

# **FULL VISITATION REPORT**

# To the VEE of the University of Bologna, Italy

### On 4-8 March 2024

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# **Contents of the Full Visitation Report**

Introduction

Area 1. Objectives, Organisation and Quality Assurance Policy

Area 2. Finances

Area 3. Curriculum

Area 4. Facilities and equipment

Area 5. Animal resources and teaching material of animal origin

Area 6. Learning resources

Area 7. Student admission, progression and welfare

Area 8. Student assessment

Area 9. Teaching and support staff

Area 10. Research programmes, continuing and postgraduate education

11. ESEVT Indicators

12. ESEVT Rubrics

**Executive Summary** 

Glossary

### Introduction

The first lectures on veterinary medicine were held in the city of Bologna in 1784. Initially operating under the medical school, it gained autonomy in 1876 with the establishment of the Veterinary Medicine of the University of Bologna (UNIBO). Over time, the school evolved into a faculty and then a department (DIMEVET, called the VEE in this report). In the early 1990s, it moved from Bologna's historical centre to Ozzano dell'Emilia.

The VEE has been successfully evaluated by EAEVE in 1996, 2005 and 2014.

The main feature of the VEE is to develop state-of-the-art veterinary education, research and services in a strong relationship with the territories and in agreement with several quality assurance systems (EAEVE, ANVUR, ISO 9001).

The main developments since the last visitation are a reorganisation of the VEE with new strategic plans and new operating regulations, introduction of transversal support services, improvement of the cohesion of the teaching activities, increased funding and staff allocated by the Ministry of Universities and Research (MUR), new facilities and equipment, and other enhancements in agreement with the suggestions done by the 2014 visiting team.

The Visitation is completed in agreement with SOP 2023.

# 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.

# **1.1.1. Findings**

The Department of Veterinary Medical Sciences (DIMEVET) (called the VEE in this report) at the University of Bologna outlines its Vision and Mission in the Strategic Plan 2022-24, aligned with the university's broader Strategic Plan 2022-27. The VEE aspires to be a place for advancing knowledge and skills in veterinary sciences, responding to societal shifts, health challenges, and professional evolution. The mission pursued involves supporting education, research, and community services within the veterinary field, emphasising national and international certifications.

The VEE expresses its commitment to fostering individual enhancement, responsible behaviour, teamwork, and interdisciplinary collaboration. The objectives pursued include efficient resource allocation, including human, instrumental, and financial, guided by multi-year planning.

To prepare future veterinary professionals, the VEE has defined key strategies in its curriculum, including adherence to accreditation and quality standards, continuous facility updates, comprehensive curriculum design, and regular competency assessments. The curriculum aligns with national regulations. A new curriculum, starting from 2023-24, enables graduates to practise without the need to pass the State Examination through the introduction, during the 5<sup>th</sup> year, of a practical examination.

The VEE curriculum is stated to be dynamic, evolving based on feedback from stakeholders and changes in the veterinary profession. Quality assurance measures, including performance monitoring, student evaluations, and graduate employment rates, are conducted for ongoing improvements.

# 1.1.2. Analysis of the findings/Comments

The mission of the VEE includes EU Directives and ESG recommendations.

The mission of the VEE is formulated to meet the requirements of the ESEVT Standards.

The VEE emphasises the need for continuous training and adaptation of the curriculum based on stakeholder feedback.

# 1.1.3. Suggestions for improvement

None.

#### 1.1.4. Decision

The VEE is compliant with Standard 1.1.

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 teaching 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.

# 1.2.1. Findings

The VEE of the University of Bologna (DIMEVET) operates within the broader framework of the Alma Mater Studiorum - University of Bologna (UNIBO). UNIBO is a public university under the Italian Ministry of University and Research (MUR), with campuses in Bologna, Cesena, Forlì, Ravenna, Rimini, and a branch in Buenos Aires. It offers 200 degree programmes to more than 82,000 students.

UNIBO's governance is led by a Rector and supported by Vice-Rectors overseeing various aspects. The University Senate and the Board of Governors play roles in the general administration, strategic planning, and financial programming. The Director General manages the University's services and resources in alignment with the Board's directives.

UNIBO is organised into departments, the VEE being one of these departments (Department of Veterinary Medical Sciences) operating under its own Operating Regulation, approved by the University's governing bodies. The VEE's organisational structure includes key official bodies like the Head, Department Board, and Department Executive Committee, each having defined functions related to guidance, coordination, resource allocation, and decision-making. The VEE is further divided into 13 Scientific-Educational Services (SES) and 9 Transversal Support Services (TSS). SES focuses on scientific and educational activities, such as Anatomy and Physiology, Biosciences and Biotechnologies, Clinical Pathology, etc. TSS, on the other hand, deals with cross-functional and support activities like Administrative Services and Teaching Services. The VTH is composed of six different SES.

