiP of Ukraine, Regulations on academic integrity in NUBiP of Ukraine.

The representatives of quality management are: for educational activities - Vice-Rector for Scientific and Pedagogical Activities and Digital Transformation, for scientific activities - Vice-Rector for Research and Innovation.

NUBiP of Ukraine and VEE has implemented a quality management system in accordance with ISO 9001/2015.

The quality of scientific and educational services is achieved through continuous improvement of the professional level of employees, motivation and stimulation of their work, formation and improvement of the information, material and technical, educational and methodological base of the university and VEE, creation of a favourable moral and psychological climate in the team, which would promote everyone's interest in achieving high results. Improvement of the quality of scientific and educational services is constantly planned, monitored and analysed. Decisions made in the field of quality are based on continuous monitoring data according to established criteria and are binding. The university's and VEE's quality goals and measures aimed at achieving them are focused on consumers of research and educational services and other stakeholders.

The university has a department of educational quality, marketing and career guidance. The department organises and conducts systematic monitoring of the quality of education and develops Regulations for improving the educational process on this basis. Specialists of the department develop questionnaires for conducting planned cyclical surveys of higher education students, all stakeholders of the educational process, evaluation of academic and teaching staff in general, analyse their results and ensure accessibility for all participants of the educational process.

In the process of performing their duties, all university staff must comply with the requirements of the Quality Management System (QMS) documentation, which is available through the internal resource of NUBiP of Ukraine.

The VEE is committed to ensuring high quality standards of educational programmes and awards by developing and implementing a quality policy that includes clear written procedures for monitoring, evaluating and improving the quality of the educational process. The VEE's quality policy provides for a systematic approach to ensuring that study programmes meet ESEVT standards, and takes into account the interests of both internal and external stakeholders.

The VEE also develops a quality culture, which is supported by a strategic plan that provides for regular SWOT analysis of the current activities of the VEE, and the definition of short- and medium-term goals.

The Academic Integrity Policy is an integral part of the VEE's overall quality strategy.

Academic staff, students, employers, and graduates of the VEE are involved in discussing and adjusting curricula, choosing a strategy, and making management decisions aimed at ensuring the quality of education. The VEE's group on the content and quality of education coordinates the analysis and publication of the results of their evaluations of the content of educational programmes, forms of education important for the development of professional competences, etc.

The evaluative judgements of different stakeholder groups (annex 17) are the results of their periodic questionnaires, interviews, blitz surveys (online or offline), as well as direct participation in the work of the group on the content and quality of education. The group's work results in decisions on the publication of respondents' recommendations, development of strategies for implementing changes or revising the content of educational programmes, forms of education, assessment methods, etc.

**Standard 1.5: The VEE must provide evidence that it interacts with its stakeholders and the wider society. Such public information must be clear, objective and readily accessible; the information must include up-to-date information about the study programme, views and employment destinations of past students as well as the profile of the current student population.**

**The VEE's website must mention the VEE's ESEVT status and its last Self-Evaluation Report and Visitation Reports must be easily available to the public.**

Educational, scientific and teaching activities are covered on the university website <https://nubip.edu.ua/> and on the faculty website <https://nubip.edu.ua/structure/fvm> (English version available).

Applicants can influence the content of the training programme by participating in the educational and administrative structures of the university, the VEE, monitoring the quality of the training programme and curriculum, methodological support of the process, etc.; participation in the work of the senate of the student organisation of the NUBiP of Ukraine and the VEE, the student council of the hostel, or individually. The study and analysis of internal stakeholders' proposals for the content and improvement of the quality of education is carried out in the following ways: surveys, representative surveys, questionnaires, while ensuring publicity and transparency of the survey of HE students.

To organise and coordinate the interaction between stakeholders at the university and the VEE, the Council of Employers was established and is working. Their activities are regulated by the Regulations on the Employers' Council. The Employers' Councils hold regular meetings at the university and VEE levels.

During the advanced training at the VEE, representatives of the speciality 'veterinary medicine' (all production specialisations, senior management, middle managers (an average of 700 people annually) influence the development of the educational programme by communicating with teaching staff and participating in surveys.

When formulating the goals and programme learning outcomes, the proposals of the VEE's academic staff, expressed in the survey and at meetings of the dean's office and academic and methodological councils, are taken into account.

In addition, we can also mention the university's graduates. In particular, the President of the Union of Veterinary Business Owners is directly involved in the development and revision of the educational programme, curriculum and the educational process. The influence of applicants on the formation of the educational programme is carried out at the stage of professional campaigning through surveys, questionnaires, and monitoring of social networks.

The university has a practice of collecting, analysing and recording information about the career path of graduates. Employment of the VEE's graduates is monitored annually. This activity is carried out at the university level by the Department for Graduate Employment and Issuance of Higher Education Documents, and at the faculty level by the Deputy Dean.

Information on employment prospects and inquiries is posted on the VEE's information board (building 12) and on the VEE's Facebook page <https://www.facebook.com/groups/fac.vet.med>. Traditional at the university are conferences - meetings of graduates of the VEE of different years, where they are interviewed about the current needs of production and requirements for veterinary medicine specialists. The areas of employment for graduates of the VEE of previous years include private small animal clinics, enterprises for keeping productive animals of various forms of ownership, veterinary pharmacies, district and regional departments of the State Service of Ukraine for Food Safety and Consumer Protection, laboratories, zoos and research institutions, the Association of Milk Producers, the Association of Pig Breeders of Ukraine and others.

The VEE's website contains information on the state of preparation for the pre-accreditation visit (<https://nubip.edu.ua/en/node/147742>).

**Standard 1.6: The VEE must monitor and periodically review its activities, both quantitative and qualitative, to ensure that they achieve the objectives set for them and respond to the needs of students and society. The VEE must make public how this analysis of information has been utilised in the further development of its activities and provide evidence as to the involvement of both students and staff in the**

**provision, analysis and implementation of such data. Evidence must be provided that the QA loops are fully closed (Plan Do Check Adjust cycles) to efficiently enhance the quality of education.**

**Any action planned or taken as a result of this data analysis must be communicated to all those concerned.**

The VEE is an integral part of the university's overall quality assurance system. As a structural subdivision of the university, the faculty not only implements study programmes, but is also actively involved in the processes of controlling and improving the quality of education, which are the fundamental principles of the university quality system. All procedures are regulated by the 'Regulations on the system of quality assurance of educational activities and quality of higher education at the NUBiP of Ukraine' and other internal documents.

The VEE performs its functions within the framework of approved policies and procedures aimed at ensuring high standards of education and research. This includes regular monitoring and evaluation of educational programmes, analysis of learning outcomes, as well as collection and consideration of feedback from students, teaching staff, employers and other stakeholders. These aspects are regulated by the Regulations on Educational Programmes at NUBiP of Ukraine. The procedure for development is described in Section 4, approval in Section 5, and monitoring of the review and updating of EPs is described in Section 6. In accordance with paragraph 6.6, the educational programme may be updated annually in terms of all components, except for the mission (goals) and programme learning outcomes. Curricula are subject to monitoring and periodic review at least once per full course of study. Re-approval of the training programme is initiated by the project team or faculty in case of its significant update (more than 50% of the composition of disciplines, practices and their volume in ECTS credits). The project team and the involved academic staff are responsible for the quality of implementation.

The VEE participates in internal and external audits, preparation of self-assessment reports, as well as in the development and implementation of continuous quality improvement strategies to ensure that the VEEs activities meet modern requirements and standards of higher education. These processes are regulated by the relevant orders of the Rector (Order of the Rector on conducting self-analysis of educational programmes dated 3.12.2021 No. 1325). Order of the Rector on monitoring and revision of educational programmes dated 1.04.2021 No. 309). Other documents regulating the content and implementation of the educational process are also publicly available.

Monitoring and periodic analysis of activities, both quantitative and qualitative, as well as control over the implementation of corrective actions, is carried out by the project group for quality control of education, discussed at meetings of departments, the clinical council and the academic council of the faculty. Academic staff, higher education students, employers, and graduates of the VEE, as members of the Clinical Council, the Educational and Methodological Commission, and the Academic Council of the VEE, are involved in discussing and adjusting curricula, choosing a strategy of action, and making management decisions aimed at ensuring the quality of education.

To manage periodic quality assurance cycles, the PDCA methodology (Deming cycle) is used as an algorithm for managing processes and achieving quality assurance goals at NUBiP of Ukraine, taking into account national and international standards and recommendations. In educational practice, the PDCA cycle is used systematically with different frequency: during the semester - academic year. The analysis of the quality of teaching disciplines is based on the results of a survey of higher education students, which is conducted every semester at the end of the session, so this cycle is the shortest. At the same time, the results of the survey of the VEE's stakeholders on the goals and objectives, quality indicators of the educational process are monitored annually.

The results of the survey are distributed via e-mail to the heads of structural units, and a summary report is posted on the VEE's website.

**Standard 1.7: The VEE must undergo external review through the ESEVT on a cyclical basis. Evidence must be provided of such external evaluation with the assurance that the progress made since the last ESEVT evaluation was linked to a continuous quality assurance process.**

It will be the first time that the VEE has been evaluated.

**Comments on Area 1**

The review of the VEE's development strategy demonstrates its commitment to achieving European standards of veterinary education. The efforts are aimed at further improving the practical training of students and the traceability of this process, deepening scientific research with its further international integration, modernising the infrastructure of the VEE with appropriate financial support.

**Suggestions for improvement in Area 1**

It is necessary to implement the developed strategic long-term and short-term development plans with the participation of all stakeholders, harmonise the accreditation system with the European one and continue to seek grants and funding for student training costs, including the maintenance of the clinic and other facilities of the VEE, as well as specific topics related to companion animals and wildlife health and welfare, and One Health.

## Area 2. Finances

**Standard 2.1: Finances must be demonstrably adequate to sustain the requirements for the VEE to meet its mission and to achieve its objectives for education, research and services. The description must include both expenditures (separated into personnel costs, operating costs, maintenance costs and equipment) and revenues (separated into public funding, tuition fees, services, research grants and other sources).**

Financing of the Faculty's activities is carried out thanks to the general and special funds of the state budget provided for in the University's budget.

The Faculty participates in determining the prospects for the development of its material and technical base based on the needs of its activities.

Remuneration of the Faculty employees is regulated by the current legislative acts of Ukraine on remuneration, the Statute of the University, the Collective Agreement, regulations and orders of the Rector of the University:

- remuneration of the Faculty employees is carried out at the established official salaries on the basis of the Unified tariff scale of categories and coefficients for remuneration and taking into account the individual rating coefficient for full-time research and teaching staff of the Faculty;

- the distribution of funds for additional remuneration of persons involved in the performance of certain works and services, including self-supporting activities, is carried out by the Dean of the Faculty together with the heads of structural units. Remuneration of the relevant category of employees is carried out on an hourly remuneration system in accordance with the actual number of hours of laboratory and practical classes or other types of pedagogical work, according to the hourly wage rates, and material incentives for employees, expressed in the form of bonuses, depending on the results of their individual work and the results of the Faculty, within the payroll fund.

Funds of the Faculty received from the provided paid services in accordance with the Resolution of the Cabinet of Ministers of Ukraine of 27 August 2010 № 796 'On approval of the list of paid services that can be provided by educational institutions, other institutions and establishments of the education system belonging to the state and municipal form of ownership', as well as charitable contributions received from sponsors, other revenues that are not prohibited by the current legislation of Ukraine are the University's own funds, which are accounted for on the personal (special) account of the Faculty.

The use of funds of the Faculty received from self-supporting activities is carried out on the basis of the budget (plans of income and expenditure, orders for the purchase of goods, works and services for public funds), which is approved by the rector / vice-rector in the field of activity annually, in agreement with the planning and financial department of the university.

Financing of the Faculty's activities is carried out by the general state budget, which is distributed through the Ministry of Education and Science and the special fund of the University, provided for in the University's budget and thanks to sponsorship. The special fund is replenished by students' tuition fees, payment for accommodation in the faculty hostel, funds from the economic contractual activities of the faculty departments, services (including clinical) and economic activities of the university, including revenues from the university's educational farms, veterinary services provided by teachers and students on the basis of the structural unit Clinical Centre "Vetmedservice", grants, diagnostic services, charitable assistance and others. These sources form the general budget of the university (including the faculty), which is approved and controlled by the Ministry of Education and Science.

The period of 2021-2023 was a test of COVID 19, martial law and challenges related to the need to organise financial and economic activities in the context of a budget deficit, dependence on financial support from Ukraine's international partners and rational and economical use of resources. To this end, targeted work was carried out to maintain staff discipline, control the filling of the university budget by all groups of own revenues, such as tuition fees and accommodation in dormitories, provision of services through a network of self-supporting units, namely the Educational, Research and Production Clinical Centre Vetmedservice, and the Educational, Research and Production Laboratory of Information Technologies in Veterinary Medicine. Measures were taken



to save energy and to control procurement on an ongoing basis. This made it possible to ensure the full functioning of the faculty.

For the period 2021-2023, the Faculty was financed in the amount of UAH 187549.17 thousand. The cash expenditures are shown in Table 2.1.1 by cost items. The primary main items of expenditure are salaries, scholarships, and utilities. It should be noted that due to the deficit of the general fund in 2023, the costs of materials and services were fully financed from own revenues.

The VEE carries out economic activities, including the provision of clinical medical and diagnostic services, scientific and advisory support to livestock farms, etc. Contract students pay tuition fees, and nonresident students pay dormitory fees, which form a special fund of the institution. The amount of staff salaries is determined by national legislation, which forms the institution's payroll. Additional payments in the amount of 30-50% of the basic salary are possible for certain employees.

The institution independently decides when and what equipment and materials to purchase at the cost of the special fund and is obliged to adhere to the targeted use of the general (budget) fund in accordance with the previously approved budget.

All revenues from economic activities and services (clinical and research) remain at the disposal of the university, the VEE is a part of the university, and therefore the income goes to the general budget but then returns to the VEE budget during the year, except for taxes. Taxes account for 19.5% of revenues and another 22.0% of salaries paid. Funding for scientific research, as well as the costs of its maintenance from the amount of scientific grants, is controlled by the Academic Council of the faculty and coordinated by the Academic Council of the University. The administration and accounting support of economic contracts is carried out by the planning and financial department, the research department and the university accounting department on the same terms as for all faculties.

The licensed number of undergraduate students trained annually is 350, of which 165 are state-funded, and the rest are trained on a contractual basis. The tuition fee for higher education students is  $\approx$  900 euros (39530 UAH) per year, for foreign students  $\approx$  1400 euros (60,000 UAH) per year. The contract fee is mainly allocated to reimburse tuition fees and to ensure the conditions for students' education and the activities of student self-government bodies.

Table 2.1.1. Annual expenditures during the last 3 academic years (in k€)

Area of expenditure	2023	2022	2021	Mean
Personnel	1314.75	1377.18	1237.02	1309.65
Operating costs	62.75	174.87	44.15	93.93
Maintenance costs	8.05	3.69	14.01	8.58
Equipment	44.11	0.00	11.07	18.39
Total expenditure	1429.66	1687.72	1831.36	1649.58

\* The last complete academic year prior to the Visitation

\*\* 1 EUR at 31 December 2021 = UAH 30.1, 2022 = UAH 38.9, 2023 = UAH 42.2

Table 2.1.2. Annual revenues during the last 3 academic years (in k€)

Revenues source	2023	2022	2021	Mean
Public authorities	-	-	-	-
Tuition fee (standard students)	201.44	180.27	123.5	168.4
Tuition fee (full fee students)	353.81	344.26	434.95	377.68
Clinical services	13.05	11.58	13.83	23.14
Diagnostic services	10.68	9.86	10.43	10.32
Other services	12.32	8.31	15.68	12.10
Research grants	76.23	60.20	102.50	79.65
Continuing Education	25.37	6.04	13.58	15.00
Donations	44.65	95.10	65.52	68.42

Other sources **	78.77	92.62	79.37	83.59
Total revenues	816.32	808.24	859.36	827.98

\*\* Income from dormitory accommodation

Table 2.1.3. Annual balance between expenditures and revenues (in k€)

Academic year	Total expenditures	Total revenues	Balance***
2023	1831.36	859.36	-972.0
2022	1687.72	808.24	-879.48
2021	1429.66	816.32	-613.34

\*\*\* Total revenues minus total expenditure

**Standard 2.2: Clinical and field services must function as instructional resources. The instructional integrity of these resources must take priority over the financial self-sufficiency of clinical services operations.**

**The VEE must have sufficient autonomy in order to use the resources to implement its strategic plan and to meet the ESEVT Standards.**

Expenditures are planned and allocated in accordance with the needs of the departments, which they formulate and submit in accordance with the Strategic Development Plan. Requests from the departments are collected and analysed by the dean of the faculty and, in agreement with the heads of the departments, a list of needs is formed for which the university proposes to provide for the relevant expenditures in the budget for the next year. This list of expenditures and purchases for the faculty is considered at a meeting of the Academic Council of the faculty, which includes leading scientists of the faculty, heads of departments and representatives of students. The Dean submits the agreed list-application for consideration to the university management with justification. The application is evaluated by the economic service and approved by the university management. Therefore, the dean submits an application for the VEE to form the overall university budget, and the university allocates funds in accordance with the dean's application.

**Standard 2.3: Resources allocation must be regularly reviewed to ensure that available resources meet the requirements.**

It is expected to generate revenues of EUR 700-850 k€, expenditures of EUR 1600-1700 k€ to support the activities and development of the faculty and investments of EUR 100-120 k€ in development.

The main planned investments for the next 3 years will be: bringing the premises for clinics and animal isolation facilities in line with modern requirement, bringing the premises and the necessary infrastructure for students' duty in the VEE's clinics in line with modern requirements, update the material and technical base of clinics and isolation facilities by animal species.

The project and decisions on planned expenditures, investments and income are prepared by the planning and financial department and the university accounting department on the basis of recommendations of the university management, faculties and departments.

As a result, the University's budget for the financial year is formed, which takes into account budget and other revenues. The estimate is approved at a meeting of the Academic Council of the University, which includes professors of all faculties and representatives of students. After approval by the Academic Council of the University, the estimate is approved by the Rector and sent to the Ministry of Education and Science for approval.

Unplanned current expenses, such as minor repairs of premises, purchase of low-value consumables, repair of equipment, may be made on the basis of an application by the head of the department to the university's economic service.

## Comments on Area

The financial state of the institution is in line with the financial state of the country and is objectively insufficient to quickly achieve European standards. The strategy of financing the development needs of the faculty envisages gradual reconstruction and purchase of equipment in accordance with the most urgent needs. The university management demonstrates a strong commitment and understanding of the needs of the faculty and allocates significant investments from the university's special fund.

### **Suggestions for improvement in Area 2**

It is necessary to intensify the search for grants and opportunities to finance the reconstruction at the expense of the state budget or philanthropists.

Increase revenues from expanding grant activities and clinical services by improving and expanding veterinary services at training clinics (preventive medicine, laboratory diagnostics, herd health support), which will be used to develop the material and technical base. Attracting sponsorship and charitable support.

The learning environment for students will be improved, including computer classes and laboratories, training equipment and tools, visual aids, infrastructure for students in animal clinics, etc. The investments will be used to improve the work of training clinics at clinical departments to achieve the level of competence of European standards.

### Area 3. Curriculum

**Standard 3.1: The curriculum must be designed, resourced and managed to ensure all graduates have achieved the graduate attributes expected to be fully compliant with the EU Directive 2005/36/EC (as amended by directive 2013/55/EU) and its Annex V.4.1. The curriculum must include the subjects (input) and must allow the acquisition of the Day One Competences (output) listed in the ESEVT SOP Annex 2.**

**This concerns:**

- **Basic Sciences**
- **Clinical Sciences in companion animals (including equine and exotic pets)**
- **Clinical Sciences in food-producing animals (including Animal Production and Herd Health Management)**
- **Veterinary Public Health (including Food Safety and Quality)**
- **Professional Knowledge including soft skills (e.g. communication, team working skills, management skills).**

**When part of the study programme cannot be organised because of imposed regulations or constraints, convincing compensations must be developed and implemented.**

**If a VEE offers more than one study programme to become a veterinarian, e.g. in different languages or in collaboration with other VEEs, all study programmes and respective curricula must be described separately in the SER. For each Standard, the VEE must explain if there are differences or not with the basic programme and all this information must be provided as a formal annex to the SER. Similarly, if a VEE implements a tracking (elective) system in its study programme, it must provide a clear explanation of the tracking system in the SER.**

The educational goals of the University in general and VEE in particular are to form a set of general and special (professional) competencies in the future veterinarian, the ability to dynamically combine knowledge, skills, including communication skills with autonomous activity and responsibility, the ability to combine effective professional and social activities to identify production problems in order to ensure the health and welfare of animals, obtain safe and high-quality food, and protect the environment in accordance with the One Health concept.

The curriculum for training students at the VEE of the National University of Life Sciences of Ukraine includes the following components: 1) fundamental knowledge of animal biology; 2) the impact of environmental factors and technologies on the animal body; 3) identification of causes and prevention of diseases on the basis of animal welfare; 4) ensuring food safety and quality and public health; 5) clinical training by animal species and herd health management.

The educational process of training of students is carried out in accordance with national legislation, which includes the Law of Ukraine 'On Higher Education', the Law of Ukraine 'On Education', the Law of Ukraine 'On Veterinary Medicine', the National Classification of Ukraine: Classifier of Occupations DK 003: 2010, National Qualifications Framework, 2011; Standard of Higher Education of Ukraine in the speciality 211 'Veterinary Medicine' at the educational level of Master's degree (on the basis of complete general secondary education), approved by Order No. 558 of 24.04.2019. Ministry of Education and Science of Ukraine; other national legislative acts, orders of the Ministry of Education and Science of Ukraine, internal regulations of the university. The standards of higher education in veterinary medicine are approved by the Ministry of Education and Science of Ukraine, developed and coordinated by the structural unit of the Ministry of Education and Science of Ukraine - the State Institution 'Scientific and Methodological Centre for Higher and Professional Higher Education'. The latter has a collegial body - the Scientific and Methodological Commission and the Subcommittee on Veterinary Medicine, which is formed on a competitive basis from representatives of all faculties of veterinary medicine in Ukraine. This subcommittee prepares proposals and develops primary materials to improve veterinary education in Ukraine.