The VEE, in addition to official bodies, has various committees and officers overseeing specific areas, such as Research, Teaching, Third Mission (coordinating knowledge transfer to society), Internationalisation, Biosecurity, EAEVE Accreditation, and Quality Management System. Collaborative partnerships are conducted with both domestic and international institutions, including other VEEs. The VEE is engaged in research projects with colleagues from various VEEs. The VEE has agreements with 31 VEEs for student exchange programmes and collaborations through the Erasmus+ programme.

# 1.2.2. Analysis of the findings/Comments

The VEE has strong links with UNIBO University, allowing the VEE to take advantage of the services offered by UNIBO. Conversely, the VEE must comply with procedures and organisations that are shared by other departments whose training tasks are less specific than those of veterinary medicine.

The individuals responsible for the vet curriculum and the VTH hold a veterinary degree.

The VEE is organised with a detailed organisational structure, including official bodies such as the Department Board, Department Executive Committee, Faculty-Student Joint Committee, and others. The decision-making bodies and structure are well-defined, allowing for the implementation of a strategic plan and a cohesive study programme in compliance with the ESEVT Standards.

### 1.2.3. Suggestions for improvement

None.

#### 1.2.4. Decision

The VEE is compliant with Standard 1.2.

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.

# **1.3.1. Findings**

The VEE has developed a Strategic Plan (SP) and implemented a Quality Management System, certified to ISO 9001 standards. This adherence aligns with Article 9 of the Department's Operating Regulation, mandating a three-year research and teaching plan in sync with the University's Strategic Plan.

The VEE's strategic plan 2022-2024 is constructed taking into account the vision and mission of the VEE and an annual context analysis using the SWOT methodology during the Management Review activity. The strategic map outlines objectives cutting across research, training, and third mission processes, ensuring integration with the University's Strategic Plan 2022-27.

The strategic plan also takes into account the National Recovery and Resilience Plan of the Next Generation EU programme and the UN Sustainable Development Goals proposed in the 2030 Agenda.

A contextual analysis using a SWOT approach led to the approval of the first integrated strategic plan in 2017 with two strategic plans (17-19 and 19-21) before the current SP came into effect (22-24).

The current strategic plan has been approved by the Department Board in September 2022. The SP identifies three main Strategic Objectives (SO), further articulated into Basic Objectives (BO):

SO1: Promote the development of knowledge and its educational impact

- BO1.1: Strengthen and enhance research activities
- BO1.2: Promote quality, innovative, and highly qualified education

SO2: Improve the efficiency of the organisation and resource management

- BO2.1: Improve efficiency also through certifications and accreditations of the establishment
- BO2.2: Valorise human resources

SO3: Promote synergy with the territory and society

- BO3.1: Promote research and third mission activities, responding to the needs of society
- BO3.2: Promote education and guidance activities that respond to the needs of society

The SP includes specific actions, indicators, and targets, annually reviewed during the Management Review activity. A SWOT analysis is conducted yearly for each Strategic Objective of the SP.

The SWOT analysis serves as a basis for setting up a Risk-Opportunity Management process. This process involves quantifying the significance of each risk factor through a hazard probability and hazard severity calculation, leading to the formulation of an Action Plan. This plan outlines new actions and the progress of previously planned actions to address identified risks and opportunities.

# 1.3.2. Analysis of the findings/Comments

The VEE demonstrates a strong commitment to strategic planning, including a SWOT analysis as part of its annual context analysis. This approach provides a clear framework for short- and medium-term objectives aligned with the requirement for a strategic plan that includes a SWOT analysis of current activities.

The VEE has implemented a Quality Management System (ISO 9001 certified) and a strategic plan with specific actions, indicators, and targets, including annual reviews during the Management Review activity. The indicators are monitored yearly, contributing to the implementation of the operating plan. The quality of the monitoring of these indicators is commendable.

# 1.3.3. Suggestions for improvement

None.

### 1.3.4. Decision

The VEE is compliant with Standard 1.3.

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.

### **1.4.1. Findings**

The VEE undergoes Quality Assurance (QA) systems, both mandatory and voluntary. The mandatory UNIBO QA system aligns with European Standards and Guidelines for Quality Assurance in the Higher Education Area (ESG 2015) and is in accordance with Italian Ministerial Decree 47/2013 and the local accreditation system (ANVUR AVA3). This system addresses the Quality of Teaching, involving degree programmes, departments, joint committees, academic bodies, the Quality Assurance Unit, and the Evaluation Unit. Additionally, it covers the Quality of Research and the Third Mission, with departments responsible for planning, implementing strategies, and participating in national evaluations.