Until 2018, the entire cycle of veterinary training in Ukraine was based on the formula (4 + 2): 4 years (bachelor's degree - junior veterinarian who was not entitled to licensed practice). Nowadays, veterinarians are

trained only at the Master's degree level with a full-time study period of 6 years. In accordance with the Law of Ukraine 'On Higher Education' (Section 2, Article 5), a master's degree is obtained under an educational and professional or educational programme. The Master's degree in Veterinary Medicine is obtained on the basis of complete general secondary education and is awarded by a VEE as a result of successful completion of a education programme 360 ECTS credits.

In accordance with Article 32 of the Law of Ukraine 'On Higher Education', higher education institutions have equal rights, which constitute the content of their autonomy and self-government. The principles of academic freedom are taken into account in the Regulations on the Organisation of the Educational Process at NUBiP of Ukraine.

When forming the educational programme (EP) and curriculum, the university adheres to the relevant provisions of the 'Regulations on Educational Programmes at NUBiP of Ukraine'.

In February 2023, the educational programme 'Veterinary Medicine' was accredited at the second (master's) level of higher education in the specialty 211 'Veterinary Medicine' of the field of knowledge 21 'Veterinary Medicine', which was conducted at the Faculty of Veterinary Medicine of NUBiP of Ukraine, and received a certificate from the National Agency for Higher Education Quality Assurance as an excellent educational programme.

The national legislation allows for autonomous modification of curricula, which allowed the VEE, after consultations, to develop and implement the Day One competencies in the educational programme for the training of veterinarians entering 2024 in accordance with the ESEVTg SOP. The curriculum allows the student to acquire relevant and in-depth competencies in all mandatory areas in the field of public health, food safety and cyclic clinical training by animal species. The quantitative and substantive ratio of compulsory and elective subjects in all years of study allows the student not only to acquire the required mandatory Day One competences listed in Annex 2 to the ESEVT SOP, but also to form the basis of their professional career (animal clinics, state inspection service and food hygiene or veterinary science). In accordance with the university's procedure, the draft SOP is posted on the faculty's website for discussion 1 month before the review. Identified duplications, redundancies, gaps and lack of consistency, cross-cutting and/or integration of the curriculum are also identified through regular surveys of all stakeholders. The working group analyses, summarises and recommends corrections to the identified inconsistencies during the next approval of the curriculum.

Table 3.1.1. Curriculum hours in each academic year taken by each student

Academic years	A	B	C	D	E	F	G	H	J
Year 1	240	75	765	510	90	30	-	-	1710
Year 2	330	-	630	540	60	60	-	-	1620
Year 3	390	-	825	555	30	90	-	-	1890
Year 4	310	-	695	545	30	120	-	-	1700
Year 5	260	-	660	440	-	90	240	-	1690
Year 6	225	-	1080	315	-	240	330	-	2190
Total	1755	75	4655	2905	210	630	570	-	10800

A: lectures; B: seminars; C: supervised self-learning; D: laboratory and desk-based work; E: non-clinical animal work; F: clinical animal work; G: EPT; H: others (specify - e.g. graduation thesis); J: total

Table 3.1.2. Curriculum hours taken by each student

Subjects	A	B	C	D	E	F	G	H
Basic subjects								
Inorganic chemistry	15		60	45				120
Biophysics	30		60	30				120
Latin language (terminology)			60	60				120
Organic chemistry	30		60	30				120
Genetics	30		60	30				120



History of Ukrainian statehood	15	30	75				120
Ukrainian language (by profession)			90	30			120
Philosophy with the basics of logic	15	30	75				120
Foreign language			30	90			120
Safety of labour and life activity	15		75	30			120
Methodology and organisation of scientific research with the basics of intellectual property	15		75	30			120
History of veterinary medicine	15	15	90				120
Specific veterinary subjects							
Ecology in veterinary medicine	30		60	30			120
Anatomy of domestic animals	45		45	180			270
Cytology, histology, embryology	60		30	90			180
Fundamentals of animal breeding	15		90	15			120
Veterinary microbiology	30		30	60			120
Animal biochemistry with the basics of physical and colloidal chemistry	60		30	90			180
Physiology of animals	60		60	90			210
Animal feeding	15		75	30			120
Veterinary immunology	15		90	15			120
Veterinary virology	30		45	45			120
Animal hygiene	30		30	60			120
Animal welfare, ethology and professional ethics	30		60	30			120
Animal pathophysiology	45		45	90			180
Operative surgery, topographic anatomy and anaesthesiology	60		30	90			180
Clinical diagnosis of animal diseases	60		30	90			180
Veterinary pharmacology	60		45	75			180
Veterinary radiobiology	15		75	30			120
Parasitology and invasive diseases	45		60	75			180
Pathological morphology and forensic veterinary medicine	75		60	105			240
Veterinary clinical biochemistry	15		60	45			120
Obstetrics, gynaecology and biotechnology of animal reproduction with the basics of andrology	60		45	135			240
General and special surgery	60		30	120			210
Internal diseases of animals	45		60	135			240
Veterinary toxicology	30		60	30			120
Food hygiene	45		30	75			150
Epizootology and infectious diseases	60		45	135			240
Organisation of veterinary business and national and international veterinary legislation	45		15	60			120
Animal reproductive science	15		75	30			120
Special propaedeutics, therapy and prevention of internal diseases of animals	15		90	15			120
Surgical diseases of productive animals	15		75	30			120
Special epizootology	15		75	30			120
Global parasitology	15		75	30			120
State veterinary and sanitary expertise	15		90	15			120
Special pathomorphology	15		90	15			120

A: lectures; B: seminars; C: supervised self-learning; D: laboratory and desk-based work, E: non-clinical animal work; F: clinical animal work; G: others (specify); H: total

Table 3.1.3. Practical rotations under teaching staff supervision (excluding EPT)

Types	List of practical rotations	Duration, weeks	Year of programme
Intra-mural clinics (VTH)	Animal feeding / cattle, pigs, horses, cattle	1	2
	Anatomy of animals	1	2
	Cytology, histology, embryology	1	2
	Fundamentals of animal breeding/ cattle, pigs, horses, small animals, dogs, poultry, bees, rabbits	1	2
	Animal hygiene / cattle, pigs, horses, cattle, dogs, cats, poultry	1	4
	Operative surgery, topographical anatomy and anaesthesiology/ cattle, pigs, horses, bovines, dogs, cats	1	3
	General and special surgery/ cattle, pigs, horses, small animals, dogs, cats	1	4
Ambulatory clinics	Clinical diagnostics of animal diseases/ cattle, pigs, horses, small animals, dogs, cats, poultry	1	3
	Biotechnology of animal reproduction / cattle, pigs, horses, small ruminants	1	4
	Parasitology and invasive diseases/ cattle, pigs, horses, cattle, dogs, cats, poultry	1	4
	Pathological morphology and forensic veterinary medicine	1	4
Herd Health Management	Veterinary obstetrics, gynaecology and androlog	1	5
	Internal diseases of animals	1	5
Ensuring the epizootic welfare (all species of animals)	Veterinary microbiology	1	2
	Veterinary virology	1	2
	Epizootology and infectious diseases	1	5
VPH (including FSQ)	Food hygiene	1	4

Table 3.1.4. Curriculum hours taken as electives for each student.

Electives	A	B	C	D	E	F	G	H
Political science	15		90	15				120
Conflictology	15		90	15				120
Agricultural policy	15		90	15				120
Ethnocultural studies	15		90	15				120
Anatomy and physiology of fish	15		90	15				120
Anatomy and physiology of game and wild animals	15		90	15				120
Microbiology of meat	15		90	15				120
Biochemical processes of the cell	15		90	15				120
Neurophysiology with the basics of zoopsychology	15		90	15				120
Sanitary microbiology	15		90	15				120
Sanitary virology	15		90	15				120
Organic animal husbandry	15		90	15				120
Organisation of laboratory business	15		90	15				120
Microbiology of fish	15		90	15				120
Medicinal plants in veterinary medicine	15		90	15				120
Methods of mycological research	15		90	15				120
Anaesthesiology	15		90	15				120
Management and marketing in veterinary medicine	15		90	15				120
Fundamentals of veterinary pharmacy	15		90	15				120
Veterinary haematology	15		90	7	8			120
Dietetics of small pets	15		90	15				120
Biotechnology in veterinary medicine	15		90	15				120
Visual diagnostics of animal diseases	15		90	2		13		120

Technical microbiology	15		90	15				120
Dermatology and endocrinology	15		90	7		8		120
Veterinary nephrology and animal urology	15		90	7		8		120
Biosafety and biosecurity	15		90	15				120
Biochemical analysis in veterinary clinical practice	15		90	15				120
Veterinary support of beekeeping	15		90	15				120
Veterinary support of poultry farming	15		90	15				120
Diseases of fur-bearing animals	15		90	7		8		120
Reproductive biotechnology	15		90	5		10		120
Zoonoses and the concept of one health	15		90	15				120
Veterinary transfusiology	15		90	7		8		120
Animal herd health management	15		90	15				120
Veterinary oncology	15		90	8		7		120
Veterinary mycotoxicology	15		90	15				120
Veterinary neonatology	15		90	15				120
Fundamentals of rational antibiotic therapy	15		90	15				120
Diseases of aquarium fish	15		90	15				120
Reproductive sonography of ruminants	15		90	5		10		120
Diseases of dogs and cats	15		90	5		10		120
Intensive care and emergency treatment of animals	15		90	5		10		120
Organisation of veterinary business	15		90	15				120
Diseases of exotic animals	15		90	7		8		120
Tropical veterinary medicine	15		90	5		10		120
Veterinary andrology	15		90	15				120
Clinical toxicology	15		90	15				120
Veterinary health care of cattle	120		570	50	20	80		840
Veterinary health care of horses	120		570	50	20	80		840
Veterinary health care of dogs and cats	120		570	50	20	80		840
Veterinary health care of pigs	120		570	50	20	80		840
Veterinary health care of sheep and goats	120		570	50	20	80		840
Veterinary health care of exotic animals and fur-bearing animals	120		570	50	20	80		840
Veterinary health care of poultry	120		570	50	20	80		840
Veterinary pharmacy	120		570	150				840
Veterinary laboratory diagnostics	120		570	150				840
Veterinary support of public health	120		570	100			50	840

A: lectures; B: seminars; C: supervised self-learning; D: laboratory and desk-based work, E: non-clinical animal work; F: clinical animal work; G: others (specify); H: hours to be taken by each student per subject group

Table 3.1.5. Optional courses proposed to students (not compulsory)

Subjects	A	B	C	D	E	F	G	H
The basics of grooming	15		90	15				120
Cynology and felinology with the basics of first aid	15		90	15				120
Dietetics and maintenance of small pets	15		90	15				120
PEST control	15		90	15				120
Veterinary nutrition science	15		90	15				120
Food safety assurance systems	15		90	15				120

A: lectures; B: seminars; C: supervised self-learning; D: laboratory and desk-based work, E: non-clinical animal work; F: clinical animal work; G: others (specify); H: total

During the first two years of study, students undergo, first of all, preclinical training to master the knowledge and skills of general rules of care and the basics of care, feeding, hygiene, breeding, physiology, ethology and welfare of animals of different species under the guidance of the teaching staff and employees in the

form of shifts and work with healthy animals in the Vetmedservice Centre (data on the number of hours of preclinical practice for each student are given in Table 3.1.1).

During the next 3, 4, 5 and 6 years of study, in addition to theoretical knowledge, students gain practical knowledge and skills during clinical classes in the disciplines of propaedeutics and diagnostic imaging, anaesthesiology and surgery, pathological morphology, epizootology, infectious diseases and preventive medicine, veterinary endocrinology, clinical toxicology.

Students gain special practical knowledge about the health of companion animals by studying courses in small animal surgery with anaesthesiology and resuscitation, small animal traumatology and orthopedics, small animal internal medicine and reproductive endocrinology, dermatology, clinical oncology, etc.

For productive animals, horses and poultry, students have the opportunity to undergo clinical training in such disciplines as obstetrics and biotechnology of animal reproduction with the basics of andrology, general and special surgery of productive animals, internal diseases, herd health management, diseases of ruminants, horses, pigs, poultry, and exotic animals.

Students acquire practical skills in laboratory diagnostics, sampling of biomaterial, interpretation of laboratory test results, diagnostic and therapeutic measures for laboratory animal diseases during the study of veterinary clinical biochemistry and clinical laboratory diagnostics.

In addition, before starting clinical rotations, students master clinical skills in the disciplines of beekeeping, fish farming, fur-bearing animals, diseases of exotic and wild animals.

Before starting the clinical rotation, students will receive basic clinical exercises while working with healthy animals, mannequins, through practical modelling and the use of video materials.

The curriculum offers 58 elective courses (table 3.1.4), of which students can choose 17 subjects (25%). Starting from the 2nd year of study, students have the opportunity to form an individual educational trajectory. The selection procedure is described in the 'Procedure for the Formation and Selection of Elective Disciplines by Students of Educational Programmes at the National University of Life and Environmental Sciences of Ukraine'.

The faculty website contains a list of elective courses and syllabuses for them, which students can access at any time. The list of disciplines of free choice for the EPP (elective component 1 - elective component 48, and 30 elective components from 10 elective blocks) was formed by the departments based on discussions with students, employers, the academic community of the VEE. Such a list of disciplines is recommended by the EPP working group for consideration by the Educational and Methodological Council and the Academic Council of the VEE, and the curriculum as a whole is approved by the Educational and Methodological Council of the University and approved by the Academic Council of the University. To form the contingent of students, the dean's office of the faculty acquaints students in the 1st, 3rd, 5th, 7th and 9th semesters with the list of free choice disciplines of the educational programme approved by the academic council of the VEE and the list of free choice disciplines approved by the academic council of the University. The dean's office also organises the procedure for students to choose elective courses in paper or electronic form. Applicants who have chosen an educational component around which the required number of people has not been grouped are given the opportunity to re-select educational components for which full academic groups have been formed. In the curricula the elective educational components make up 25% or 90 credits.

Procedures for determining the achievements of each student in each major clinical activity are carried out in accordance with the Regulations 'On Practical Training of Students at NUBiP of Ukraine,' 'On Recognition of Learning Outcomes for Higher Education Applicants at NUBiP of Ukraine.

Clinical activities performed by the student are reflected in the relevant protocols, a report is drawn up, which is defended at the relevant department, and grades are entered in the student's record book.

At the end of the external clinical practice, students fill in the reporting documentation (diary with appendices and a report with a brief summary). The reports are defended at a commission appointed by the rector's order, and grades are put in the student's academic record.

**Standard 3.2: Each study programme provided by the VEE must be competency-based and designed so that it meets the objectives set for it, including the intended learning outcomes. The qualification resulting**

from a programme must be clearly specified and communicated and must refer to the correct level of the national qualifications framework for higher education and, consequently, to the Framework for Qualifications of the European Higher Education Area.

**The VEE must provide proof of a QA system that promotes and monitors the presence of a teaching environment highly conducive to learning including self-learning. Details of the type, provision and updating of appropriate learning opportunities for the students must be clearly described, as well as the involvement of students.**

**The VEE must also describe how it encourages and prepares students for lifelong learning.**

The basis for the training at the VEE of the National University of Life Sciences of Ukraine is an integrated approach that combines practical training, innovation and international integration, the possibility of participating in academic mobility programmes (Erasmus+), internships abroad at modern agricultural enterprises, obtaining modern knowledge at lectures and master classes of foreign lecturers and experts, domestic practitioners, obtaining professional advice from employers at lectures, on-the-job training during internships, research and practical training. Students' participation in the revision of the curriculum and the formation of their individual educational trajectory through the choice of elective courses, disciplines, independent learning activities with students through the independent choice of scientific clubs, interactive teaching methods, and various forms of independent work prepare students for independent learning. All of this improves the quality of study programmes, contributes to the development of the academic environment and students' orientation towards lifelong learning. In addition, after graduation, every 5 years graduates have to undergo advanced training in a narrow specialisation.

The curriculum was developed taking into account the recommendations of employers, the academic community and students. It was updated in 2018 (Order of NUBiP of 20.04.2018 №384) and then in 2022 by a project team of teachers under the supervision of the Dean, the detailed list of whom is available in Annex 25.

The educational programme is designed to take into account the trends in the development of veterinary science, due to the need for society to develop and improve methods, schemes for the diagnosis, treatment and prevention of animal diseases in the context of globalisation, food security, modernisation of the field of knowledge 'Veterinary Medicine', raising standards and improving the quality of life.

Students can influence the content of the EP by participating in the educational and administrative structures of the University (Academic Council of the University, Faculty of Veterinary Medicine), monitoring the quality of the EP, curricula, methodological support of the process, etc.; participation in the work of the student organisation of the NUBiP of Ukraine and the VEE, the student council of the hostel, or individually. The study and analysis of proposals of internal stakeholders on the content of the EP and improvement of the quality of higher education is carried out in the following ways - surveys, representative surveys, questionnaires, while ensuring publicity and transparency of the survey of students. Monitoring of the interests of applicants, the standard of higher education in terms of the content of the EP and ensuring the competencies of specialists; - round tables, open forums with the university administration, faculty and/or with the participation of employers, etc. When formulating the goals and programme learning outcomes of the EP, the proposals of the VEE's academic staff, expressed in the questionnaire and at meetings of the dean's office, academic and methodological councils, are taken into account

The VEE encourages and prepares students for lifelong learning by organising master classes and guest lectures by well-known professionals in veterinary medicine.

### **Standard 3.3: Programme learning outcomes must:**

- ensure the effective alignment of all content, teaching, learning and assessment activities of the degree programme to form a cohesive framework
- include a description of Day One Competences
- form the basis for explicit statements of the objectives and learning outcomes of individual units of study
- be communicated to staff and students



• **be regularly reviewed, managed and updated to ensure they remain relevant, adequate and are effectively achieved.**

The learning outcomes of the programme are set out in the curriculum ([https://nubip.edu.ua/sites/default/files/u384/op\\_veterinarna\\_medicina\\_2024\\_0.pdf](https://nubip.edu.ua/sites/default/files/u384/op_veterinarna_medicina_2024_0.pdf)). The knowledge and skills that students need to acquire to achieve the required learning outcomes are described in the curriculum and annotations for each discipline ([https://nubip.edu.ua/sites/default/files/u284/katalog\\_magprogram\\_ukr\\_2024\\_tom\\_1\\_na\\_sayt.pdf](https://nubip.edu.ua/sites/default/files/u284/katalog_magprogram_ukr_2024_tom_1_na_sayt.pdf)).

ESEVT learning outcomes, criteria and indicators were taken into account when revising the curriculum and syllabuses of the disciplines. Particular attention was paid to modernising methodological approaches and practical training in accordance with the WOA requirements for the competences of a first-day veterinarian. This analysis has resulted in the curriculum being optimised for core and elective components.

Participants in the educational process are provided with information on the objectives, content and expected learning outcomes, as well as the assessment procedure and criteria. This information is published in the curricula of individual disciplines and provided to the participants of the educational process in electronic form on the elearn distance learning platform. Students get acquainted with these materials at the beginning of the academic year (usually at the introductory class in each discipline). The university's website contains curricula, syllabuses, discipline catalogues, the schedule of the educational process, class schedules, survey results, links to distance learning, etc. Information about the educational process at the VEE can also be found on the VEE's website.

Every year, teaching staff members undergo advanced training, where they have the opportunity to communicate with employers and graduates in an industrial environment, to receive information from them about current industrial needs and requirements for veterinary medicine graduates. Suggestions and wishes are taken into account when revising the educational programme (EP) and curriculum. The draft EP, curriculum and learning outcomes are discussed at meetings of the working group, departments and the Academic Council of the VEE, where they are analysed for the need to update them. The working group includes leading teaching staff members of clinical departments, students, and a representative of the employers' council.

All learning outcomes defined in the Standard of Higher Education of the second (master's) level of higher education in the specialty 211 'Veterinary Medicine' (approved by the order of the Ministry of Education and Science of Ukraine №558 of 24.04.2019) and the first day competencies are included in the programme learning outcomes of this programme and are provided by the relevant mandatory educational components of the EP, and are additionally strengthened by the elective component.

The objectives, content and expected learning outcomes, assessment criteria and procedure are described in the syllabus of each discipline. Each student has access to an e-learning course, which clearly regulates the rules and deadlines for submitting various types of work. Every year, in the first month of study, the first-year students attend the First-Year School training, during which they are also provided with information on the objectives, content and expected learning outcomes in accordance with the national standard and the First Day competencies. At the beginning of each course, the academic staff communicates this information verbally and visually in the form of a presentation. This information is also communicated to students before writing tests, etc. According to the quality procedures, the syllabus of a core discipline is reviewed annually by the academic staff, taking into account the recommendations of students and employers, new research developments, and is discussed and adopted at a meeting of the department.

**Standard 3.4: The VEE must have a formally constituted committee structure (which includes effective student representation), with clear and empowered reporting lines, to oversee and manage the curriculum and its delivery. The committee(s) must:**

- **determine the pedagogical basis, design, delivery methods and assessment methods of the curriculum**
- **oversee QA of the curriculum, particularly gathering, evaluating, making change and responding to feedback from stakeholders, peer reviewers and external assessors, and data from examination/assessment outcomes**

- **perform ongoing reviews and periodic in-depth reviews of the curriculum at least every seven years by involving staff, students and stakeholders; these reviews must lead to continuous improvement of the curriculum. Any action taken or planned as a result of such a review must be communicated to all those concerned**
- **identify and meet training needs for all types of staff, maintaining and enhancing their competence for the ongoing curriculum development.**

The training of undergraduate students in the speciality "Veterinary Medicine" is carried out according to the educational programme (EP). The procedures for the development, approval, monitoring and periodic review of educational programmes at NUBiP of Ukraine are regulated by the Regulations on Educational Programmes of NUBiP of Ukraine. The EPP includes the list of disciplines and the logical sequence of their study, the number of ECTS credits required to complete the programme, competences and learning outcomes. Compliance with the requirements is monitored by the university's internal quality assurance system.

In accordance with the 'Regulations on the organisation of the educational process in NUBiP of Ukraine', the educational programme is reviewed annually and updated if necessary. The educational programmes are reviewed at the meeting of the group on the content and quality of education and the Academic Council of the VEE. The EPP is approved by the Academic Council of the University. On the basis of the EPP, the dean's office staff draw up a curriculum, which is agreed by the EPP guarantor, the educational department, the vice-rector for scientific and pedagogical work of the university, and then approved by the rector. The approved curriculum is posted on the NUBiP of Ukraine website.

In accordance with the EPP and the curriculum, the departments annually review and update the discipline work programmes, which are considered at the meetings of the departments, the VEE methodological commission in June before the start of the new academic year and are agreed by the programme guarantor, approved by the Academic Council. Updated curricula at the beginning of the academic year are posted on the e-learning platform for each discipline and on the pages of the departments in the form of syllabus.

An anonymous survey is conducted for students on the quality of teaching and content of disciplines, as well as their wishes for changes within disciplines, the educational programme and the curriculum. The results of the survey are reflected in the development of the curriculum for the next period. The questionnaires and results of the student survey are posted on the VEE's website.

The project team consists of: N.G. Grushanska, Head of the Department of Therapy and Clinical Diagnostics, Doctor of Veterinary Sciences (guarantor), M.I. Tsvilikhovsky, Dean of the Faculty; Zhuk Y.V. Associate Professor of the Department of Obstetrics, Gynecology and Biotechnology of Animal Reproduction, Candidate of Veterinary Sciences (member of the group); Derkach S.S. Associate Professor of the Department of Obstetrics, Gynecology and Biotechnology of Animal Reproduction, Candidate of Veterinary Sciences (member of the group), Melnyk V.V, Head of the Department of Veterinary Epidemiology and Animals Health, PhD (Team Member) determines the pedagogical framework, design, and oversees the quality assurance of the curriculum, including collecting, evaluating, amending and responding to feedback from stakeholders, peer reviewers and external experts.

The core components, teaching methods and assessment methods of the curriculum are reviewed by the Educational and Methodological Commission and approved by the Academic Council in accordance with the standard of the speciality 'Veterinary Medicine'; the draft of the EPP is published on the official website of the VEE for discussion by students and stakeholders before approval,

Students are represented in the Academic Council of the VEE and the VEE's Educational and Methodological Commission. The members of the Academic Council are students Aranyosh O. V. (5th year), Hvedchuk M. F. (5th year) and Herko A. B. (3rd year), Storozhuk V. (PhD candidate). Representation in the scientific and methodological commission is by M.F. Khvedchuk, student, 5th year, and V. Storozhuk, PhD candidate.

The training needs of all categories of staff to maintain their competences and continuous development of the curriculum are met through participation in in-service training activities, which is regulated by the Regulations on in-service training at NUBiP of Ukraine.

**Standard 3.5: Elective Practical Training (EPT) includes compulsory training activities that each student must achieve before graduation to complement and strengthen their core theoretical and practical academic education, inter alia by enhancing their experience, professional knowledge and soft skills. Like all elective activities, its contents may vary from one undergraduate student to another.**

**EPT is organised either extra-murally with the student being under the direct supervision of a qualified person (e.g. a veterinary practitioner) or intra-murally, with the student being under the supervision of a teaching staff or a qualified person.**

**EPT itself cannot replace the Core Clinical Training (CCT)<sup>1</sup> under the close supervision of teaching staff (e.g. ambulatory clinics, herd health management, practical training in VPH (including Food Safety and Quality (FSQ)).**

The organisation, conduct and control of the elective component of practical training of students (EPT) is carried out in accordance with the Regulations on Practical Training of Students.

The purpose of the practical training is also to form and develop students' professional ability to make independent decisions in a specific professional environment, as well as their ability to communicate and socialise. Students of the VEE undergo practical training in the 5th year (10th semester) and 6th year (12th semester) for 14 weeks with a total of 420 hours, of which 8 weeks are spent on external (outside the VEE) clinical practice on productive animals in farms in accordance with the concluded agreements, 6 weeks - on companion animals in small animal clinics, also in accordance with the agreements.

Students independently choose the place of external practice. The enterprises that are the bases for internships must: meet the requirements for internships; provide the student with the first job; if technical means are available, provide access to the Internet; provide housing that meets sanitary and hygienic requirements for the period of internship; ensure compliance with safety conditions; if possible, ensure further employment of the graduate after graduation. The purpose and main tasks of the internship, its content by individual educational components, rules for documentation and evaluation criteria are set out in the methodological recommendations reviewed and approved by the Academic Council of the School of Medicine (Minutes No. 12 of 20.06.2024).

**Table 3.5.1. Curriculum days of Elective Practical Training (EPT) for each student**

Fields of Practice	Minimum duration (weeks)	Year of programme
Production animals (pre-clinical)*	-	-
Companion animals (pre-clinical)	-	-
Production animals (clinical)	6	5
Companion animals (clinical)	6	6
VPH (including FSQ)	1	5

\*pre-clinical practice of students is conducted under the supervision of teaching staff

**Standard 3.6: The EPT providers must meet the relevant national Veterinary Practice Standards, have an agreement with the VEE and the student (stating their respective rights and duties, including insurance matters), provide a standardised evaluation of the performance of the student during their EPT and be allowed to provide feedback to the VEE on the EPT programme.**

**There must be a member of the teaching staff responsible for the overall supervision of the EPT, including liaison with EPT providers.**

The university has a department for graduate employment and issuance of documents on higher education, which includes a specialist in promoting the employment of students and graduates, who deals with issues of cooperation with employers. The organisation of students' internships, including the search for enterprises, institutions and organisations (employers), the introduction of a feedback system between enterprises, institutions, organisations and the university to obtain an objective assessment of the quality of students' professional training is carried out by O. Bachynskiy. Associate Professor Zhuk Y. is responsible for communication with industry and practical training of students, as well as with employers at the VEE. Employers (practice bases) (annexes 15 &

16) are involved in the educational process during the organisation and conduct of internships (in accordance with the concluded agreements). Insurance of students is not provided by national legislation.

The bases of practical training of students of the VEE are enterprises and facilities that produce livestock products and carry out primary processing of slaughtered animals; conduct diagnostic and laboratory research, small animal clinics, zoos and others. Employers take an active part in the organisation and conduct of the practice, supervise the practice at the enterprise. The content and objectives of the internship are agreed with employers who are members of the employers' council. At the end of the internship, the internship supervisor (veterinarian) certifies the diary and gives the student a characteristic assessment of the completeness of the internship programme and the acquired competencies. Feedback from the production is also provided through monitoring (via questionnaires).

**Standard 3.7: Students must take responsibility for their own learning during EPT. This includes preparing properly before each placement, keeping a proper record of their experience during EPT by using a logbook provided by the VEE and evaluating the EPT. Students must be allowed to complain officially and/or anonymously about issues occurring during EPT. The VEE must have a system of QA to monitor the implementation, progress and then feedback within the EPT activities.**

The Regulations 'On Practical Training of Students of NUBiP of Ukraine' define the procedure for appealing the results of control measures. Students can submit comments and suggestions on the organisation and conduct of internships in the summary reporting documentation, as well as address complaints or suggestions to the dean's office, to the person responsible for liaison with production and practical training at the VEE. In addition, the university conducts an internal audit of the quality of the educational process in accordance with the 'On the system of ensuring the quality of educational activities and the quality of higher education in NUBiP of Ukraine'.

During the internal audit, complaints or comments from students regarding the educational and professional programme (if any) are considered and corrective actions are developed. Students take responsibility for their own learning during the EPT by writing a practice report and self-assessment of their practical skills, the main tasks of the practice, its content by individual educational components, rules for documentation are set out in the methodological recommendations, which are considered by the educational and methodological commission and approved by the academic council (for example, [https://nubip.edu.ua/sites/default/files/u336/p-ka\\_ag\\_2025\\_211\\_ok\\_34\\_ok\\_34\\_valchuk\\_rnpn\\_veterinarne\\_akusherstvo\\_ta\\_ginekologiya\\_.pdf](https://nubip.edu.ua/sites/default/files/u336/p-ka_ag_2025_211_ok_34_ok_34_valchuk_rnpn_veterinarne_akusherstvo_ta_ginekologiya_.pdf)) of the VEE.

### **Comments on Area 3**

During 2018-2022, the educational programme was significantly updated, as a 6-year Master's curriculum was developed and implemented with partial consideration of Directive 2005/36/EC and successfully accredited according to the National Standard.

### **Suggestions for improvement in Area 3**

Continue to modernise the programme in accordance with the recommendations and European requirements of the SOP and harmonise it with the university's regulations and the national standard. Strengthen the organisation and documentary support of intraclinical practice. Especially attention should be paid to the suggestions of ESEVT experts, which will be provided as a result of the previsit.

## Area 4. Facilities and equipment

**Standard 4.1: All aspects of the physical facilities must provide an environment conducive to learning, including internet access at all relevant sites where theoretical, practical and clinical education takes place. The VEE must have a clear strategy and programme for maintaining and upgrading its buildings and equipment. Facilities must comply with all relevant legislation including health, safety, biosecurity, accessibility to people including students with a disability, and EU animal welfare and care standards.**

The VEE is located in the Holosiivskyi district at 16 Vystavkova Street, Kyiv, 03041. The building of the VEE has been operating since 1985.

The VEE is housed in separate buildings No. 12 and No. 12a with a territory of 5.8 hectares, which has several blocks: A, B, C, D, E. The VEE has a dormitory (No. 6) with 630 beds.

The student dormitory is located at a distance of 3 km from the academic building No. 12. The central student canteen is located at a distance of 1.5 km from the academic building. Public transport connects the VEE with other districts of Kyiv.

Students of the VEE study mainly in the academic building No. 12 and other buildings (No. 1-11). The lecture courses and practical classes are held in auditoriums with a total area of 4238.2<sup>m2</sup> equipped with multimedia teaching aids. The laboratories are equipped with instruments for clinical, biochemical, microbiological and other studies. The VTH includes operating rooms, diagnostic rooms, and rooms for postoperative care of animals. The educational and scientific laboratory 'Centre for Animal Reproduction with Sperm and Embryo Bank' contains specialised equipment for manipulating embryos and sperm in accordance with biosecurity standards.

The facilities for theoretical, practical and clinical training and laboratories are equipped (in particular, microscopes, ultrasound machines, X-ray machines, endoscopes, haematological and biochemical analysers, urine and milk analysers, surgical equipment used for diagnosis, treatment animals and training of students.) with modern technical facilities for lectures, seminars and practical classes. All key areas (classrooms, laboratories, clinics) have access to high-speed Internet, which allows the use of digital resources and interactive learning technologies.

The VEE systematically upgrades its material and technical facilities, which includes regular monitoring of the condition of facilities and equipment, and scheduled renewal of outdated equipment. Additional funding is obtained through grants, public and private investments.

In addition, the VEE has a number of cooperation agreements with clinics, agricultural enterprises, processing plants and laboratories on the basis of cooperation agreements to expand opportunities for practical work of students, increase the number of animals and biological material in the educational process.

The facilities of the university and VEE meet the requirements of the current legislation and national licensing requirements for educational activities, which is confirmed by the availability of licences, accreditation certificates, inspection reports of authorised bodies, inventory documents and modern equipment necessary to ensure a quality educational process.

**Standard 4.2: Lecture theatres, teaching laboratories, tutorial rooms, clinical facilities and other teaching spaces must be adequate in number and size, equipped for instructional purposes and well maintained. The facilities must be adapted for the number of students enrolled. Students must have ready access to adequate and sufficient study, self-learning, recreation, locker, sanitary and food service facilities.**

**Offices, teaching preparation and research laboratories must be sufficient for the needs of the teaching and support staff to support their teaching and research efforts.**

Lectures are held in buildings 1-12, in auditoriums equipped with multimedia projectors, laptops and the Internet. In addition, building 12 has 52 classrooms for laboratory and practical lessons for 15-30 students, as well as facilities for teaching and support staff and educational and research laboratories. Each floor of the building has recreational facilities where students can relax after lessons with a WiFi zone, as well as restrooms. The university buildings have canteens with hot meals available throughout the day. The university's scientific library is located in academic building 4. There are branches of the library in buildings 10, 11, 12, 6, 1, which have a



reading lounge with computers, Internet and subscription. For independent training students also use computer classes of the VEE, museums of surgical pathology, anatomy and pathological anatomy, parasitology. The clinics are equipped with separate rooms for students.

The departments are equipped with the appropriate equipment: multimedia projectors, projection screens, computers with Windows licence, MS Office software package, tools for distance learning, Elearn educational environment, corporate ZOOM access points.

The laboratories of the departments are equipped with microscopes, centrifuges, fume hoods, reagent storage cabinets, refrigerators, biochemical analysers, photoelectrocolourimeters, scales, water baths, educational posters, pH meters, dispensers, test kits for the study of biochemical parameters, laboratory glassware, nutrient media for cultivation of microorganisms, equipment and chemical reagents for microscopic studies, work with gametes, and for detection and identification of pathogens of blood-parasitic diseases, arachnoentomoses and protozoa.

The equipment of the laboratories includes a centrifuge XC-2000, a digital X-ray complex for veterinary medicine Vatel-1 Alpha, an electrocardiograph Neart Screen 60G, ultrasound machines, biochemical analysers, Urine analysers, Microscopes MISROmed XS-3320, Ionometers I-160MI, Colostrometers, Centrifuges, Monocular microscopes XS-2610, Haematological analysers IDEX Uet Autoread, Trinocular microscope BB. 2253 with a digital camera, Binocular microscopes, Electronic stethophonendoscope eCure Vet IIR Gemium Kit, Electronic otoscope eCure Otosore, Wireless monitor ESG monitor eCure, Endoscope viewing WiFi camera Endoscore eCure, Histoprocessor Thermo, Diagnostic device C-arc, SE-3 EDAN electrocardiograph, Mindray DP-50 haematology analyser, freezers, LS shakers, thermostats, medical tables, inhalation anaesthesia devices, STORZ surgical equipment, PatonVet, CO2 incubators, Dewar dishes, etc.

Students have the opportunity to use geographically coordinated information suitable for analysis in a user-friendly form (maps, atlases, graphs, charts, profiles, etc.).

The VEE's infrastructure is equipped with personal protective equipment (disposable gowns, hats, shoe covers, gloves, masks and goggles), centralised water supply and drainage, hand-wash basins with detergents and disinfectants for washing and treating hands as well as eyewashers.

There are sufficient offices and laboratories for teaching and support staff that meet the requirements for effective teaching and research activities. These facilities are equipped with all the necessary equipment to conduct lectures, research, training and support of students in the educational process. The VEE also has specially equipped rooms for students to work in small groups, which are provided with the necessary furniture, multimedia equipment and Internet access for effective learning tasks and discussions.

**Standard 4.3: The livestock facilities, animal housing, core clinical teaching facilities and equipment used by the VEE for teaching purposes must:**

- be sufficient in capacity and adapted for the number of students enrolled in order to allow safe hands-on training for all students
- be of a high standard, well maintained and fit for the purpose
- promote best husbandry, welfare and management practices
- ensure relevant biosecurity
- take into account environmental sustainability
- be designed to enhance learning.

Farm animals are kept in the hospital of the Vetmedservice Clinical Centre of the VEE. There are five cages for pigs, each measuring 2.5 m<sup>2</sup> (12.5 m<sup>2</sup> in total). In the same block there are three stalls for horses (8.5 m<sup>2</sup>, 5.5 m<sup>2</sup> and 6 m<sup>2</sup>). In addition, there are three cow sheds, each of 9 m<sup>2</sup>. For small cattle there are four boxes with an area of 2.4 m<sup>2</sup>. Poultry (chickens - 2, pheasants - 1) are kept in a 20 m<sup>2</sup> cage.

Rabbits are kept on the basis of the clinical centre ('feed kitchen') in a cage designed for 40 animals with an area of 20 m<sup>2</sup>.

The Clinical Centre has an educational and scientific laboratory for preclinical and clinical pharmaceutical research, which is part of the Department of Vertebrate Pharmacology. Laboratory mice and rats are kept on the basis of this laboratory.

The VTH has 8 individual cages for dogs with a total area of 25 m<sup>2</sup> (6 cages of 3 m<sup>2</sup> and 2 cages of 1.5 m<sup>2</sup>). For small breeds of dogs and cats, there are 6 individual boxes with an area of 0.3 m<sup>2</sup> each).

Table 4.3.1. Areas for keeping animals at the Vetmedservice Clinical Centre

Types of animals	Healthy		Sick		Isolation	
	Number of places, per animal	Area, m <sup>2</sup>	Number of places, per animal	Area, m <sup>2</sup>	Number of places, per animal	Area, m <sup>2</sup>
Dogs	6	18	2	3	Not available	-
Cats	3	0.9	3	0.9	Not available	-
Cattle	3	27	Not available	-	Not available	-
Small ruminants	4	9.6	Not available	-	Not available	-
Horses	3	20	Not available	-	Not available	-
Pigs	5	12,5	Not available	-	Not available	-

Table 4.3.2. Areas of infrastructure of the Vetmedservice Clinical Centre

Types of animals	Rooms	Room number	Room size, m <sup>2</sup>
Companion animals	Reception	127	31.5
	Conference room	126	64.8
	Blood bank	128	14.9
	Pet boarding facility (kennel)	129	32.0
	Ultrasound room	136/1	19.1
	Laboratory	130	30.7
	Surgery room	134	27.3

At the Department of Animal and Food Hygiene named after prof. A.K. Skorokhodko, students of the discipline of food hygiene work in the educational and research laboratory of food hygiene, which has the appropriate material and technical base for conducting laboratory classes of the work programme in the discipline. In addition, students work with biological material supplied by poultry farms, fish farms, educational and research farms, animal product processing facilities, and state laboratories for veterinary and sanitary examination of agri-food markets in Kyiv. Students also use the material and technical base of the Department of Processes and Equipment for Processing Agricultural Products of the Faculty of Food Technologies and Quality Management of Agricultural Products (building 11, room 101 - meat processing and room 107 - milk processing), where they are trained. 107 - milk processing), which has the necessary equipment for meat processing (cutter, mince mixer, grinder, carcass separator, tenderiser, syringe for filling membranes, etc.) and a production line for milk processing, where students acquire practical skills related to the processing of raw materials of animal origin and food production. Some classes related to the study of food and feed safety and quality are held at the Ukrainian Laboratory of Quality and Safety of Agricultural Products. In addition, the department has close ties with production facilities with which it has signed cooperation agreements. There, students are divided into small subgroups, depending on their capabilities, and undergo practical training (individual practical classes, internships) on farms, slaughter and processing facilities, in supermarket processing departments, testing and calibration laboratories.

**Standard 4.4: Core clinical teaching facilities must be provided in a veterinary teaching hospital (VTH) with 24/7 emergency services at least for companion animals and equines. Within the VTH, the VEE must unequivocally demonstrate that the standard of education and clinical research is compliant with all**

**ESEVT Standards, e.g. research-based and evidence-based clinical training supervised by teaching staff trained to teach and to assess, availability for staff and students of facilities and patients for performing clinical research and relevant QA procedures.**

**For ruminants, on-call service must be available if emergency services do not exist for those species in a VTH.**

**The VEE must ensure state-of-the-art standards of teaching clinics which remain comparable with or exceed the best available clinics in the private sector.**

**The VTH and any hospitals, practices and facilities which are involved with the core curriculum must be compliant with the ESEVT Standards and meet the relevant national Veterinary Practice Standards.**

Since 2015, the main clinical training has been carried out at the Vetmedservice Clinical Centre and the VEE's clinical departments. The clinical centre is equipped with advanced equipment and infrastructure that meets the highest international standards of veterinary medicine. Students have the opportunity to gain practical skills in conditions close to real-life situations, which contributes to the development of clinical skills using modern research methods and evidence-based medicine. The staff of the Vetmedservice is represented by the head and veterinarians. The basic clinical training is provided by research and teaching staff in the following specialisations: diagnostic imaging, anaesthesiology and surgery, veterinary reproductive medicine, internal metabolic diseases, ophthalmology, intensive care, and preventive medicine.

The VTH is on duty according to the schedule approved by the dean's office. The VTH is open from Monday to Friday from 9:00 to 17:00, Saturday and Sunday from 10:00 to 14:00.

As part of clinical training, university students are trained based on the principles of evidence-based medicine. The training process includes the integration of modern scientific research into clinical practice, which allows students to develop skills in making informed clinical decisions based on modern scientific data. This is ensured through close cooperation with research laboratories, where students have access to current clinical trials and can actively participate in the analysis of clinical cases.

All clinical classes are conducted under the careful supervision of highly qualified teaching staff, with experience in both clinical practice and research and undergo systematic professional development in pedagogical skills. Teaching staff provide students with individual consultations, evaluate their skills and progress, and ensure continuous quality control through regular assessments and practical evaluations.

**Standard 4.5: The VEE must ensure that students have access to a broad range of diagnostic and therapeutic facilities, including but not limited to clinical skills laboratory, diagnostic imaging, clinical pathology, anaesthesia, surgeries and treatment facilities, intensive/critical care, ambulatory services, pharmacy and necropsy facilities. Procedures and facilities should also be available for soft skills training, e.g. communication skills training through role-play.**

All students of the VEE have access to a wide range of diagnostic and therapeutic tools. In the course of their studies, students develop skills in diagnosing various pathologies using special devices and equipment: a patient monitor, an X-ray machine (stationary and mobile), an ultrasound machine, laparoscopy, ophthalmoscopy, eye biomicroscopy and various laboratory diagnostic methods. During surgical operations, students have access to anaesthesia techniques and animal operations. They have the opportunity to provide emergency care under the supervision of a teaching staff member.