The VEE achieved the highest grade in the ANVUR evaluation in 2019. The information on these processes is available on the VEE's web page. Voluntarily, the VEE engages in the EAEVE system to ensure professional qualifications align with EU Directives and ESG. Furthermore, the ISO 9001 QMS is employed for management and to meet other QA system requirements.

The VEE has a longstanding commitment to QA, evident in its ISO 9001 certification since 2000. In 2014, it became the first Italian Veterinary Education Establishment accredited by EAEVE (stage 2). The quality management system extends to various services, including Scientific-Educational Services and Transversal Support Services. The QMS is governed by procedures defining organisation, responsibilities, and operational methods, subjected to internal and third-party audits annually.

The cyclical assessment is conducted through the annual Management Review, involving all departmental components. The results are communicated during Department Board meetings. The Plan-Do-Check-Act (PDCA) cycles are used for the continuous improvement of the ISO 9001 QMS and UNIBO QA systems for Teaching, Research, and Third Mission.

# 1.4.2. Analysis of the findings/Comments

The VEE demonstrates a comprehensive approach to QA, with both mandatory and voluntary systems in place: the UNIBO QA system, the ANVUR AVA3 system and the ISO 9001 QMS, a voluntary system that adds an extra layer of quality control (since 2000). This demonstrates a longstanding commitment to QA and a robust QA policy that promotes a culture of continuous improvement.

The juxtaposition of quality systems and indicators from different sources (ISO 9001, ANVUR, UNIBO, ESEVT) must be handled with care, to avoid unnecessarily multiplying redundant procedures. In particular, it is important for UNIBO to recognise the pioneering role of the VEE in the implementation of quality systems (ISO 9001 in particular), so as not to re-impose new procedures that would duplicate an already well-established system.

# 1.4.3. Suggestions for improvement

None.

#### 1.4.4. Decision

The VEE is compliant with Standard 1.4.

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. 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.

# **1.5.1. Findings**

The VEE communicates with stakeholders and the public through its web portal and Facebook page. Key information is freely accessible. Details about the Veterinary Medicine degree programme are on a dedicated website and also accessible through the university platform. UNIBO monitors professional opportunities and outcomes. The ESEVT VEE's status, along with Self-Evaluation and Visitation Reports, is on the VEE's website. Additional information on the last Visitation is on the Degree Programme website.

### 1.5.2. Analysis of the findings/Comments

The VEE engages with stakeholders, provides accessible information about its programs, and makes evaluation reports readily available on its website, as requested in ESEVT standard 1.5.

# 1.5.3. Suggestions for improvement

None.

### 1.5.4. Decision

The VEE is compliant with Standard 1.5.

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.

### **1.6.1. Findings**

Since 2017, the VEE has adopted a three-year strategic planning approach. This strategic map integrates objectives spanning research, education, and third mission processes. The process includes drafting by the QA officer, pre-approval by the Department Executive Committee, and final approval during a Department Board meeting, with a provision for revisions during the Annual Review Process. The finalised Strategic Plan is shared on the VEE portal.

The VEE's organisational structure, detailed in the Operating Regulation, requires approval from the Department Board and UNIBO's central bodies. Scientific-Educational Services changes are approved by the Department Board and communicated to the University Board of Governors. Transversal Support Services follow organisational chains under the University's General Director's direction.

The annual Management Review, guided by ISO procedures, involves drafting, verification by the Department Executive Committee, approval by the Head, and sharing with staff and the Department Board. Students are introduced to UNIBO's teaching quality assurance during degree programme presentations, emphasising their role and exposing them to the ISO 9001 quality management system.

# 1.6.2. Analysis of the findings/Comments

The VEE employs a structured approach to monitor and periodically review its activities through the annual Management Review process. The document details the workflow, involving drafting, verification, approval, and sharing, demonstrating a systematic and participatory assessment.

There is evidence that QA loops are closed to improve the quality of education.

### 1.6.3. Suggestions for improvement

None.

# 1.6.4. Decision

The VEE is compliant with Standard 1.6.

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.

### **1.7.1. Findings**

The last ESEVT Visitation occurred in May 2014. A specific Committee (EAEVE Committee) oversees ESEVT indicators, preparing reports and suggesting actions for accreditation standards. An action plan, aligning observations with ESEVT standards, aids in the Self Evaluation Report (SER) preparation. This plan, periodically updated, informs the current SER. A specific ISO management procedure, "PG 101 - Monitoring of EAEVE Indicators," defines responsibilities for overseeing ESEVT indicators.

# 1.7.2. Analysis of the findings/Comments

The implemented methods (including the existence of a specific EAEVE Committee and an action plan monitored through ISO procedure) demonstrate a strong commitment to the quality assurance process linked to the outcomes of external evaluations.

# 1.7.3. Suggestions for improvement

None.