While on duty in the VTH, students study the organisation of the veterinary pharmacy. They take an active part in conducting autopsy procedures under the guidance of teaching staff. All procedures must be documented in a protocol, discussed with the teaching staff with the participation of other students and animal owners.

The disciplines 'Philosophy', 'Animal Welfare, Ethology and Professional Ethics', 'Ecology in Veterinary Medicine' help students to form a systematic outlook, master general cultural knowledge, and understand ethical issues. Learning how to work in a team and manage teamwork, use creative approaches and critical thinking, the ability to cope with psychological difficulties in communicating with animal owners, develop logical and critical thinking in diagnosing a disease helps to master the material of such educational components as Clinical Diagnosis of Animal Diseases, Animal Pathophysiology, etc. The acquisition of social skills is facilitated by teaching

methods and forms: adaptability, development of business communication skills, improvement of analytical skills, communication and management skills (participation in trainings, seminars, scientific and practical conferences, forums, exhibitions, master classes); the ability to learn throughout life (self-education, abstracts, scientific reports, information search tasks); skills of participation in the discussion (brainstorming, practical training, reports of masters at the department meetings, reception of sick patients in the clinic); critical thinking (unified state qualification exam, defence of practice reports); creative thinking (panel discussion, business games, cases, modelling). For the effective development of soft skills, students also participate in master classes of leading scientists and practitioners, workshops.

**Standard 4.6: Appropriate isolation facilities must be provided to meet the need for the isolation and containment of animals with communicable diseases. Such isolation facilities must be properly constructed, ventilated, maintained and operated to provide for the prevention of the spread of infectious agents, animal care and student training. They must be adapted to all animal species commonly handled in the VTH. When permanent isolation facilities are not available in any of the facilities used for clinical training, the ability to provide such facilities and the procedures to use them appropriately in an emergency must be demonstrated during the visitation.**

In accordance with the strategic development plan of the VEE, a plan for the reconstruction of facilities has been developed to ensure the safe treatment of infectious and suspected infectious animals on the VEE campus, which makes it possible to control infections and prevent threats to humans, animals and the environment. Temporarily infectious suspected and sick animals are sent to partner clinics.

**Standard 4.7: The VEE must have an ambulatory clinic for production animals or equivalent facilities so that students can practise field veterinary medicine and Herd Health Management under the supervision of teaching staff.**

Students (4-6 years of education) have the opportunity to provide veterinary care on call under the supervision of a teaching staff member. For this purpose, the clinic has a schedule of faculty members on duty, and the university provides transport for group visits of students. The University's educational and research farms are in operation, where students regularly undergo educational and industrial practices.

To manage the health of the herd, students have the opportunity to participate in comprehensive measures for the prevention, diagnosis and treatment of diseases in farm animals. As part of the Animal Health Management discipline, students acquire practical skills in animal health management and productivity optimisation. This knowledge is complemented by practical work at the Centre for Digital Welfare Monitoring in Cattle, Sheep and Goat Breeding, where students learn to analyse herd health data, implement biosecurity monitoring systems, and develop strategies to improve animal welfare using modern software and equipment.

**Standard 4.8: The transport of students, live animals, cadavers, materials from animal origin and other teaching materials must be done in agreement with national and EU Standards, to ensure the safety of students and staff and animal welfare, and to prevent the spread of infectious agents.**

To transport students to their internships and educational and research farms, the VEE uses university transport, which is distributed centrally. Mostly it is 3 passenger buses with 25 seats and a minibus with 10 seats. To use the buses, an application is submitted to the university garage in advance, which is usually always granted. The use of teaching staff and/or students' own transport is allowed in the case of individual study in small groups. Transport and drivers are allowed to transport people by a special public service in accordance with the requirements of national legislation.

Patients are transported to clinics by animal owners in special vehicles or vehicles adapted for animal transport. In some cases, for example, animals are transported from the university's teaching farm to the VTH using university transport - a truck equipped to transport live animals.

Cadavers for necropsy for diagnostic purposes are delivered by animal owners using special or adapted transport. In the absence of the possibility of delivery by special transport, all measures are taken to prevent

contamination of transport with cadaveric material, for which purpose waterproof materials are used for temporary adaptation of transport. After delivery of the cadavers, such transport is disinfected. Individual organs or carcasses of small animals are delivered in watertight, dense plastic containers with biosecurity labelling. In some cases, faculty members may pick up the cadavers with their own containers, which can be obtained from the necropsy department.

The corpses of animals that died during treatment in the teaching veterinary hospital are transported to the necropsy room of the E Block in special containers or in dense special bags.

After necropsy, the cadavers are stored in freezers and periodically removed by special transport of a commercial enterprise that has the appropriate specialisation, permits and equipped transport.

The implemented rules for the transportation and storage of corpses and biowaste ensure the protection of people and animals from infectious diseases and prevent the spread of infectious agents into the environment.

**Standard 4.9: Operational policies and procedures (including biosecurity, good laboratory practice and good clinical practice) must be taught and posted (in different languages if the curriculum is taught in them) for students, staff and visitors and a biosecurity manual must be developed and made easily available for all relevant persons. The VEE must demonstrate a clear commitment for the delivery and the implementation of biosecurity, e.g. by a specific committee structure. The VEE must have a system of QA to monitor and assure clinical, laboratory and farm services, including regular monitoring of the feedback from students, staff and clients.**

The safety management of students and staff while studying at the university and, accordingly, at the VEE is built in accordance with national legislation: The Law of Ukraine ‘On Labour Protection’, ‘Regulations on the Organisation of Labour Protection and Life Safety of Participants in the Educational Process in Educational Institutions’, and the recommendations contained in the regulatory document ‘Rules for Labour Protection in Veterinary Laboratories’ and the VEE Biosecurity SOP.

The University has an Occupational Health and Safety Service headed by an Occupational Health and Safety Engineer, a responsible official who coordinates the creation and implementation of appropriate conditions and practices aimed at ensuring the safety of people during the educational process and economic activities at the University.

All heads of structural subdivisions periodically (every 5 years) undergo training on labour protection and are responsible for compliance with the law, training of their subordinates and monitoring compliance with safety rules during the educational process. This system is part of the university's management system and is designed to cover every employee and student and in all areas of the institution. Occupational health and safety measures are recorded in logs and reports and can be easily analysed and adjusted as necessary. Periodic state control over compliance with the legislation is carried out by the State Inspectorate for Labour Protection.

Additionally, the biosecurity rules are set out in the internal document ‘Standard Operating Procedures for Biosecurity at the Faculty of Veterinary Medicine’, which is available to staff and students on the Elearn platform.

At the beginning of the academic year, all students and staff are instructed on occupational health, fire safety and biosecurity. The instructed students are registered in the relevant journals. At the beginning of lessons, students are introduced to emergency exits from the building and safety rules in accordance with the specifics of particular types of educational activities.

Before visiting the farm, students are briefed on the farm (compliance with biosecurity requirements, hygiene requirements and handling of the animals being examined). The start of work in the laboratory is accompanied by a briefing. Students receive instructions on safety and biosecurity rules in specific conditions. Each department has a short and logically understandable biosecurity instruction as a supplement to the general biosecurity SOP of the VEE. The biosecurity rules are visualised through a system of signs and explanations that are understandable to staff, students and visitors.

The biosecurity rules are reviewed on the basis of the SOP. The person responsible for biosecurity at the faculty is a member of the faculty appointed by the dean. The Biosecurity Commission includes all heads of departments of the VEE and an authorised person from each department and structural unit. The Clinical Council



checks compliance with biosecurity rules, identifies weaknesses and makes changes to the instructions to improve them. Feedback from students, staff of the VEE is also considered by the Clinical Council and taken into account. The main principles that guide the Council are the effectiveness, adequacy and feasibility of biosecurity procedures.

Waste disposal at the university is handled by the relevant service within the structure of the administrative and economic part. Household waste is collected in garbage containers and taken to the landfill by municipal services.

Biological waste that may contain hazardous microorganisms is preliminarily disposed of by autoclaving or disinfecting, as required in each case. The collection and disposal of biological waste is the responsibility of an authorised person appointed for each department from among the laboratory staff or faculty. For the disposal of biological waste, units shall be provided with a supply of personal protective equipment, special bags, containers and disinfectants.

Chemical reagents are inactivated and disposed of in accordance with sanitary standards. The circulation (purchase, use, transportation and disposal) of precursors (a list of acids and organic solvents) is controlled separately, which are subject to strict control by the state and the university has a licence for such activities.

Waste from productive animals that are kept at the Vetmedservice and are not infectious, excrement (urine, faeces) is collected in a manure storage facility, composted and then used as organic fertiliser.

Employees receive annual training on biosecurity rules and changes in procedures.

#### **Comments on Area 4**

Over the past few years, the university has made a financial contribution to the development of the VEE infrastructure. The updated vision of clinic logistics by animal species, updating the role of teaching and support staff, student responsibilities, allows for a multidisciplinary approach to clinical training, objective assessment of students' practical skills and helping them choose the direction of professional and career growth.

In 2024, the approaches to biosecurity at the VEE were updated, materials for the creation of Standard Operating Procedures were developed, and they were widely discussed at each of the VEE's structural units. An electronic course was created on the basis of the university platform, which contains not only SOPs, but also instructions for each of the structural units of the VEE and auxiliary materials. A testing element has also been created to help monitor the mastery of biosecurity approaches by both VEE members and students.

#### **Suggestions for improvement in Area 4**

The VEE's development strategy for the next period proposes appropriate changes to improve the VEE's material and technical base, modernise/build clinics and animal isolation facilities, and provide mobile support for clinical activities.



## **Area 5. Animal resources and teaching material of animal origin**

**Standard 5.1: The number and variety of healthy and diseased animals, first opinion and referral cases, cadavers, and material of animal origin must be adequate for providing the practical and safe hands-on training in all relevant areas and adapted to the number of students enrolled.**

**Evidence must be provided that these data are regularly recorded and that procedures are in place for correcting any deficiencies.**

The global strategy of the VEE is to maximise the use of healthy and sick animals and animal materials to provide students with first-day competencies.

In recent years, thanks to cooperation with public and private enterprises, we have been able to focus more on veterinary care for domestic and exotic animals. Another advantage is the diversity of student training at different bases and structural units and faculties of the NUBiP of Ukraine.

The VEE has its own clinics and preclinical training facilities on the farms of the educational and research farms and its own educational, research and production Clinical Centre 'Vetmedservice', which includes small and productive animal training clinics, laboratory animal husbandry laboratories and a vivarium.

In recent years, due to biosafety requirements, access of student groups to pigs on farms has been hampered by the epizootics of ASF in pigs and avian influenza at poultry farms. This is partially compensated by our university agreement through cooperation with various enterprises, in particular Antonov Agro, Kyiv Zoo, Kyiv Hippodrome, where different types of animals (pigs, rabbits, horses and exotic zoo animals) are kept on their bases. The faculty also has cooperation agreements with a number of public and private enterprises with their own processing facilities, where students practically individually or in groups of 2-3 people (within the framework of the master's programme) consolidate theoretical knowledge and practical skills. In addition, students undergo an internship at the largest poultry farm in Ukraine, Myronivsky Hliboproduct, and other facilities where veterinary services are mandatory.

In addition, the population of the region, including the Kyiv region, keeps productive animals in their private households, namely cows, small cattle, pigs, rabbits and poultry (chicken, duck, goose, quail, turkey), which are serviced in the faculty's kennels.

Animals that have died of unknown causes, mainly small domestic and productive animals (pigs, poultry, rabbits and exotic animals) are received by the Vetmedservice from private and public veterinary institutions for pathological and anatomical dissection, which ensures the educational process.

The faculty has partnership agreements with farms and agricultural enterprises of various forms of ownership with access to their technological processes and laboratories at food markets, slaughterhouses and processing facilities.

The valuable use of these practical training facilities in the VEE's teaching and research is crucial to the development of a global strategy for the use of animals and animal materials to provide students with first-day competence.

The specific strategy of the VEE for the relevant clinical training of students is to create maximum conditions for students to work with animal materials and animals in groups, individually, on farms, in clinics and production facilities. This work begins during their studies and continues throughout the cycle of teaching clinical disciplines with duty in the faculty's clinics under the guidance of teachers and doctors.

The educational process involves working with museum materials, training, acquiring skills in keeping and caring for animals, assessing their physiological state, behaviour and well-being in hospitalisation in educational clinics and other structural units.

Students acquire competences throughout the entire period of study, primarily during practical classes in preclinical disciplines: animal hygiene, ecology in veterinary medicine, physiology, feeding, ethology and animal welfare (2-6 semesters). Taking into account the significant increase in the number of students from the city and suburbs, the faculty introduced the duty of 2nd and 5th year students at the Vetmedservice Clinical Centre to study technological processes, animal behaviour, characteristics of livestock facilities, animal hygiene and husbandry,

physiology and feeding technology, and the specifics of caring for different types of animals. Alongside this, attention is paid to biosecurity, animal identification, and assessment of animal development and productivity.

The procedure for ensuring animal welfare at the VEE is based on the EU Directive (2010/63/EU), the Law of Ukraine ‘On Protection of Animals from Cruelty’ (2006), and the Regulation ‘On the Bioethical Commission of the NUBiP of Ukraine on Animal Treatment’.

According to these documents, permission to use animals in the research and educational process is granted after the decision of the Bioethics Commission of NUBiP of Ukraine in compliance with the Regulations ‘On the Protection of Animals Used for Scientific or Educational Purposes in NUBiP of Ukraine’ and ‘On the Bioethics Commission of NUBiP of Ukraine’ approved by the decision of the Academic Council of 26 April 2023.

The faculty also uses all the possibilities of its material and technical base to replace animals in the educational process when it is not essential for the quality of education. This contributes to the 3R policy of the VEE. Thus, the Department of Vertebrate Biomorphology named after Academician V.G. Kasyanenko is provided with cadaveric material and samples of animal origin (bones, skeletal base, anatomy museum, etc.). The I.O. Povazhenko Department of Veterinary Surgery uses museum exhibits of animal skeletons and bones, models for practicing suturing techniques. The Department of Veterinary Reproductive Medicine uses phantoms of female farm animals, samples of embryos and cells of the reproductive system. Removed organs, fragments of organs, pathology and biopsy materials are used in embryology, cytology and histology classes to teach students histological examination skills and to fill the database of histological specimens for research in the form of diagnostic histomorphological specimens.

During clinical training, most surgical interventions are performed only in the presence of pathologies and the need for emergency care. The time of fixation of the animal, the duration and number of painful procedures are minimised.

In the study of methods of ensuring human health, the principles of animal welfare are particularly important as the basis of preventive medicine.

Biological material and animal cadavers admitted to the training clinics are accepted by resident doctors and stored in a refrigerator or freezer. After practicing practical methods in laboratory classes, this material is disposed of by incineration in the biological waste disposal laboratory of the Department of Animal and Food Hygiene named after Prof. A.K. Skorokhodko.

The accompanying documentation and protocols of animal autopsies are stored at the Department of Vertebrate Biomorphology named after Acad. V.G. Kasyanenko in the archive and in electronic form.

The work of students in the pathological and anatomical sectional room is regulated by the instructions on labour protection and biosafety.

Before starting work, students personally read the biosafety instructions of the VEE clinics of the departments and are briefed and sign the relevant log.

Table 5.1.1. Cadavers and material of animal origin used in practical anatomical training.

Species	2023	2022	2021	Mean
Cattle	15	15	21	17
Companion animals	3	2	0	2
Total	18	17	21	19

Table 5.1.2. Healthy live animals used for pre-clinical training (animal handling, physiology, animal production, propaedeutics, ...)

Species	2023	2022	2021	Mean
Cattle	3	3	3	3
Small ruminants	6	5	3	5
Pigs	6	8	10	8
Companion animals	5	6	6	6
Equine	3	3	3	3

Rabbits	30	30	35	32
Poultry	10	10	12	11
Water animals	1	2	1	1
Exotic pets	35	2	2	13
Rats	150	150	150	150
Guinea pigs	25	5	5	12
Mice	50	50	50	50
Total	273	267	280	273

Table 5.1.3. Number of patients\*\* seen intra-murally (in the VTH)

Species	2023	2022	2021	Mean
Cattle	424	615	492	510
Small ruminants	69	71	102	81
Pigs	5	4	4	4
Companion animals	5455	4286	6292	5344
Equine	134	158	171	154
Poultry & rabbits	50	67	60	59
Exotic pets (chinchilla, ferret, guinea pig, hamster)	104	69	138	104
Total	6241	5270	7259	6256

Table 5.1.4. Number of patients\*\* seen extra-murally (in the ambulatory clinics)

Species	2023	2022	2021	Mean
Cattle	513	622	555	563
Small ruminants	73	54	60	62
Pigs	5	2	4	4
Companion animals	259	367	289	305
Equine	102	94	98	98
Poultry & rabbits	56	22	44	41
Exotic pets (chinchilla, ferret, guinea pig, hamster)	128	147	158	144
Total	1136	1308	1208	1217

\*\* Each patient must be officially recorded and must be individually examined/treated by at least one student under the supervision of at least one member of staff. Each live animal affected by one specific clinical episode is counted as one single patient.

Table 5.1.5. Percentage (%) of first opinion patients used for clinical training (both in VTH and ambulatory clinics, i.e. Tables 5.1.3 & 5.1.4)

Species	2023	2022	2021	Mean
Cattle	93	93	97	94
Small ruminants	85	78	85	83
Pigs	100	100	87	96
Companion animals	73	79	77	76
Equine	94	96	95	95
Poultry & rabbits	90	96	90	92
Exotic pets	84	91	98	91
Total	619	633	629	627

Table 5.1.6. Cadavers used in necropsy

Species	2023	2022	2021	Mean
Cattle	55	102	127	95

Small ruminants	18	24	11	18
Pigs	14	17	21	17
Companion animals	167	149	248	188
Equine	13	16	12	14
Poultry & rabbits	10	13	-	4
Water animals	4	-	-	1
Exotic pets	16	20	9	15
Exotic zoo animals	84	77	117	93
Total	381	418	545	448

Table 5.1.7. Number of visits in herds/flocks/units for training in Animal Production and Herd Health Management

Species	2023	2022	2021	Mean
Cattle	80	20	90	63
Equine	5	1	4	3
Small ruminants	15	3	34	17
Pigs	-	-	-	-
Poultry & rabbits	5	6	8	6
Total	105	30	136	86

Table 5.1.8. Number of visits in slaughterhouses and related premises for training in VPH (including FSQ)

Species	2023	2022	2021	Mean
Ruminant slaughterhouses	5	3	2	3
Pig slaughterhouses	0	0	0	0
Poultry slaughterhouses	3	3	3	3
Related premises **	46	14	25	28
Total	54	20	30	35

\*\* Premises for the production, processing, distribution or consumption of food of animal origin

In December, the heads of the VEE departments plan the need for animals and biological material for the next year and submit the information to the head of the clinical centre, who communicates the information to the heads of subordinate structural units for its implementation or implementation during the next year. When animal owners apply to the Vetmedservice Clinical Centre, the animals are initially admitted and, if diagnostic and therapeutic procedures (services) are required, the animals are referred to specialised departments.

**Standard 5.2: In addition to the training provided in the VEE, experience can include practical training at external sites, provided this training is organised under the supervision of teaching staff and follows the same standards as those applied in the VEE.**

The bases for practical training, preclinical and clinical training of students are the research stations and educational and research farms of the NUBiP of Ukraine (Velykosnitynske Educational and Research Farm named after O.V. Muzychenko, Agronomic Research Station) where cattle and horses are kept. At the same time, pig farms, due to strict biosecurity measures as a result of the spread of African swine fever in Ukraine, are problematic for higher education students to visit. This disadvantage is compensated for by the practical training, which students usually do individually. Before visiting livestock farms, students are instructed on safety, rules of behaviour with animals and biosecurity rules. During the internship, students deliver births under the supervision of a teaching staff, perform milking, feeding, routine surgical procedures and manipulations, clinical research, and sampling of biomaterials.)

The students of the speciality ‘Safety, quality of food and feed’ are trained in production. Student groups are divided into 2-3 subgroups of 8-12 people each, and these subgroups work under the guidance of teaching staff and specialists of the enterprise.

During clinical practice, students deepen their competencies in animal health assessment, disease prevention and animal health care. During the industrial practice, students of the 5th and 6th years of study acquire competences in state laboratories for food safety.

**Standard 5.3: The VTH must provide nursing care skills and instruction in nursing procedures. Under all situations students must be active participants in the clinical workup of patients, including problem-oriented diagnostic approach together with diagnostic decision-making.**

For a long time, the faculty has been operating departmental clinics on a disciplinary basis. In 2015, the Vetmedservice Clinical Centre was established, which includes a productive animal clinic, a small animal clinic, a laboratory of laboratory animal husbandry and a vivarium. On 1 July 2024, by order of the rector, the clinics were returned to the subordination of the departments.

During practical lessons, training and industrial practice, under the guidance of teaching staff, students take part in diagnosis, which includes a variety of clinical, laboratory and instrumental tests. At the same time, students acquire practical skills in working with different types of animals in need of veterinary care. When making a diagnosis, students become familiar with and learn how to use diagnostic instruments.

In their free time, students have the right to participate in the practical activities of the Clinical Centre and its departments, which contributes to the acquisition of practical skills in diagnosis and the acquisition of appropriate competence.

Table 5.3.1. Types of specialised care provided by clinics (VTH)

Clinics	Specialised aid
Equines	On-site veterinary care, endoscopy, surgery (including orthopaedics, trauma surgery, anaesthesia), dermatology, ophthalmology, dentistry, obstetrics and gynaecology, andrology
Companion animals	Internal medicine, surgery (including orthopaedics, endoscopy, trauma surgery), anaesthesia, dermatology, oncology, ophthalmology, reproductive medicine.
Small mammals, reptiles, birds	Internal diseases and surgery, diagnostic imaging of small mammals, reptiles, decorative birds (radiology)
Cattle	Internal medicine, surgery, orthopaedics, obstetrics, gynaecology, andrology
Pigs, small ruminants	Internal medicine, surgery, orthopaedics, reproduction of pigs, small ruminants (sheep, goats)

During the holidays, students work in the clinics of the VEE and partner clinics as volunteers under the guidance of teaching staff in accordance with the topics of the educational process in a particular discipline.

During clinical practice, students may work in subgroups of 10-12 students under the supervision of at least 2 teachers.

During practical classes or during duty in the clinic, having planned visits to patients outside the university, subgroups of 4 to 12 students are formed under the guidance of two or more teachers who provide veterinary services (castration, vaccination and other preventive treatment of pigs, hoof cleaning, diagnosis of pregnancy in pigs, cows and sheep, etc.)

During this training, students acquire clinical skills and participate in animal manipulation (clinical research, injections, haemotransfusions, bandaging, etc.).

All students actively participate in the discussion of clinical cases - the results of anamnesis and clinical examination, laboratory or instrumental research, decisions on treatment or prevention methods, prognosis of the disease, etc.

During the clinical work, students are active participants in communication with animal owners, take direct part in the care of sick animals (cleaning, watering, feeding, etc.), perform simple diagnostic procedures

(measuring temperature, pulse, respiration, etc.), blood, urine, skin scraping, etc. for further laboratory research. Students fix animals for veterinary manipulations, control infusion, walk sick animals, etc., with the preparation of relevant documents (protocols, research acts, case histories).

During the examination and writing of the medical history, students should pay attention to the condition of the animal (clinically healthy or sick) and interpret the results of the examination, analyse the conditions of the animal, changes in physiological state, behaviour, etc. The doctor on duty should discuss clinical cases with the students at the end of the shift.

The student's progress is recorded by the teacher with his/her signature in the journal and in the notes.

During clinical training, biosafety requirements are properly ensured and controlled.

**Standard 5.4: Medical records for patients seen intra- and extramurally under Core Clinical Training (CCT) must be comprehensive and maintained in an effective retrieval system to efficiently support the teaching and learning, research, and service programmes of the VEE.**

Patients are recorded and registered in the relevant journals of the established form: records of sick animals, vaccinations, records of anti-epizootic measures, veterinary and sanitary supervision of controlled facilities of the enterprise, registration of pathological material. The registers are kept in the reception area or specialised offices of the clinic. The logs of the relevant forms are filled in by the doctors on duty in accordance with the requirements of Ukrainian legislation (the Law of Ukraine on Veterinary Medicine). During the educational process, students have free access to records of relevant documentation.

All journals for previous years are kept in the archive. Reports are submitted monthly, quarterly, and annually to the State Service of Ukraine on Food Safety and Consumer Protection.

Until 2024, all patients were traditionally registered in the dispensary work logs of the departments. During their internships, students document clinical cases in the form of coursework. The electronic patient registration system will be implemented in 2025.

**Comments on Area 5**

In recent years, there has been significant progress in the development of clinical and preclinical skills of students (work with animals and materials of animal origin). The Vetmedservice centre was reorganised into separate clinics by animal species. Preparatory work has begun to digitise the accounting of clinical activities with clients and monitor students' mastery of clinical skills, and the accounting of students' external practices has been updated.

**Suggestions for improvement in Area 5**

There is a need to improve the infrastructure for students in clinics by type, as well as to develop a record of students' clinical and preclinical skills. It is important to continue investing in the development of clinics, especially the equine clinic, to develop students' preclinical and clinical skills.



## Area 6. Learning resources

**Standard 6.1: State-of-the-art learning resources must be adequate and available to support veterinary education, research, services and continuing education. Learning resources must be suitable to implement teaching facilities to secure the ‘never the first time on a live animal’ concept. When the study programme is provided in several tracks/languages, the learning resources must be available in all used languages. Timely access to learning resources, whether through print, electronic media or other means, must be available to students and staff and, when appropriate, to stakeholders. State-of-the-art procedures for bibliographical search and for access to databases and learning resources must be taught to undergraduate students, together with basic English teaching if necessary.**

The University Library is the main provider of pedagogical and electronic learning resources for students and academic staff. The academic library operates on the basis of the Law of Ukraine ‘On Libraries and Librarianship’; the Law of Ukraine ‘On Electronic Documents and Electronic Document Management’; the Law of Ukraine ‘On the National Informatisation Programme’; the Regulations on the academic library of NUBiP of Ukraine; the Regulations on the electronic library of NUBiP of Ukraine; the Regulations on the digital library of NUBiP of Ukraine.

The main function of the library is to meet the information needs of all categories of users according to their requests by providing wide access to library and information resources. Library services are provided to readers at 7 subscription desks, in 6 reading rooms with 527 seats. Users of all categories (students, postgraduates, teaching staff and support staff) are provided with a central library with a lending desk for educational, scientific and fiction literature, a reading room with 125 seats and 5 branches of the library in academic buildings 1, 6, 10, 11, 12, each of which has a lending desk and a reading room. Users are served both in person and remotely online. All services in the library are free of charge.

The library traditionally holds classes on information culture for first-year students, during which it introduces students to the library collection, services and facilities of the academic library, and tells them about the principles of academic integrity.

For students of 2-4 years of study, masters and postgraduate students, we hold seminars that tell about the library's resources and services, access to world databases of journals, scientific articles and introduce them to the rules of using these databases, how to search for scientific information, how to create and work with personal accounts, etc.

For bibliographic searches, users use the automated information and bibliographic system Irbis-64, on the platform of which an electronic catalogue has been created and is available online through a Web interface.

Users have remote online access to the electronic catalogue, which includes the entire active collection of the library, with separate full-text databases (full texts of educational publications, bibliographic indexes, lists, references and an electronic collection of rare and valuable books).

There is no separate database, but access is provided to the Research4Life platform, which has the HINARI and AGORA collections, access to the Oxford University Publishing collection. It is also possible to conduct a thematic search in the Scopus and Web of Science (WoS) abstract databases and a full-text search in the Science Direct database.

Thus, the library offers a service called the information monitoring service (receiving up-to-date scientific information, full texts of articles or their abstracts) from both foreign international electronic resources (SCOPUS, EBSCO, Web of Science, DOAJ) and Ukrainian periodicals and electronic databases) to the user's e-mail. To do this, fill out a request for information and send it to the following email address.

**Standard 6.2: Staff and students must have full access on site to an academic library administered by a qualified librarian, an Information Technology (IT) unit managed by a qualified IT person, an e-learning platform, and the relevant human and physical resources necessary for the development of instructional materials by the staff and their use by the students.**

**The relevant electronic information, database and other intranet resources must be easily available for students and staff both in the VEE's core facilities via wireless connection (Wi-Fi) and from outside the VEE through a hosted secured connection, e.g. Virtual Private Network (VPN).**

The total area of the university library is 2844.89 m<sup>2</sup>, including: central library with 1711.41 m<sup>2</sup>; branch of the scientific library in the academic building № 1 with 168 m<sup>2</sup>; branch of the scientific library in the academic building № 6 with 138.13 m<sup>2</sup>; branch of the scientific library in the academic building № 10 with 338.35 m<sup>2</sup>; branch of the scientific library in the academic building № 11 with 241.2 m<sup>2</sup>; branch of the scientific library in the academic building № 12 with 247.8 m<sup>2</sup>.

The university library is open from Monday to Thursday from 8:30 to 17:30, on Friday from 8:30 to 16:15, Saturday and Sunday are days off. The branch in building № 12 is open from Monday to Thursday from 8:30 to 17:30, on Friday from 8:30 to 16:15, Saturday and Sunday closed.

The library has 7 reading rooms with 527 seats. The library has a staff of 35 people. Book depositories are located in the central library and in branches. The central information and bibliographic department is located in the central library, academic building 4.

The University Library consists of the following departments:

- Department of acquisition, scientific processing of documents and organisation of catalogues provides scientifically grounded, complete and prompt acquisition of documents of the Library collection, carries out their scientific processing, is responsible for organisation and maintenance of alphabetical, systematic and electronic catalogues of the scientific Library;

- Department of Educational, Scientific and Fiction Literature Services provides library and bibliographic services with scientific and fiction literature for users of all categories; provides library and bibliographic services with educational literature for students of all forms of study of the faculties; agrobiology; plant protection, biotechnology and ecology; animal husbandry and aquatic bioresources; humanities and pedagogy; food technologies and quality management of the agro-industrial complex;

- Information and bibliographic department provides reference, bibliographic and information services to all categories of Library users;

- Department of Information Technologies and Computer Support is responsible for implementation and support of automation of library processes in the structural units of the Library; Ensuring the functioning of the automated library information system; Centralised support of publicly available electronic information resources of the Library; Scientific and methodological work on automation of library processes.

- The branch of the Educational Library (EL), which serves students studying at the Faculty of Veterinary Medicine, is located in the academic building № 12 (room 203, block D). The area of the branch of the library in building 12 is 247.8 m<sup>2</sup>. The reading room is designed for 96 seats (103.95 m<sup>2</sup>). The branch of the library in building 12 has 4 computers.

The departments of the Faculty of Veterinary Medicine have department libraries.

The university has computer labs connected to the Internet, from any computer of the university, there is access to the resources of the scientific library with the possibility of bibliographic search. The scientific library has 59 computers with Internet and Wi-Fi connections.

Library staff improve their skills once every 5 years by participating in advanced training courses held at the National Agricultural Library of the National Academy of Agrarian Sciences of Ukraine in conjunction with the Institute of Continuing Education and Tourism of the National University of Life Sciences of Ukraine. 9 employees of the scientific library are qualified and have higher professional education.

The library staff participates in seminars and webinars on the use of databases WoS, Scopus, PubMed and has the relevant certificates. The library regularly posts announcements about webinars on the use of databases WoS, Scopus, PubMed among teachers and invites postgraduate students, academic staff and researchers to join them. The library staff provides group and individual consultations to academic staff on the use of international databases.

Financial costs for the purchase of educational resources in the library are as follows. In 2023, the purchase of books 344.46 €, subscription to periodicals 1019.5 €, in 2023, the scientific library received from the publishing department of NUBiP of Ukraine educational publications for the amount of 2265.43 €.

At the beginning of the academic year and throughout the year, all students receive free educational publications and materials according to the curriculum. In addition, due to the martial law in Ukraine, the staff of the academic library sends the necessary educational and methodological literature in electronic form to students' e-mails twice a year, at the beginning of each semester, according to the curriculum.

The library has an information support and technology department. The IT department has 3 employees. Employees of the IT department daily update the university repositories with new publications, in addition, they provide individual and, if necessary, group consultations to academic staff on access and use of electronic databases, support public electronic information resources of the library.

The work of the e-learning portal is organised on the basis of the Moodle distance learning platform. With the help of this system, a student can remotely, via the Internet, get acquainted with the educational material, which can be presented in the form of various types of information resources (text, video, animation, presentation, electronic manual), complete assignments and send them for review, and pass electronic testing. The academic staff can create e-learning courses and conduct distance learning, send messages to students, distribute, collect and check assignments, keep electronic journals of grades and attendance, set up various course resources, etc. Access to the resources of the educational portal of NUBiP of Ukraine is personalised. Students and academic staff receive their login and password from Maksym Mokriev, Head of the Centre for Distance Learning Technologies, Chief Administrator of the NUBiP Ukraine Educational and Information Portals System. Responsible for the organisation of the educational process on the distance learning platform at the Faculty of Veterinary Medicine is Yurii Harkevych, Associate Professor of the Povazhenko Department of Veterinary Surgery.

The university has three different repositories, namely:

The Electronic Library of the National University of Life and Environmental Sciences of Ukraine is accessible from the university's local network, created in 2014 and provides access to full texts of educational and scientific literature to support the educational process at the university. It contains more than 8000 documents, including: dissertation abstracts (since 2015), qualification papers, monographs, textbooks and manuals, teaching materials (methodological materials for laboratory and practical work, lecture notes), valuable and rare publications from the collection of the scientific library of NUBiP of Ukraine.

DGlibrary - Digital Library of NUBiP of Ukraine is accessible from the Internet, created in 2019, contains publications of scientific and educational works of academic and research staff of NUBiP of Ukraine. These include textbooks and manuals, monographs, articles and conference abstracts. A collection of digitised rare and valuable publications in the field of natural sciences and a collection of dissertation abstracts. Contains 6000 documents.

IRTHNUBiP - Institutional Repository of Qualification Works of NUBiP of Ukraine (<http://studtheses.nubip.edu.ua>), created in 2021 to provide access to the full texts of qualification works, to improve the quality of education based on increasing the productivity of the educational process and accelerating the transfer of knowledge, as well as to improve the level of qualification works by students and students of the university. It contains more than 2000 documents.

Academic staff and students have unlimited free access from the local network (for the electronic library and the repository of master's theses) and from the Internet (for the digital library) to digital objects from the collections of the Scientific Library of NUBiP of Ukraine, and to provide access to students, academic staff, university staff, researchers and the general public.

**Standard 6.3: The VEE must provide students with unimpeded access to learning resources, internet and internal study resources, as well as facilities and equipment for the development of procedural skills (e.g. clinical skills laboratory). The use of these resources must be aligned with the pedagogical environment**

**and learning outcomes within the programme and have mechanisms in place to evaluate the teaching value of changes in learning resources.**

The fund of educational and scientific literature of veterinary direction is 49076 copies of publications as of 01.01.2024. The University has access to scientific and metric databases free of charge from the Ministry of Education and Science of Ukraine: Scopus; Web of Science (WoS); Science Direct; Research4Life: (HINARI, AGORA, ARDI, GOALI, OARE); Association for Computing. The University publishes a scientific journal on veterinary medicine - Ukrainian Journal of Veterinary Sciences. Issue frequency: 4 times a year.

Educational resources in veterinary medicine are formed on the basis of curricula and information needs of users, at the request of academic staff and sectoral librarians.

The electronic catalogue of the library contains all the information about the active collection of the scientific library, and every user has the opportunity to use it. In addition, twice a year, at the beginning of each semester, the library staff sends out educational and methodological publications to students' e-mails according to their disciplines in accordance with the curriculum.

The university library has more than 10,000 textbooks by foreign authors (from the general fund).

The library holds exhibitions-reviews of new literature acquisitions on a regular basis (at least 4 times a year), and more often if necessary. Information about exhibitions-reviews of new acquisitions is posted on the websites of the university and the library, and then an article about this event is presented on the university website.

As of 01.01.2024, the total fund of the branch of the scientific library in the academic building No. 12 is 49076 copies, of which: educational literature - 32263 copies, scientific literature - 16813 copies, including 10798 copies of periodicals.

Replenishment of the library fund of the branch of the building 12 (for the last 3 years):

2023 - 308 copies of educational publications, 21 copies in a foreign language;

2022 - 350 copies of educational publications, including 8 copies in a foreign language;

2021 - 456 copies of publications, including 14 copies in a foreign language.

One of the important areas of education development is the introduction of information technology into the activities of an educational institution - a set of methods and software and hardware tools integrated into a technological chain that ensures the collection, processing, storage and display of information. The use of information technology can significantly improve the efficiency of the educational process, organise the interaction of all subjects of education in a new way, and build an educational system in which the student is an active and equal participant.

The Faculty of Veterinary Medicine of the National University of Life Sciences of Ukraine closely monitors the trends in the development of information technology in the educational system and actively implements them in the educational process. Thus, in the period from 2008 to 2024, the academic staff of the Faculty of Veterinary Medicine certified and implemented 157 e-learning courses that are posted on the university's educational portal. The latter is organised on the basis of the Moodle distance learning platform. With the help of this system, students can remotely, via the Internet, get acquainted with the educational material, which can be presented in the form of various types of information resources (text, video, animation, presentation, electronic manual), complete assignments and send them for review, and pass electronic testing. The teacher can independently create e-learning courses, fill them with educational materials (lectures, laboratory and practical tasks, etc.) and conduct distance learning, send messages to students, distribute, collect and check assignments, keep electronic journals of grades and attendance, set up various course resources, etc. Access to the resources of the educational portal of NUBiP of Ukraine is personalised. Students and academic staff receive their login and password from Maksym Mokriiev, Head of the Centre for Distance Learning Technologies. Responsible for the organisation of the educational process on the distance learning platform at the Faculty of Veterinary Medicine is Yurii Harkevych, Associate Professor of the Povazhenko Department of Veterinary Surgery.

At the Faculty of Veterinary Medicine, students' classes are conducted in accordance with the requirements of higher education standards and under the conditions of full use of educational (E), educational and scientific (ES), educational and scientific production (ESP) laboratories in the educational, scientific and innovative

processes, which are certified annually. There are also elements of skill lab equipment of the basis of different Departments of the VEE (annex 20).

### **Comments on Area 6**

The current state of the main library is good in terms of available books, periodicals and electronic resources. Students are provided with basic educational literature in accordance with the requirements of national legislation free of charge.

### **Suggestions for improvement in Area 6**

Include the university scientific journal in veterinary sciences in the WoS and Scopus databases. Expand access to specialised databases of scientific literature for students and teaching staff in order to increase awareness of the evidence-based results of medical and veterinary research.



## **Area 7. Student admission, progression and welfare**

**Standard 7.1: The VEE must consistently apply pre-defined and published regulations covering all phases of the student “life cycle”, e.g. student admission, progression and certification.**

**In relation to enrolment, the VEE must provide accurate and complete information regarding the educational programme in all advertisements for prospective national and international students.**

**Formal cooperation with other VEEs must also be clearly advertised.**

Potential students and students studying at the VEE can find information on the regulations covering various stages of the student life cycle on the university website. It also contains information about the history of the university, the Rectorate, the Academic Council, regulatory documents, and subdivisions, including faculties and departments. There is information about the Faculty of Veterinary Medicine, the Academic Council of the Faculty, academic work, educational programmes, curricula, schedules of the educational process and much more. Information for applicants on entrance exams, required documents for admission, admission rules, tuition fees, licences and certificates are available on the website.

Every year, academic staff visits secondary schools, gymnasiums, lyceums, vocational colleges and technical schools, where they meet with final year students and tell them about the university.

Twice a year, in November and April, NUBiP of Ukraine holds an Open Day to which it invites students of secondary schools, gymnasiums, lyceums, vocational colleges and technical schools, and everyone else. During this event, potential applicants get acquainted with the educational buildings, dormitories, libraries and see the material and technical base of the VEE. In addition, all advertising and information products are covered in advertisements, on television and radio, in newspapers of national and local importance, posted on the Internet, on the university website, and on social media pages.

Every year, students of the VEE take part in the All-Ukrainian Olympiad in Biology and Veterinary Medicine, where they consistently win prizes. They also traditionally participate in the annual All-Ukrainian competition of student research papers.

For academic exchanges of students and academic staff, as well as scientific cooperation, the university has signed agreements with various universities in different countries.

Students of the Faculty of Veterinary Medicine undergo internships in accordance with the ‘Regulations on Academic Mobility of Students and Postgraduates of the NUBiP of Ukraine’ in the USA and the European Union under various international projects and programmes.

Students and staff of the Faculty of Veterinary Medicine are actively involved in Erasmus+ programmes. Students of the faculty also study at foreign universities. Individual international academic mobility is carried out in accordance with agreements. There are various international exchange programmes at NUBiP. This allows students to improve their professional skills, knowledge of a foreign language, communication skills, financial situation, and to get acquainted with the world's livestock farming and veterinary sciences. After completing the internship, students prepare and defend their reports.

The Senate of the student organisation operates at the faculty, the regulations of the organisation were approved by the Conference of Students of NUBiP of Ukraine, Protocol No. 2/2023 of 18 February 2023. The chairman of the Senate of the student organisation is elected for a term of one academic year from among the students by secret ballot. The main tasks (annex 22) of student self-government are set out in the Regulations on Student Self-Government of NUBiP of Ukraine.

The faculty also has student councils in dormitories. All students of the Faculty of Veterinary Medicine are 100% provided with a dormitory (according to the regulation on the procedure for settling students with all amenities) located near the academic buildings. Payment for accommodation in the dormitory is made in accordance with the order of the rector. Postgraduate students have the same benefits as undergraduates.

Everyone can get acquainted with the educational programme, which is posted on the official website of the university.

Each student can see the results of their studies in their electronic cabinet.



The admission procedure for national and foreign students is carried out in accordance with the Rules of Admission to NUBiP of Ukraine.

Admission procedures (annex 23) do not differ for students who plan to study on a contract basis. The tuition fee (specified in the contract) is set annually by the decision of the Academic Council and the order of the Rector but may vary depending on the level of inflation in Ukraine.

Promotion and certification of higher education students are carried out in accordance with the Regulations on the organisation of the educational process at NUBiP of Ukraine and the Regulations on exams and tests at the National University of Life and Environmental Sciences of Ukraine.

Enrolment of foreigners for study is carried out on the basis of a document on the previous level of education based on the results of entrance examinations for foreigners in certain subjects and language of study and on the basis of academic rights to continue studying, provided by the document on the level of education in the country of origin, and taking into account the points of success that give the right to continue studying at the next level of higher education in accordance with the legislation of the country that issued the document on the degree (level) of education.

The academic calendar is approved by the Academic Council and posted on the official website before the beginning of the academic year.

**Standard 7.2: The number of students admitted must be consistent with the resources available at the VEE for staff, buildings, equipment, healthy and diseased animals, and materials of animal origin.**

Table 7.2.1. Number of new veterinary students admitted by the VEE

Type of students	2023	2022	2021	Mean
Standard students	193	160	179	177.33
Full fee students	83	83	48	71.33
Total	276	243	227	248.66

Table 7.2.2. Number of veterinary undergraduate students registered at the VEE

Year of programme	2023	2022	2021	Mean
First year	276	243	227	248.66
Second year	238	223	286	249.00
Third year	194	264	198	218.66
Fourth year	266	187	184	212.33
Fifth year	159	179	135	157.66
Sixth year	166	127	-	146.50
Total	1299	1223	1030	1184.00

Note. The Faculty started recruiting the first students of the Master's degree programme (6 years of study) in 2017 and the first graduation took place in 2023. Therefore, only students with a full cycle of veterinary training are included in Table 7.2.2.

Table 7.2.3. Number of veterinary students graduating annually

Type of students	2023	2022	2021	Mean
Standard students	78	79	-	78.5
Full fee students	52	40	-	46.0
Total	130	119	-	124.5

Note. The Faculty started recruiting the first students of the Master's degree programme (6 years of study) in 2017 and the first graduation took place in 2023. Therefore, only students with a full cycle of veterinary training are included in Table 7.2.3.

Table 7.2.4. Average duration of veterinary studies

Duration	% of the students who graduated in 2023
+ 0*	98.5
+ 1 year	1.5

+ 2 years	0.0
+ 3 years or more	0.0

\* The total duration of the studies 6 years. Therefore, Table 7.2.4 takes into account only students with a full cycle of veterinary training whose first graduation took place in 2023.

Table 7.2.5. Number of postgraduate students registered at the VEE

Programmes	2023	2022	2021	Mean
Interns	-	-	-	-
Residents	-	-	-	-
PhD students/doctors of science	76	77	61	71.33
Others (specify)	-	-	-	-

**Standard 7.3: The selection and progression criteria must be clearly defined, consistent, and defensible, be free of discrimination or bias, and take into account the fact that students are admitted with a view to their entry to the veterinary profession in due course.**

**The VEE must regularly review and reflect on the selection processes to ensure they are appropriate for students to complete the programme successfully. If the selection processes are decided by another authority, the latter must regularly receive feedback from the VEE.**

**Adequate training (including periodic refresher training) must be provided for those involved in the selection process to ensure applicants are evaluated fairly and consistently.**

Admission conditions are determined by the 'Procedure for Admission to Higher Education', which is approved annually by the Ministry of Education and Science of Ukraine. On the basis of this document, the Admissions Committee develops the Rules of Admission to NUBiP of Ukraine, which are approved annually by the Academic Council of the University.

In accordance with the Rules of Admission (annex 23) to the educational programme 'Veterinary Medicine' of the educational degree 'Master', applications are accepted from persons who have completed a complete general secondary education based on the results of external national multimedia test in four subjects: 1. Ukrainian language, 2. Mathematics, 3. History of Ukraine, 4. Foreign language, or biology, or physics, or chemistry, or Ukrainian literature, or geography. External independent evaluation is conducted by the Ukrainian Centre for Educational Quality Assessment in accordance with the current legislation of Ukraine.

For applicants of privileged categories (e.g. orphans, war veterans, children of war veterans and others according to the admission rules), special conditions for participation in the admission campaign apply. In accordance with the Admission Rules, the Unified State Electronic Database on Education (USEDE) indicates the preferential category in the card of an individual and enters supporting data (details of documents certifying the right to special conditions for participation in the admission campaign or uploaded scanned copies of such documents in the absence (unavailability) of information about them in state registers), as well as indicates in the applicant's application the need to apply special conditions. All applicants of privileged categories study at the expense of the state budget.

Admission procedures do not differ for students who plan to study on a full fee (contract) basis. The amount of the contract (specified in the contract) is set annually but may vary depending on the level of inflation in Ukraine.

Admission to NUBiP of Ukraine is organised by the Admissions Committee, whose composition is approved by the order of the Rector of NUBiP of Ukraine, who is its chairman. All issues related to admission to NUBiP of Ukraine are resolved by the Admissions Committee at its meetings and are governed by the Rules of Admission to NUBiP of Ukraine. The decisions of the Admissions Committee are published on the official website of NUBiP of Ukraine on the day of adoption or no later than the next day after the relevant decision is made.

Appeals against the results of the entrance examinations conducted by NUBiP of Ukraine are considered by the NUBiP of Ukraine Appeal Commission, the composition and procedure of which are approved by the

Rector's order, taking into account the need to involve the Commissioner for the Prevention and Detection of Corruption, representatives of the public, student self-government bodies, and external experts in its activities.

Each student of NUBiP of Ukraine has 2.4 m<sup>2</sup> of classroom space, which is in line with the State Education Standards. The material and technical base is filled with tools and devices that contribute to the achievement of programme learning outcomes and meet the requirements of the licence to operate.

The projected number of applicants is regulated by the licence issued by the Ministry of Education and Science of Ukraine, according to which the licence volume of annual admission to the speciality 211 'Veterinary Medicine' is 350 persons for an unlimited period. According to the SWOT analysis of the faculty's activities conducted in 2024, an increase in the licensed volume of applicants for the next 3 years is not expected due to martial law.

The permit to conduct educational activities at NUBiP of Ukraine is a licence issued by the Ministry of Education and Science of Ukraine and a certificate of accreditation of the educational programme.

The educational process is fully provided with educational, methodological and scientific literature on paper and electronic media thanks to the funds of the scientific library, repository and web resources of scientometric databases. Students are provided with social infrastructure, which includes dormitories, sports facilities, catering facilities, a sports and recreation camp, the Centre for Patriotic and Legal Education, premises for the preparation and holding of cultural events (assembly and reading rooms of dormitories, etc.).

NUBiP of Ukraine provides free access to the relevant infrastructure and information resources necessary for learning, teaching and research activities within the educational programme. The university provides free internships at enterprises, institutions, establishments and organisations within the programme; participation in research works, conferences, symposia, exhibitions, competitions, presentation of their works for publication; academic mobility, including international; participation in discussions and solutions to issues of improving the educational process, leisure, health improvement; selection of academic disciplines within the limits provided by the programme and curriculum, as well as from the university catalogue; use of the cultural, educational, domestic, medical and healthcare facilities of NUBiP of Ukraine; provision of dormitories for the duration of training in accordance with the procedure established by law.

**Standard 7.4: There must be clear policies and procedures on how applicants with disabilities or illnesses are considered and, if appropriate, accommodated in the programme, taking into account the requirement that all students must be capable of meeting the ESEVT Day One Competences by the time they graduate.**

The VEE has established mechanisms for organisational support for students, which is provided primarily by the Dean's Office. Administrative issues are resolved either through the head student of the group, academic group mentor, or directly with the participation of the student and the dean's staff. Various incentives are provided for social support of students: awarding diplomas and certificates, grants, and the possibility of receiving financial assistance. We constantly analyse the survey results and take them into account to improve our social support work.

The institution has a 'Health Centre', which students visit in case of ill health. This health centre has all the conditions for receiving and examining students. Qualified doctors and nurses provide primary medical care: examination, elements of emergency treatment (recommending temporary disability or day hospital), and in case of complicated situations, referral to a specialised medical institution. The centre provides its services free of charge, at the expense of the university budget.

If necessary, students are provided with financial assistance by the Primary Trade Union Organisation of Students and Postgraduates for the treatment and prevention of diseases. In addition, NUBiP of Ukraine has a sports and recreation camp 'Academic' on the Black Sea coast.

NUBiP of Ukraine has created conditions to ensure the rights and opportunities of people with special educational needs to receive education at all levels, taking into account their individual needs, opportunities, abilities and interests.

Open days are held only on the ground floor, and the entrances to the buildings, if necessary, are equipped with ramps for comfortable movement of a person in a wheelchair.

In the event of a long-term illness, on the recommendation of a qualified medical commission, a student is granted an academic leave of absence for a period of one year, which may be extended on the recommendation of the medical commission. After the academic leave, the student returns to the course from which he or she was granted this academic leave. If a student fails to attend an exam due to illness, he or she is given the opportunity to take the exam at another time on an individual basis.

**Standard 7.5: The basis for decisions on progression (including academic progression and professional fitness to practise) must be explicit and readily available to the students. The VEE must provide evidence that it has mechanisms in place to identify and provide remediation and appropriate support (including termination) for students who are not performing adequately.**

**The VEE must have mechanisms in place to monitor attrition and progression and be able to respond and amend admission selection criteria (if permitted by national or university law) and student support if required.**

NUBiP of Ukraine has introduced a credit transfer system of education. The list of exams and semester tests is determined by the educational programme and curriculum. Semester control in a particular discipline is conducted in accordance with the curriculum in the form of a semester exam or test within the time limits established by the schedule of the educational process and in the amount of educational material determined by the work programme of the discipline.

Prior to studying the discipline or working in clinics, the student is familiarised with the list of competencies and practical skills required for its acquisition.

A student is not admitted to semester control in a particular discipline if he or she has not completed all types of work (laboratory work, practical work and individual assignments) provided for in the semester curriculum for this discipline or has unsatisfactorily passed final modules or colloquia in the discipline.

The schedule for the liquidation of academic debt is drawn up by the dean's office in a timely manner and communicated to the teachers and students involved in this procedure. The form of control is testing of students, or written or oral questioning, working out of lecture laboratory and practical works.

Repeated training is carried out from the beginning of the semester, the curriculum of which the applicant has not completed. Students may be re-enrolled in disciplines during re-education, in which they previously had grades not lower than 'satisfactory' or 'passed' based on the results of the final control, which is carried out on the basis of the student's application.

Students are reinstated by the rector of the university regardless of the duration of the break in studies, the reason for expulsion, length of service, form of study and taking into account the applicant's ability to successfully complete the schedule of the educational process.

The application for transfer or reinstatement is considered by the university and the VEE within two weeks, and the applicant is informed of the terms of enrolment or the reason for refusal. Academic differences are usually eliminated before the start of studies. Reinstatement of students to the first year of study is prohibited.

Fluctuations in the number of students over the years are often quite significant, mainly due to financial difficulties, which forces students to work. Some of them are reinstated, and their place is taken by graduates of other Ukrainian VEEs (18-42 people within 3 years).

The main reasons for dropping out are academic debt, transfer to other educational institutions, failure to return from academic leave, voluntary withdrawal, and family reasons. The difficult demographic situation in Ukraine also affects the quantitative and qualitative indicators of the Faculty of Veterinary Medicine.

**Standard 7.6: Mechanisms for the exclusion of students from the programme for any reason must be explicit.**

**The VEE's policies for managing appeals against decisions, including admissions, academic and progression decisions and exclusion, must be transparent and publicly available.**

Students who have not eliminated their academic debt within the terms established by the university, in accordance with part one of Article 46 of the Law of Ukraine 'On Higher Education', part six of Article 42 of the

Law of Ukraine 'On Education' and the Regulations on the Procedure for Expulsion, Interruption of Studies, Renewal and Transfer of Persons Studying in Higher Education Institutions and Granting Them Academic Leave. A student may be expelled from the university at his/her own request; in connection with transfer to another educational institution; for health reasons based on the conclusion of the state medical advisory commission (MAC); for academic failure (for unsatisfactory exams and tests during the session); for failure to comply with the requirements of the curriculum and the schedule of the educational process; for violation of the academic discipline and internal regulations of the higher education institution; by a court decision that has entered into force.

According to the 'Regulations on the organisation of the educational process at NUBiP of Ukraine', which is published on the university and VEE website in the public domain, the Rector of the University shall order the establishment of a permanent appeal commission at each faculty to consider appeals of higher education students against the results of examinations during examination sessions. The chairman of the permanent appeal commission is the Vice-Rector for Scientific and Pedagogical Work and Digital Transformation of the University, the deputy chairman is the dean of the faculty. An appeal by a student is submitted in the form of an application addressed to the chairman of the faculty appeal committee no later than the next business day after the grade is announced. As a rule, the appeal is considered in the presence of the student who filed the appeal.

**Standard 7.7: Provisions must be made by the VEE to support the physical, emotional and welfare needs of students. This includes but is not limited to learning support and counselling services, career advice, and fair and transparent mechanisms for dealing with student illness, impairment and disability during the programme. This shall include provision for disabled students, consistent with all relevant equality, diversity and/or human rights legislation.**

**There must be effective mechanisms for the resolution of student grievances (e.g. interpersonal conflict or harassment).**

The Educational and Scientific Centre for Educational Work and Social Development operates at NUBiP, the purpose of which is to implement the main provisions of the Concept of National Education of Student Youth, create conditions for the younger generation to gain social experience, personal traits of a citizen of Ukraine and form a fully developed personality, promote a healthy lifestyle, popularise sports and physical education, develop the social and household infrastructure of the campus, control the functioning of NUBiP dormitories, and create a The NUBiP Student Education Programme 'Citizen, Patriot, Specialist', whose mission is to provide patriotic, spiritual, moral and legal education of young people, to train highly qualified competitive specialists of a new generation for the agricultural sector by providing educational services, and to maintain high standards in teaching, research and professional activities.

The university has established a Commission on Ethics and Academic Integrity, which meets and determines the procedure for resolving conflict situations. NUBiP of Ukraine has an Anti-Corruption Programme. As part of the Anti-Corruption Programme, a number of measures have been implemented to ensure transparency and objectivity of the assessment during the exam session. For example, examinations in all disciplines are conducted in the presence of at least two teachers. After the session, a survey is conducted on the observance of non-statutory relations. The university has also created a procedure for filing (with confidentiality) a statement about bullying cases. NUBiP of Ukraine provides immediate response to complaints of sexual harassment, discrimination and corruption. The university has a Primary Trade Union Organisation of students and postgraduates and a trust box at the faculty.

The university pays great attention to students' leisure time, in particular, there are a large number of different clubs and sections. The most popular sports clubs are football, volleyball, basketball, athletics, weightlifting, and tennis. Students of the Faculty of Veterinary Medicine have repeatedly won competitions in various sports in the NUBiP of Ukraine Student Olympics, Ukrainian Championships and European competitions: European Kyokushin Karate Championship 2023 - one student; one student is a master of sports of Ukraine in Kyokushin Karate.



The NUBiP of Ukraine has active creative sections that are winners of Ukrainian and international festivals: Folk Song and Dance Ensemble 'Kolos' named after Stanislav Semenovskiy; Folk Student Theatre 'Berezil'; Men's Folk Vocal Ensemble 'Amero'; Women's Folk Vocal Ensemble 'Octave'; Art Studio '7 Steps'; Studio of Academic, Pop and Jazz Singing; Ballroom Dance Ensemble 'Charisma'; Choreographic Ensemble 'Maiden Constellation'; Art Studio 'Holosiivska Palitra'; Club 'Decorative Floristics'; Club 'Art of Serving'. The total number of students of the Faculty of Veterinary Medicine who are involved in creative teams is 87 people.

The VEE pays great attention to student research. Each department has scientific clubs (there are 29 clubs at the faculty) where students conduct research and present their findings at student scientific conferences (on and off campus). The traditional conference at the university is held in September-May each year. The best student reports are recognised, and students are awarded diplomas and valuable gifts accordingly. Winning students receive additional points to the rating for scholarships (Rules for awarding and paying academic scholarships). Based on the results of the reports, students, together with their supervisors, write abstracts that are posted on the official website of the institution in the public domain.

**Standard 7.8: Mechanisms must be in place by which students can convey their needs and wants to the VEE. The VEE must provide students with a mechanism, anonymously if they wish, to offer suggestions, comments and complaints regarding the compliance of the VEE with national and international legislation and the ESEVT Standards.**

Students are involved in the process of periodic review of the work programmes, as they are part of the project team (one student is among the 6 members of the teaching team) and are also part of the teaching and methodological commission. Students' suggestions on the work programme are also taken into account through surveys. During the academic year, students take part in a survey conducted by the academic department. The questionnaires contain questions about students' expectations of learning (for 1st year students), the organisation of the educational process, the quality of educational services, the level of teaching, their own attitude to learning, etc. The questionnaires and the processed results of the student survey with conclusions are posted on the university website.

At the faculty level, after completion of the course, academic staff conducts a survey of students who evaluate the course according to the following criteria: clarity and accessibility of the material, focus on the future profession, complexity of tasks, the volume of classroom classes, and methodological support of the discipline. Academic staff take into account suggestions and wishes in the future when formulating the work programme.

Students meet regularly with the rector, vice-rectors, deans and heads of departments.

## **Comments on Area 7**

The university carries out extensive information work on admission to the Faculty of Veterinary Medicine, as evidenced by annual surveys of first-year students. At the same time, the demographic situation in Ukraine is quite critical. In addition, the war and the visa-free regime have created conditions for free access of secondary school graduates to study at foreign universities.

Ukraine's university admission system is fairly transparent, but annual changes to the technical conditions of admission often disorganise applicants. The lack of stable state funding forces the university to raise tuition fees.

At the same time, the university has a well-developed infrastructure of student self-government and personal progress.

The School of Young Veterinarian course was launched at the Faculty of Veterinary Medicine to increase the motivation of the professional component of education. The Science 3.0 Centre 'Zoo under a microscope' is now in operation.

### **Suggestions for improvement in Area 7**

In accordance with the development strategy of the Faculty of Veterinary Medicine, strengthen the education of global leaders in One Health and improve the involvement of the younger generation of scientists in the academic environment.

## Area 8. Student assessment

**Standard 8.1: The VEE must ensure that there is a clearly identified structure within the VEE showing lines of responsibility for the assessment strategy to ensure coherence of the overall assessment regime and to allow the demonstration of progressive development across the programme towards entry-level competence.**

The general strategy of student assessment at the VEE is regulated in the Regulations on the organisation of the educational process at NUBiP of Ukraine; Regulations on exams and tests at NUBiP of Ukraine, which describe the types of control measures and procedures, forms, methods and criteria for assessing student learning, requirements for information and feedback, communication with students, the mechanism for appealing against results and maintaining relevant documentation. The Regulations are a public document and are available on the university's website.

The learning outcomes assessment system for each course and discipline is presented in the relevant discipline work programmes and discipline syllabuses. These are public documents that are published on the university's website (departmental pages) before the start of the academic year. Student assessment procedures are designed to objectively assess the achievement of the planned learning outcomes, including the first day competencies. The competences and learning outcomes are defined in accordance with the Standard of Higher Education of Ukraine for the speciality 211 Veterinary Medicine of the second (master's) level of higher education and the specifications of the European Higher Education Area. The content of the educational components of the curriculum contains forms of control measures (tasks of current and final control) that are understandable to students, and the work programmes and syllabuses of academic disciplines contain clear criteria for their evaluation based on the documents of the VEE and University. Each work programme has a section describing the assessment system within each discipline. The clarity and comprehensibility of control measures is ensured by: timely notification of them during systematic meetings of the VEE with representatives of the administration, deans, guarantors; notification of them to the teaching staff at the beginning of the study of each educational component. The availability of control forms and their frequency is contained in the schedule of the educational process and the schedule of the examination session.

Students' assessment of theoretical knowledge, preclinical and clinical practical skills is carried out in accordance with the ECTS Bologna system. To assess knowledge and skills, teaching staff use small surveys/tests, module surveys, assignments through the e-learning system, computer testing, tests and exams. VEE uses a rating form of control after the logically completed part of lectures and practical classes (module) in a particular discipline. Its results are taken into account when assigning the final grade. The rating assessment of students' knowledge does not cancel the traditional grading system, but exists alongside it. It makes the assessment system more flexible, objective and promotes systematic and active independent work of students throughout the entire period of study, ensures healthy competition between students in their studies, and helps to identify and develop students' creative abilities.

The periods of examination sessions are determined before the academic year, depending on the duration of the semesters, and are indicated in the 'Schedule of the educational process', which is posted on the university website. One month before the beginning of the academic year, the academic department of NUBiP of Ukraine, in agreement with the dean's office, develops a schedule for each semester, which is posted on the university/faculty website.

The certification of graduates of the EPP of speciality 211 'Veterinary Medicine' is carried out in the form of a single state qualification exam. It takes the form of online computer-based testing in Ukrainian with independent proctoring in each classroom, remote administration and video surveillance. The test lasts 120 minutes, during which applicants have to answer 100 test questions in the format of choosing one correct answer out of the four offered. The tasks of the qualification exam are developed in accordance with the programme of the speciality 211 'Veterinary Medicine' for applicants for the second (master's) level of higher education, approved by the order of the Ministry of Education and Science dated 20.04.2021 No. 444 and No. 443.

The overall student assessment strategy includes assessment of soft skills, including communication skills, teamwork skills (group assignments, creative competitions), time management (meeting deadlines), leadership (the university has a student rating system, a leadership school), flexibility (during the academic year, students are offered master classes, seminars, meetings with leading experts).

**Standard 8.2: The assessment tasks and grading criteria for each unit of study in the programme must be published, applied consistently, clearly identified and available to students in a timely manner well in advance of the assessment. Requirements to pass must be explicit.**

**The VEE must properly document the results of assessment and provide the students with timely feedback on their assessments.**

**Mechanisms for students to appeal against assessment outcomes must be explicit.**

Student assessment at VEE is transparent, which is achieved, in particular, through the Elearn e-learning platform. The results of the assessment (current grades, results of intermediate and final certification) of students are recorded by the teacher in the 'Journal of accounting of the work of the teaching staff'. The results of academic work and final certification of students are recorded by the academic staff in the 'Records of academic performance' and 'Record book'. Information on learning outcomes is also available to students 24/7 on the Elearn e-learning platform.

The criteria and procedures for student assessment for each course and discipline are presented in the relevant curricula and syllabuses published on the official websites of the VEE. Before the start of the academic year, the methods of assessment of student learning outcomes and the timing of the assessment are determined for each discipline. Students are informed in advance about the forms, frequency, methods and criteria of assessment, which will further influence the final grade in the discipline. Students have the right to review their answers to the module control, intermediate and final assessment and compare them with the standard answers or assessment criteria.

The assessment criteria are given in the 'Regulations on Examinations and Credits in NUBiP of Ukraine', the work programme of the discipline and the syllabus and are published on the university website (department pages) before the start of the academic year. At the first class of the discipline, academic staff must familiarise students with the forms, frequency, methods and criteria of assessment.

The assessment of knowledge of a student is based on a 100-point scale and is converted into national grades in accordance with the current 'Regulations on Exams and Tests in NUBiP of Ukraine'. To determine the rating of a student for learning the discipline RDIS (up to 100 points), the attestation rating (up to 30 points) is added to the rating of a student for academic work REW (up to 70 points):  $RDIS = REW + RAT$ .

Table 8.2.1. Scale for assessing the performance of students

Rating of students, points	National assessment and results of the:	
	exams	final tests
90-100	excellent	passed
74-89	good	
60-73	satisfactory	
0-59	unsatisfactory	not passed

The student has the right to read the assessment of his/her work and receive explanations from the academic staff about his/her mistakes. In case of inaccuracies, the student may contact the lecturer or the dean's office. The VEE receives feedback from students after questionnaires on the quality of the educational process (<https://nubip.edu.ua/node/1165/5>). During the first meeting with the students, the academic staff briefly informs them about the topics of classroom classes and independent work, forms of current and final control, and evaluation criteria for various types of academic work. Detailed information on teaching materials is available on the university's website and in the learning environment eLearn (<https://elearn.nubip.edu.ua>). Thus, the information on the content and assessment criteria can be read by the applicant before the start of the discipline,

and the extended information within the E-Learning environment becomes available to him/her immediately after his/her registration for the course.

Higher education applicants who do not agree with the results of the assessment have the right to appeal in the form of an application to the Faculty Appeal Commission no later than the next working day after the assessment is announced. The procedure for considering appeals of higher education applicants is regulated in the 'Regulations on Examinations and Credits at NUBiP of Ukraine'. In case of an appeal by a student, the Dean's order includes the Head of the Department that provides teaching of the discipline in which the exam was held and the appeal was filed, and, at the request of the Head of the Department, a leading teacher (professor, associate professor) from among those who did not participate in the control event. The initial data on the appeal filed and the results of the consideration of the appeal commission are recorded in the 'Journal of the Appeal Commission Meetings', which is kept in the dean's office.

In accordance with the 'Regulations on Exams and Tests in NUBiP of Ukraine' for students who have no more than three academic debts based on the results of the tests and summer examination session, the Academic Council of the VEE, at the request of the student and the dean's submission, agrees an individual curriculum for the next academic year, taking into account the elimination of academic debts in the disciplines of previous semesters and indicating the timing of their elimination, which is approved by order of the Rector of the University, and recommends the transfer of students. Students who have not fulfilled their individual curriculum and have not eliminated academic debt in at least one discipline before the start of the work of the Examination Commissions are subject to expulsion from the University. A person expelled from the University before completing the educational programme receives an academic certificate containing information about the results of studies, names of disciplines, grades received and the number of ECTS credits obtained (Section II of the 'Regulations on the Procedure for Expulsion, Interruption of Studies, Renewal and Transfer of Persons Studying in Higher Education Institutions and Granting Them Academic Leave' approved by the Order of the Ministry of Education and Science of Ukraine of 07 February 2024 No. 134).

**Standard 8.3: The VEE must have a process in place to review assessment outcomes, to change assessment strategies and to ensure the accuracy of the procedures when required. Programme learning outcomes covering the full range of professional knowledge, skills, competences and attributes must form the basis for assessment design and underpin decisions on progression.**

The Regulations clearly define the assessment criteria that differentiate students into those who have achieved the expected level of learning at the appropriate level and those who have performed unsatisfactorily. Each assignment has assessment criteria that are announced to students at the same time as the assignment to be assessed is revealed. Openness of assessment is achieved by making the results available in the e-learning system.

An obligatory stage of assessment is the analysis of course results, where the academic staff and students conduct self-analysis after seeing the results of their work or assessment in the public domain. In particular, at the faculty, it is already traditional to have semesterly meetings of the dean's office with academic staff and students where a thorough analysis of the session is carried out, including the results of tests and exams and student surveys. The purpose of student reflection is to identify gaps in knowledge and skills and improve competencies. Through reflection, the lecturer improves (updates) the course material and teaching methods.

Semester control is carried out by means of testing (tests), or combined testing and open questions (exams). When summing up the results of certain types of work (training, industrial practice), the decision on the assessment is made not by one person, but by a commission of 3 or more academic staff appointed by the head of the relevant department or by order of the dean. The task of preventing conflicts of interest is assigned to the head of the department, who directly appoints the members of the examination committee. According to clause 4.5 of the Regulations on Examinations and Tests at NUBiP of Ukraine, examinations are administered by two academic (teaching) staff members. The same Regulation regulates the procedure for preventing and resolving conflicts of interest. By order of the Rector of the University, a permanent appeal commission is established at each faculty (research institute) to consider appeals of higher education students against the results of examinations during examination sessions. Within e-learning courses, it is possible to check the objectivity of the assessment, as test



results and submitted practical work with the dates of completion and assessment are stored on the server until the end of the academic year. Class attendance is recorded in a paper and electronic journal. The University also has an anti-corruption attorney and a trust box in the dean's office. No cases of appealing the results of control measures and conflicts of interest were registered at the Veterinary Medicine study programme.

The results of the semester and final assessment are discussed at the meetings of the dean with students, meetings of the departments, the Academic Council of the VEE and the Academic Council of the university in order to conduct self-analysis in the context of quality management of the student assessment procedure and its improvement in the next examination period. The criteria and procedures for student assessment for each course and discipline are presented in the relevant curricula and syllabuses published on the official websites of the university and the VEE.

**Standard 8.4: Assessment strategies must allow the VEE to certify student achievement of learning objectives at the level of the programme and individual units of study. The VEE must ensure that the programmes are delivered in a way that encourages students to take an active role in creating the learning process and that the assessment of students reflects this approach.**

Upon completion of the study of the discipline, other types of educational activities and achievement of the relevant learning outcomes, which is confirmed by the relevant assessment, students are awarded ECTS credits.

Learning outcomes within the disciplines are checked during the current control work in all educational components of the programme, tests and exams, and the e-learning portal. Students' academic achievements are checked during the semester by performing current control tasks, the forms of which vary significantly depending on the discipline. One of the most common forms of control is testing, which is organically implemented in e-learning courses. The toolkit for developing control didactic materials within the E-Learning environment allows you to create questions/tasks of various types and complexity, as well as test questions for self-checking. Regulations on the Educational and Information Portal (regulates the uniform requirements, procedure and rules for creating and working with e-learning courses. It also describes the methodology for creating e-learning elements related to control and self-control. The Regulation on Exams and Tests regulates the process of control measures at the VEE.

Encouraging students to actively participate in the educational process and promoting their motivation to learn is carried out through such teaching practices as student peer assessment (evaluation of research tasks), self-assessment (online testing on the eLearn platform), and teaching staff assessment (anonymous offline and online surveys).

**Standard 8.5: Methods of formative and summative assessment must be valid and reliable and comprise a variety of approaches. Direct assessment of the acquisition of clinical skills and Day One Competences (some of which may be on simulated patients) must form a significant component of the overall process of assessment. It must also include the regular quality control of the student logbooks, with a clear distinction between what is completed under the supervision of teaching staff (Core Clinical Training (CCT)) or under the supervision of a qualified person (EPT). The clear distinction between CCT and EPT ensures that all clinical procedures, practical and hands-on training planned in the study programme have been fully completed by each individual student. The provided training and the global assessment strategy must provide evidence that only students who are Day One Competent are able to graduate.**

The learning objectives and competences that correspond to the initial guidelines of the University and the Day One Competences (approved by ECCVT) are regularly updated in accordance with the requirements and changes in the higher education system and the needs of the production business.

Assessment of learning outcomes in the block of disciplines includes ensuring food safety, hygienic conditions, mastery of practical skills (methods) for monitoring food safety and quality, the ability to interpret research results, analyse risks and make decisions on the further use of food products.

In the block of disciplines on epidemiology and infectious diseases, including zoonoses and infectious diseases of exotic, laboratory animals, etc, the student is expected to:

- knowledge and understanding of the epidemiological process, understanding of the patterns of spread of infectious diseases knowledge of methods for assessing the epizootic situation and predicting outbreaks of infectious diseases, knowledge of the nomenclature of infectious diseases by animal species, their symptoms, methods of diagnosis, treatment and prevention of infectious diseases;

- the ability to organise surveillance of the epizootic situation, conduct epidemiological studies, identify, diagnose and treat infectious diseases, plan, organise and implement anti-epizootic measures to prevent the spread of infectious diseases, including transboundary ones, and eliminate outbreaks and recover from infectious diseases.

In the block of disciplines on veterinary legislation, organisation of veterinary services, maintenance of veterinary health of the population, the following results are expected upon completion of the training:

- knowledge of the nomenclature and provisions of national and international legislation in the field of veterinary medicine, the organisational structure and functions of the state veterinary service and private veterinary enterprises, means and methods of public health protection;

- the ability to analyse and implement the provisions of legislation, organise the activities of veterinary institutions of the state or commercial sector, plan and implement measures to ensure public health.

Student assessment is carried out by comparing the level of knowledge and skills with those declared in the curricula of specific disciplines. The results of academic work and final certification of students are recorded by the teaching staff in the 'Records of academic performance' and 'Record book'. Information on learning outcomes is also available to students around the clock on the Elearn e-learning platform.

### **Comments on Area 8**

The VEE conducts regular student assessments, and the student survey system is actively developing. A system of student awareness of the Day One competencies is being developed.

A biosafety system has been developed at the faculty and is being actively implemented.

### **Suggestions for improvement in Area 8**

It is planned to develop requirements and an electronic form for recording the acquired clinical skills of students.

## Area 9. Teaching and support staff

**Standard 9.1: The VEE must ensure that all staff are appropriately qualified and prepared for their roles, in agreement with national and EU regulations and must apply fair and transparent processes for the recruitment and development of staff.**

**A formal quality-assured programme of teacher training<sup>1</sup> (including good teaching and evaluation practices, learning and e-learning resources, use of digital tools education, biosecurity and QA procedures) must be in place for all staff involved with teaching. Such training must be mandatory for all newly appointed teaching staff and encouraged on a regular basis for all teaching staff.**

**Most teaching staff (calculated as FTE) involved in core veterinary training must be veterinarians. It is expected that more than 2/3 of the instruction that the students receive, as determined by student teaching hours, is delivered by qualified veterinarians.**

To ensure the implementation of the educational programme by qualified scientific and pedagogical staff, the VEE can rely on the university which systematically selects the best graduates of the VEE, graduates and former academic staff from other educational institutions, as well as foreign specialists. The VEE offers competitive working conditions, self-development, rewards for conscientious intellectual work, incentives, internship opportunities and conditions for professional growth.

The VEE follows the university approved higher education quality policy, which includes ensuring academic integrity by participants in the educational process.

Employment conditions. The university and the VEE have an integrated approach to managing recruitment, continuous development and improvement of employees' skills. Positions of research and teaching staff can be held by persons who have a scientific degree, academic title or master's degree, with a sufficient level of foreign language skills.

To consider the recommendation of candidates for the position, a personnel commission is established to review the candidates and their suitability for the position.

The positions of academic staff are filled by competition, provided for and regulated by the legislation of Ukraine and the internal legislation of the University in accordance with the Development Programme of NUBiP of Ukraine 'Holosiivska Initiative-2025' and the approved 'Procedure for holding a competition for the positions of academic staff of the National University of Life and Environmental Sciences of Ukraine'.

The competition for the positions of academic staff is announced by the order of the Rector of the University. The announcement of the competition is published in the newspaper 'University Courier' and on the main website of the University.

During the competitive selection, applicants for the vacant position of assistant, senior lecturer, associate professor, professor, after the published announcement, submit a package of documents to the Human Resources Department within the specified time limits.

The discussion of candidates for the positions of professor, associate professor, senior lecturer, assistant professor is held by the staff of the relevant department in their presence (in the absence of the candidate, the candidate is discussed only with his/her written consent), the Academic Council of the faculty, and then by secret ballot at the Academic Council of the University. The decision of the Academic Councils of the Faculty and the University is the basis for concluding an employment agreement (contract) with a research and teaching staff member and issuing an order of the Rector of the University on appointment to the relevant position for a period of 1-5 years. The contract shall clearly state the expected performance indicators for the position. The contract is approved by the signature of the Rector of the University. In case of violation of the terms of the contract, improper performance of the assigned duties, the contract may be terminated early.

Applicants for the position of assistant, who are hired for the first time, or those scientific and pedagogical workers who have not fulfilled the conditions provided for participation in the competitive selection, are hired on the basis of an application under an employment contract for a period of 1 year on the proposal of the heads of the relevant structural units.

When hiring academic and research staff and other employees who have received documents on education outside Ukraine, the final decisions on the recognition of foreign documents on higher education, academic degrees and academic titles are made by the Academic Council of the University.

Administrative and managerial, teaching and support staff, economic staff, and specialists are hired upon the recommendation of the heads of the relevant structural units.

The rights and obligations of researchers, academic staff, administrative and managerial, teaching and support staff, economic staff, and specialists are stipulated by job descriptions, Internal Regulations, and the terms of the employment contract.

Research and teaching staff adhere to the University Statute, Internal Regulations, the Code of Ethics for Research and Teaching Staff, the University's Anti-Corruption Programme, laws and regulations of Ukraine.

**Standard 9.2: The total number, qualifications and skills of all staff involved with the study programme, including teaching, technical, administrative and support staff, must be sufficient and appropriate to deliver the study programme and fulfil the VEE's mission.**

**A procedure must be in place to assess if the staff involved with teaching display competence and effective teaching skills in all relevant aspects of the curriculum that they teach, regardless of whether they are full or part-time, teaching or support staff, senior or junior, permanent or temporary, teachers. Guidelines for the minimum training to teach and to assess are provided in Annex 6, Standard 9.1.**

As of 1 June 2024, 108 academic staff of the VEE (99 full-time equivalents) provide the educational process under the educational programme 211 'Veterinary Medicine'. Of these, 99.1% have a diploma of a Doctor of Veterinary Medicine, 63 (57.45%) have a PhD, 36 (33.33%) have a doctorate diploma degree (Doctor of Science after PhD), and 10 (9.25%) have no academic degree. Postgraduate students are involved in teaching disciplines and have to undergo pedagogical practice in clinical and basic disciplines.

In the 1<sup>st</sup> and 2<sup>nd</sup> years of education courses in inorganic chemistry, organic chemistry, Latin, animal nutrition, occupational and life safety, animal breeding, physics with the basics of biophysics, genetics, history of Ukrainian statehood, physical education, foreign language, ethnocultural studies, philosophy, radiobiology, the educational process are provided by 27 lecturers from related faculties responsible for these disciplines, of whom only 3 (11%) were graduated as a veterinarians.

The VEE staff are appropriately qualified and prepared for their roles. A QA programme of teaching staff training include good teaching and evaluation practices, learning and e-learning resources, use of digital tools education, biosecurity and QA procedures. Such training is mandatory for all newly appointed teachers and encouraged on a regular basis for all teaching staff.

The VEE has a procedure for assessing whether all staff involved in teaching demonstrate competence and effective teaching skills in all relevant aspects of the curriculum they teach, whether they are full-time or part-time, teaching or support staff, senior or junior, permanent or temporary. There is a standardised periodicity of professional development for VEE members. The frequency corresponds to the Guidelines for the minimum training to teach and to assess provided in Annex 6, Standard 9.1 of the EAEVE SOP. Information on relevant professional development is kept in the dean's office.

Table 9.2.1. Teaching staff involved with the core veterinary programme

Type of contract	2023	2022	2021	Mean
Academic staff (FTE)	96.25	97.5	100.0	97.91
Academic staff (FTE) (part time)	2.75	5.0	3.0	3.58
Interns (FTE)	-	-	-	-
Residents (FTE)	-	-	-	-
PhD students (FTE)	75	64	63	67.33
Practitioners (FTE)	-	-	-	-
Others (specify) (FTE)	-	-	-	-

Table 9.2.2. Percentage (%) of veterinarians in teaching staff

Type of contract	2023	2022	2021	Mean
Permanent (FTE)	97.22	97.36	97.36	97.31
Temporary (FTE)	-	-	-	-

Table 9.2.3. Support staff of the veterinary programme

Type of contract	2023	2022	2021	Mean
Permanent (FTE)	81.0	81.0	88.0	83.33
Temporary (FTE)	-	-	-	-
Total	81.0	81.0	88.0	83.33

Table 9.2.4. Research staff of the VEE

Type of contract	2023	2022	2021	Mean
Permanent (FTE)	-	-	-	-
Temporary (FTE)	72	61	68	67
Total (FTE)	72	61	68	67

**Standard 9.3: Staff must be given opportunities to develop and extend their teaching and assessment knowledge and must be encouraged to improve their skills. Opportunities for didactic and pedagogic training and specialisation must be available. The VEE must clearly define systems of reward for teaching excellence in operation. Teaching positions must offer the security and benefits necessary to maintain the stability, continuity, and competence of the teaching staff. Teaching staff must have a balanced workload of teaching, research and service depending on their role. They must have reasonable opportunities and resources for participation in scholarly activities.**

The total workload for one full-time lecturer is 1548 hours. Of these, 600 hours are teaching workload, 300 hours are work based on the criteria of a national and research university, 200 hours are research work, 170 hours are teaching and methodological work, 139 hours are educational, research, innovation and international work, and 139 hours are organisational and educational work.

The hours are clearly regulated by national legislation (Law on Higher Education), university legislation (Regulations on Planning and Accounting of the Work of Academic Staff of the National University of Life and Environmental Sciences of Ukraine for 2024).

The student/teacher ratio is clearly defined by the Regulations on the organisation of the educational process at NUBiP of Ukraine.

The workload is agreed upon by the staff of the departments, heads of structural units, the dean, the academic part of the university, and the rector of the university.

Most of the lecturers work full-time on a permanent basis. At the end of the year, reports are submitted on the results of the academic, scientific, research, innovation, organisational, educational, and international activities of the academic staff, which are analysed by the rating committee of the faculty and the university. Based on the individual rating for the current year, academic staff receive salaries. Teachers who teach classes in English are entitled to a supplement (10%).

Based on the rating indicators, academic staff apply on a competitive basis for the positions of assistant, senior lecturer, associate professor, and professor.

University academic staff may receive incentives for professional achievements and teaching excellence in the form of financial (bonuses) or non-financial incentives (letters of thanks and certificates of appreciation from various institutions and organisations). Documents on awarding are developed and implemented in university practice:

- for exemplary performance of their duties and tasks, long and conscientious work, innovation, significant success in educational and scientific activities and other achievements in the work of the University employees are encouraged by:



- announcement of gratitude,
- rewarding,
- establishing allowances to official salaries,
- recognition at meetings of the Academic Councils of faculties, institutes and the University,
- awarding the Diploma of the University,
- awarding honorary titles of the University.

**Standard 9.4: The VEE must provide evidence that it utilises a well-defined, comprehensive and publicised programme for the professional growth and development of teaching and support staff, including formal appraisal and informal mentoring procedures.**

**Staff must have the opportunity to contribute to the VEE's direction and decision-making processes.**

**Promotion criteria for teaching and support staff must be clear and explicit. Promotions for teaching staff must recognise excellence in and (if permitted by the national or university law) place equal emphasis on all aspects of teaching (including clinical teaching), research, service and other scholarly activities.**

The professional development of the academic staff of the Faculty of Veterinary Medicine is facilitated by the procedure presented in the 'Regulations on the professional development of the teaching staff of the NUBiP of Ukraine'. The professional development of the teaching staff is carried out through training in advanced training programmes, internships, participation in seminars, workshops, trainings, webinars, master classes. For this purpose, teaching staff constantly improve their qualifications at the Educational and Research Institute of Continuing Education and Tourism in various types (studying under an educational programme, internships, participation in certification programmes, trainings, seminars, workshops, seminars-meetings, training seminars, webinars, master classes, etc. and in various forms (institutional, dual, at the workplace (in production), etc.) including courses on teaching skills.

Research and teaching staff annually undergo advanced training in research institutions of Ukraine, institutions of the State Service of Ukraine for Food Safety and Consumer Protection, advanced agricultural farms, veterinary clinics, laboratories) on a cumulative basis. The total amount of advanced training for an academic staff member may not be less than 180 hours (six ECTS credits) for five years.

Confirmation of the continuing professional development of the teaching staff is a certificate of advanced training issued by the institution in accordance with the established procedure, indicating the number of ECTS credits, topics of training, serial number, date of issue.

Within the framework of the International Agreements of Ukraine, projects and agreements of the University with educational and scientific institutions of other states, the internships of research and academic staff of the University are carried out in leading European and world educational institutions. Confirmation of an international internship may be a certificate (original) issued in accordance with the requirements of the country where the internship is conducted.

The University ensures the growth of the professional component of the teaching staff by holding international and all-Ukrainian scientific and practical conferences, where topical issues of various fields of veterinary medicine are presented, round tables, scientific and practical seminars, master classes.

In order to increase the psychological and pedagogical skills of academic staff, the VEE familiarises members of the university staff with the best pedagogical practices, establishes cooperation between academic staff in the humanisation of the professional training of higher education applicants. The School of Young Teacher is held twice a year for young employees whose teaching experience does not exceed three years (Order of the Rector of 02.09.2019, No. 815).

When hired as an assistant for the first time, an experienced supervisor from among the academic staff is assigned. When appointing such research and academic staff as curators of student groups, academic staff are required to take a training course for mentors of student groups, which is conducted by the Educational and Research Centre for Educational Work and Social Development.

Practical skills of scientific and pedagogical workers, especially those involved in teaching clinical disciplines, are supported by constant participation in the work of the veterinary medicine clinic, which is located

in the structure of the faculty, and leading clinics in Kyiv and Ukraine, specialised farms for breeding cattle, small cattle, pigs, horses, poultry, zoos (under the concluded agreements).

In accordance with the legislation of Ukraine, academic staff, based on the results of their educational, scientific, research, innovation, organisational, educational, international activities and meeting all the requirements of the Ministry of Education and Science of Ukraine, may apply for the academic titles of senior researcher, associate professor and professor, the procedure for awarding which is carried out through a decision of the Academic Council of the University with the approval of the Ministry of Education and Science of Ukraine.

The Academic Council of the University also considers candidates for state awards for outstanding scientific achievements and for honorary titles of Ukraine and the University (as set out in the University Statute).

Academic staff are members of the Academic Council of the Faculty and the University, the Clinical Council of the Faculty, and the Scientific and Technical Council of the Research Institute of Animal Health. Academic staff, research and support staff are members of the Faculty Staff Conference, and some elected representatives are members of the University Staff Conference, which are held twice a year and solve general university and faculty tasks.

Academic staff and research and support staff take part in the election of the rector of the university and are eligible to apply for the elected positions of dean and rector.

**Standard 9.5: A system for assessment of teaching and teaching staff must be implemented on a cyclical basis and must formally include student participation. Results must be communicated to the relevant staff and commented upon in reports. Evidence must be provided that this system contributes to correcting deficiencies and to enhancing the quality and efficiency of education.**

For the purpose of constant sociological monitoring of the provision of educational services by faculties, departments and individual research and teaching staff, the Rector's order of 19.09.2014 No. 1007 established a sociological group that regularly conducts surveys of students on the quality of the educational process at the University. The results of the survey are systematised and submitted to the Dean of the Faculty for discussion and decision-making at the meetings of the Academic Council, as well as to the Vice-Rector for Scientific and Pedagogical Work for publication at the meetings of the University Administration and the Academic Council. In order to identify and take into account the needs and interests of the VEE, surveys are systematically conducted with the administration, representatives of the dean's office (<https://nubip.edu.ua/node/1165/5>) and heads of students' groups (<https://nubip.edu.ua/node/71339>).

Evaluation of the quality of teaching of academic staff by students is carried out according to internal regulations in accordance with the order of the Rector of NULES of Ukraine No. 1311 of 18.12.2023 'On holding open lectures' and order No. 581 of 08.06.2023 'On improving the quality of education at NUBiP of Ukraine in the academic year 2023/2024'.

Open lectures by academic staff and their evaluation are held regularly in each semester, according to a clear schedule, with a pre-published announcement of an open lecture (<https://nubip.edu.ua/node/145566>).

Students fill out a questionnaire in which they evaluate the lecturer's open lecture, taking into account the logical connection of the lecture material with the previous one, the organisation of the lecture, the systematic and logical sequence of the material, the accessibility and comprehensibility of the material, the pace of the lecture, the lecturer's contact with the audience, the use of various teaching techniques and methods, the visualisation of the means, the lecturer's culture of speech, friendliness, respect for students, and the full implementation of the lecture plan.

In addition to students, the open lecture is evaluated by an appointed committee, experienced teachers in the department where the academic staff member works, and the academic staff present. It is mandatory to discuss the level of the open lecture at the department meeting. Reports and questionnaires on the conduct of the open lecture are submitted to the responsible persons to the academic part of the university.

The administration of the dean's office conducts periodic surveys of students of different courses on general issues of the faculty's learning environment and individual subjects.

The teaching staff is informed of individual results in person. The results of the general educational indicators are announced in a report at the Academic Council of the Faculty of Veterinary Medicine.

Based on the results of the survey, measures are taken to eliminate the identified shortcomings.

### **Comments on Area 9**

The VEE is working to improve the learning environment for students and enhance the practical competence of teaching staff. To achieve this goal, over the next three years, it is planned to create new educational and research laboratories and specialised classrooms on the basis of the departments and to fill them with modern devices and equipment to ensure a high-quality educational process, conduct research and use it in the production process (annually) and increase the number of students, postgraduates and lecturers participating in mobility programmes, research projects or internships at foreign universities (annually).

### **Suggestions for improvement in Area 9**

The further goal of the VEE is to integrate into the global educational, scientific and innovative space through the development of cooperation with leading international educational and scientific institutions by:

- increasing the number of joint international educational and research projects, participation in the implementation of international grants,
- implementing the developments of the VEE's scientists in Ukraine and on the international intellectual property market,
- achievement of high quality standards of veterinary education, research and innovation in the training of undergraduate and postgraduate students to ensure the One Health in society.

## **Area 10. Research programmes, continuing and postgraduate education**

**Standard 10.1: The VEE must demonstrate significant and broad research activities of teaching staff that integrate with and strengthen the study programme through research-based teaching. The research activities must include veterinary basic and clinical sciences. Evidence must be provided that most teaching staff are actively involved with research programmes (e.g. via research grants, publications in congress proceedings and in peer-reviewed scientific journals).**

The introduction of research activities of the veterinary faculty into the curriculum significantly improves the quality of education and training of future veterinarians. Therefore, the faculty's academic and research staff do this by integrating research results into disciplines. In particular, they include materials from their research in the course of the discipline, which allows students to study the latest achievements in this field. Academic staff create case studies based on their research, which helps students develop critical thinking skills and apply theoretical knowledge in practice. Students are involved in working in research laboratories and participate in scientific circles under the guidance of teachers (29 scientific circles). Joint research projects are the basis for writing theses (2021-2022) or coursework, which allows students to gain practical experience in conducting research. Academic staff act as supervisors for students interested in research, helping them formulate research questions, choose research methods, and analyse results. Seminars, webinars and conferences are held with the participation of faculty and students, where the latter can present their research and discuss it with the scientific community. Students are involved in the preparation of scientific articles and reports together with their academic advisors, which allows them to publish their work in scientific journals or present at conferences. Every year, the faculty and the university hold an all-Ukrainian competition of student research papers. There is also financial support for student research, and students are involved in research with remuneration, both from the general and special funds. List of the major funded research programmes in the VEE is added in Annex 21.

**Standard 10.2: All students must be trained in scientific methods and research techniques relevant to evidence-based veterinary medicine and must have opportunities to participate in research programmes.**

Research and academic staff integrate scientific achievements into the curriculum to make students aware of the importance of evidence-based medicine, research and lifelong learning. A number of disciplines include components that require the application of scientific methods, such as designing experiments, statistical data analysis, and writing scientific articles. Practical classes: Laboratory work is aimed at studying research methods, including genetic research, pathological, epidemiological and other methods important for a veterinarian. The discipline 'Methodology and organisation of scientific research with the basics of intellectual property' has been introduced into the student curriculum. This is a special course on scientific methods and research skills that teaches students the basics of research methodology. The work of student research circles makes it possible to involve students in research projects under the guidance of teaching staff. In addition, students carry out their own research projects as part of their coursework or diploma theses, undergo internships and educational and industrial practices, where they participate in research at the faculty's research laboratories and other university departments. Lecturers involve students in choosing research topics, planning experiments, bibliographic searches, scientific methods and techniques, data analysis and writing research papers, and motivate students to participate in scientific conferences where they present their research results. This can be either joint work with teachers or independent publications by students. With the participation of students, the teaching and academic staff organise seminars, lectures and workshops involving experienced scientists, veterinary practitioners and stakeholders who share their experience. The assessment of students' academic performance takes into account their participation in research activities. The teaching staff provides bonuses and additional points in the discipline for achievements in research activities (winning and participating in research competitions). Students are provided with access to laboratory equipment, computer programs for data analysis and other resources available in the laboratories of the departments, as well as access to databases (NUBiP of Ukraine library) so that students can use modern scientific literature for their research.

**Standard 10.3: The VEE must provide advanced postgraduate degree programmes, e.g. PhD, internships, residencies and continuing education programmes that complement and strengthen the study programme and are relevant to the needs of the profession and society.**

Strengthening of the curriculum, relevance to the needs of the profession and society is implemented through the expansion of basic knowledge, in-depth programmes in fundamental disciplines and integration of modern scientific research.

There are no other postgraduate programmes that are not related to clinical or research work (including any external/ distance learning courses) (Table 10.3.3.).

The refresher courses last up to 1 month (2-4 ECTS credits).

Table 10.3.1. Number of students registered at postgraduate clinical training

Training. Interns:	2023/2024	2022/2023	2021/2022	Mean
Cattle	-	4	2	2
Pigs	2	4	1	2
Companion animals	8	6	6	7
Poultry	4	2	1	2
Horses	-	-	-	-
Other	1	-	2	1
Total	15	16	12	14

\* The last complete academic year prior to the Visitation

Table 10.3.2. Number of students registered at postgraduate research training

Degrees:	2023/2024	2022/2023	2021/2022	Mean
PhD	20	21	19	20
Others (specify)	-	2	-	1
Total	20	23	19	21

Table 10.3.3. Not applicable

Degrees:	AY*	AY-1	AY-2	Mean
PhD	-	-	-	-
Others (specify)	-	-	-	-
Total	-	-	-	-

Table 10.3.4. Number of attendees to continuing education courses provided by the VEE

Courses:	2023/2024	2022/2023	2021/2022	Mean
Management of Food Safety and Veterinary Medicine	510	233	306	350
Interregional departments of the State Service of Ukraine for Food Safety and Consumer Protection at the state border	128	167	139	145
Veterinarians-toxicologists	-	84	118	101
Veterinarians - parasitologists	-	12	14	13
Veterinarians - pathologists	-	18	21	20
Veterinarians - virologists	-	24	28	26
Specialists of veterinary and sanitary examination of the hospitals and laboratories / Official veterinarians	185	-	49	117
Veterinarians-epizootologists	90	67	21	59
Veterinarians in private practice	150	50	100	100
Total	1063	655	796	-



To ensure a sufficient level of knowledge in postgraduate, PhD, veterinary internship and continuing education programmes, the following additions and improvements have been introduced:

Students are given the opportunity to undergo clinical training in various veterinary clinics, institutions and farms (Vet House Veterinary Centre, Tetiana 2011 Farm, VET 24 Veterinary Clinic, Zveropolis LLC, Myronivska District State Hospital of Veterinary Medicine, Realvet Veterinary Outpatient Clinic, Neurocare Veterinary Clinic of Neurology and Rehabilitation, Alden-Vet LLC, Centre for Sterilisation and Adaptation of Animals Zoo 12 Months, I. Kuziomko, PE. O., Rud O. I., Fursov D. V.) and abroad (Order No. 257 of 19.03.2024). This helps to gain practical experience and improve mastery of the practical component. Involvement of students in research projects allows them to develop critical thinking and analytical skills and prepare for admission to PhD programmes. Encouraging students to publish their research results in peer-reviewed journals is an important part of preparing them for an academic career. The introduction of elective courses in various specialisations allows students to deepen their knowledge in their chosen field. Partnerships are established with international veterinary schools and research institutes to share knowledge and experience. Students participate in international exchange programmes, which allows them to gain global experience and knowledge.

The faculty has developed continuing education programmes for practicing veterinarians and veterinarians working in the State Service of Ukraine for Food Safety and Consumer Protection, agri-food markets, etc., which allows them to constantly update their knowledge and skills. To support lifelong learning, the faculty regularly holds online courses, seminars, roundtables, and conferences in which students of the faculty also take an active part. It is planned to attract from 2500 to 3000 students from the State Food and Consumer Service and private veterinarians to postgraduate programmes in the next 3 academic years. The Faculty of Veterinary Medicine has two PhD programmes in Contagious Animal Pathology and Non-Contagious Animal Pathology. The educational components of the curriculum for the study programmes 'Non-Contagious Animal Pathology' and 'Contagious Animal Pathology' are a logical system that allows you to form a harmonious educated specialist who: has a scientific outlook formed in the discipline 'Philosophy of Science'; communicates fluently in the state and foreign languages. Mastering the discipline 'Foreign language for professional purposes' allows a young scientist to master the vocabulary to get acquainted with foreign-language professional scientific works related to his or her work. Such knowledge, which helps in the comprehensive analysis of research results, is acquired by a postgraduate student in the discipline of Computer Information Processing. Effective study of the materials of such disciplines as 'Methods and Ethics of Scientific Research in Veterinary Medicine', 'General Veterinary Pathology', 'Risk-based Control of Food and Feed Safety' and, for the 'Contagious Animal Pathology' study programme, 'Methods of Serological and Immunobiological Research in Veterinary Medicine' contributes to awareness of the problems of the industry and the ability to conduct theoretically and practically significant research. Elective courses within the speciality: 'Veterinary Biochemistry', "Comparative Animal Physiology", "Clinical Non-Invasive Diagnosis of Animal Diseases", "Reproductive Science in Veterinary Medicine", "Pathology, Oncology and Morphology of Animals", "Medicines and Toxic Substances", 'Cellular Technologies and Transplantology in Veterinary Medicine, Tissues and Cells of Animal Haematopoiesis and Lymphopoiesis, Fundamentals of Histological Techniques and Methods of Histological Research, Methodology of Scientific Knowledge in Clinical Veterinary Practice, Polymorbid Internal Animal Pathology, Cell Physiology and Oncotransformation, 'Feed Safety and Quality', "Risk-based Capacity Control", "Veterinary Public Health", "Applied Microbiology and Virology", "Clinical Immunology", "Veterinary Epidemiology of Transboundary and Emerging Diseases", 'Veterinary Parasitology' and "Veterinary Parasitocenology") provide specialised knowledge and ability to apply research methods in the course of the dissertation (a PhD student chooses 3 disciplines from the list or 1 discipline from the university catalogue and 2 disciplines in the speciality). In addition, PhD students are involved in teaching classes for Master's degree students during their pedagogical practice, where they demonstrate their scientific achievements. Students are involved in discussions of their own research as a means of avoiding potential conflicts between undergraduate and postgraduate students.

The licensing requirements for the implementation of educational activities for the training of PhD candidates in the speciality 'Veterinary Medicine' provide for the annual enrolment of 30 postgraduates. In particular, 15 places are planned annually with state funding.

**Standard 10.4: The VEE must have a system of QA to evaluate how research activities provide opportunities for student training and staff promotion, and how research approaches, methods and results are integrated into the study programme.**

Ensuring a quality system for evaluating research activities, research approaches and methods for student learning and staff promotion in training programmes requires a comprehensive approach. To this end, the university or/ and the VEE has developed clear evaluation criteria and indicators for assessing research activities, approaches and methods. For example, the quality of students' publications is assessed before they are submitted for publication, the level of innovation, compliance with academic standards, references to sources of information when using ideas, statements, information, compliance with copyright law, and provision of reliable information about the results of their own educational (scientific, creative) activities are required. Articles are published in the journals 'Ukrainian Journal of Veterinary Sciences' and 'Electronic Reports of NUBiP' only after receiving information about the quality of a certain type of text. The author submits an electronic version of the work to the Department of Scientific and Technical Information. The file is assigned a specific ID, the responsible person uploads it to the system, and the UNICHECK programme checks it. After that, a Unicheck Similarity Report is generated and sent to the author. If the text is more than 80% unique, it is considered original. If the text is 50-80% original, the question of the amount of borrowings and self-citations is decided by a professional committee of experts. The originality of the text at the level of 40-50% is unsatisfactory and the material is returned for revision. After that, a peer review is carried out with the involvement of independent experts to evaluate the articles to ensure objectivity and a high level of academic quality. At the faculty, students are regularly involved in new research projects to develop their practical skills and critical thinking. Qualified assessors (academic staff) are trained, in particular, trainings and refresher courses on pedagogical skills are held for academic staff and assessors so that they can correctly apply assessment criteria. The curriculum for the training of a veterinarian includes a core discipline 'Methodology and Organisation of Scientific Research with the Basics of Intellectual Property'. To conduct research, students, postgraduates, research and teaching staff, regardless of the subject matter of their work, have free access to the faculty's educational and research clinic, six scientific laboratories of the faculty and to the scientific and metric databases Scopus, Web of Science, VetMed Recourses, EBSCOPUBLISHING, DGLibrary - the digital library of the NULES of Ukraine (order of the rector No. 1113 of 4. 11.2019), which contains publications of scientific and educational works of academic staff and teaching staff in general of NUBiP of Ukraine, as well as access to full-text resources (e-books) of the Science Direct database and materials of the depository library of the World Agriculture Organisation (FAO) in Ukraine. All assessment methods are aligned with the objectives of the curriculum. In order to ensure transparency and feedback at the university, the assessment process is transparent to the participants of the educational process, they are provided with a clear explanation of the results, and regular feedback on their research activities with recommendations for improvement. The assessment system is regularly reviewed to identify and address shortcomings. Changes are continuously implemented based on the data collected and feedback. Students are involved in the assessment process through regular surveys. The university and the Faculty of Veterinary Medicine implement and adhere to policies that promote academic integrity and ethical research. Seminars and trainings on research integrity and ethics are regularly held for students and staff. Academic staff of the VEE undergo advanced training both through the Educational and Research Institute of Continuing Education and Tourism of NUBiP of Ukraine and through full-time and distance international internship programmes. At the same time, opportunities for professional development of academic staff and research staff are provided, including participation in trainings, seminars and conferences.

**Comments on Area 10**

In accordance with the requirements of the national standard, the defence of a master's thesis is optional. However, research projects are carried out and supported in postgraduate studies (PhD). In order to compensate students in the process of learning and developing critical thinking, voluntary participation in student projects,

research projects and scientific clubs organised by interested students is offered and recommended. Scientific work in scientific clubs is optional and is not included in ECTS.

**Suggestions for improvement in Area 10:**

- support grant applications of young scientists,
- involve young veterinarians and postgraduates in in-depth study of foreign languages, search for and participation in research grants,
- resume the preparation and defence of master's theses.

## List of ESEVT Indicators

Name of the VEE:		Faculty of Veterinary Medicine of The National University of Life and Environmental Sciences of Ukraine			
Date of the form filling:		December 3, 2024			
Calculated Indicators from raw data		VEE values	Median values <sup>1</sup>	Minimal values <sup>2</sup>	Balance <sup>3</sup>
I1	n° of FTE teaching staff involved in veterinary training / n° of undergraduate students	0,394	0,15	0,13	0,268
I2	n° of FTE veterinarians involved in veterinary training / n° of students graduating annually	0,788	0,84	0,63	0,158
I3	n° of FTE support staff involved in veterinary training / n° of students graduating annually	0,661	0,88	0,54	0,121
I4	n° of hours of practical (non-clinical) training	1080,000	953,50	700,59	379,410
I5	n° of hours of Core Clinical Training (CCT)	795,000	941,58	704,80	90,200
I6	n° of hours of VPH (including FSQ) training	480,000	293,50	191,80	288,200
I7	n° of hours of extra-mural practical training in VPH (including FSQ)	570,000	75,00	31,80	538,200
I8	n° of companion animal patients seen intra-murally and extra-murally / n° of students graduating annually	45,376	67,37	44,01	1,366
I9	n° of individual ruminants and pig patients seen intra-murally and extra-murally / n° of students graduating annually	9,837	18,75	9,74	0,097
I10	n° of equine patients seen intra-murally and extra-murally / n° of students graduating annually	2,027	5,96	2,15	-0,123
I11	n° of rabbit, rodent, bird and exotic seen intra-murally and extra-murally / n° of students graduating annually	2,793	3,11	1,16	1,633
I12	n° of visits to ruminant and pig herds / n° of students graduating annually	0,648	1,29	0,54	0,108
I13	n° of visits of poultry and farmed rabbit units / n° of students graduating annually	0,051	0,11	0,04	0,006
I14	n° of companion animal necropsies / n° of students graduating annually	1,510	2,11	1,40	0,110
I15	n° of ruminant and pig necropsies / n° of students graduating annually	1,041	1,36	0,90	0,141
I16	n° of equine necropsies / n° of students graduating annually	0,110	0,18	0,10	0,010
I17	n° of rabbit, rodent, bird and exotic pet necropsies / n° of students graduating annually	0,937	2,65	0,88	0,057
I18	n° of FTE specialised veterinarians involved in veterinary training / n° of students graduating annually	0,078	0,27	0,06	0,018
I19	n° of PhD graduating annually / n° of students graduating annually	0,072	0,15	0,07	0,002
1	Median values defined by data from VEEs with Accreditation/Approval status in May 2019				
2	Recommended minimal values calculated as the 20th percentile of data from VEEs with Accreditation/Approval status in May 2019				
3	A negative balance indicates that the Indicator is below the recommended minimal value				
*	Indicators used only for statistical purpose				

## **Glossary**

ARDI – Access to Research for Development and Innovation  
DOAJ – Directory of Open Access Journals  
EAEVE – European Association of Establishments for Veterinary Education  
ECCVT – European Coordinating Committee on Veterinary Training  
ECTS – European Credit Transfer and Accumulation System  
EP – Educational Programme  
EPP – Education Practice Programme  
EPT – Elective Practical Training  
ESEVT – European System of Evaluation of Veterinary Training  
ESP – Educational and Scientific Production  
EU – European Union  
EUR – Euro  
FSQ – Food Safety and Quality  
FTE – full-time equivalent  
GOALI – Global Online Access to Legal Information  
HINARI – Health InterNetwork Access to Research Initiative  
MAC – Medical Advisory Commission  
NAAS – National Academy of Agrarian Sciences of Ukraine  
NAMS – National Academy of Medical Sciences of Ukraine  
NUBiP – National University of Life and Environmental Sciences of Ukraine  
OARE – Online Access to Research in the Environment  
PDCA – Plan–Do–Check–Act  
PhD – Doctor of Philosophy  
QA – Quality Assurance  
QMS – Quality Management System  
RAT – Rating of student from attestation  
RDIS – rating of student from discipline  
REW – rating of educational work  
SER – Self-Evaluation Report  
SOP – Standard Operating Procedure  
SWOT – Strengths, Weaknesses, Opportunities, Threats  
UAH – Ukrainian hryvnia  
VEE – Veterinary Education Establishment  
VPH – Veterinary Public Health  
VTH – Veterinary Teaching Hospital  
WOAH – World Organisation for Animal Health



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