#### 1.7.4. Decision

The VEE is compliant with Standard 1.7.

### 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).

# **2.1.1. Findings**

VEE has made efforts to follow the recommendations of the 2014 EAEVE visit, and improvements have been realised in several areas. Since then, the VEE has introduced annual and three-year budgets.

VEE receives financial support through public and private grants. The primary fund allocated by the government to all Italian universities is the "Fondo di Finanziamneto Ordinario" (FFO). Financial management to cover personnel and general costs (operational, building maintenance and investment, undergraduate study, and administrative costs) of universities depends on FFO support and student fees.

All UNIBO Departments receive funds and annual support. Other revenues, such as income from research projects, agreements, donations, and services, are managed directly by the responsible academic staff of the Departments.

UNIBO allocates a budget annually to all its departments, including VEE, which is among the five largest. Budgetary and financial decisions are made by the VEE Department Board (DB), and according to the SER, professors, technical and administrative staff, and students are members of the board.

The 2024 budget based on the resources available in 2023 was approved and proposed to the UNIBO by the DB.

Resources from research and investment grants are provided to SES in VEE based on meritocratic criteria (number of persons involved, strategic goals).

Due to the importance of VTH, UNIBO provides general and, in addition, special support to the teaching hospital.

As VEE is one of UNIBO's 31 departments, receiving adequate support is a continuous and challenging task. Obtaining the necessary financial resources is made difficult by the fact that 82,000 students are in UNIBO (the average per department is 2,645 students) and the largest number of students belonging to the VEE was 554 in the year 2022. In addition, due to the high financial demand for clinical and practical courses, the cost of education per student is one of the highest in UNIBO.

VEE has had a positive expenditure and revenue balance for the past three years.

Personnel costs are the largest of the total expenditure (e.g. 74.48% in 2022) and have been rising continuously. The other part of the expenses related to operation, maintenance and

equipment costs has decreased decisively.

Special attention should be paid to VTH's balanced financial budget, which has recently become more and more difficult, as UNIBO has raised the fees (from 15% to 18%) for third-party services. In addition, medicines, health care supplies together with temporary staff costs have extremely increased in recent times.

# 2.1.2. Analysis of the findings/Comments

Continuous growth of personnel costs and permanent support from UNIBO was observed during the last three years. There is a high level of research activity in VEE, which provides opportunities to obtain considerable funds and special grants.

Positive balances between the revenues and expenditures adequately support the VEE's mission of education, research, and services.

# 2.1.3. Suggestions for improvement

None.

#### 2.1.4. Decision

The VEE is compliant with Standard 2.1.

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.

# **2.2.1. Findings**

The VTH is primarily self-financing in terms of clinical activity, due to the increasing and high personnel costs and consumables; as a result, additional support from UNIBO is still needed. Regarding its educational tasks, VEE also provides financial support to cover the costs of tutors and study materials.

A significant number of extramural facilities are available, which contribute to the professional competences students acquire during their education. VEE covers most of the costs of external training, especially tutoring and the costs of certain consumables.

VEE has distinct autonomy and responsibility in financial matters, except for personnel costs.

# 2.2.2. Analysis of the findings/Comments

The VEE has sufficient autonomy to make strategic decisions in the use of available funds, to implement strategic plans, and to meet the ESEVT Standards.

# 2.2.3. Suggestions for improvement

None.

# 2.2.4. Decision

The VEE is compliant with Standard 2.2.

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

# **2.3.1. Findings**

Several investments have been made in recent years. The most important ones are supported by the Eccellenza project (8,100,000 Euro total funding). According to the final monitoring report (2022) of the project, the investment plan will be completed until the available funds are exhausted. The final report also states that the received funds were largely used. (100% personnel, 90% investment, construction, equipment acquisition, etc.). The project is characterised by a series of extraordinary actions that enabled the VEE to grow significantly in terms of personnel, infrastructure, cooperation, and synergies between research groups, innovation, and highly qualified training activities. It should be emphasised here that the Final Monitoring Report of the Eccellenza project compared the averages of the three-year period of 2018-2020 to the period of 2015-2017 and describes several great results.

# 2.3.2. Analysis of the findings/Comments

The VEE benefits from several allocations and meets the requirements.

# 2.3.3. Suggestions for improvement

None

#### 2.3.4. Decision

The VEE is compliant with Standard 2.3.

### 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, teamwork 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.

# 3.1.1. General findings

# **3.1.1.1. Findings**

The VEE delivers a 5-year single-cycle combined Bachelor's and Master's degree programme for veterinary medicine (does not follow EU Bologna declaration of a two-cycle structure (BVS + MSc)). There is no tracking in the curriculum. The curriculum fulfils the 2005/36/EC requirement for its total length of 5 years; each year is divided into two semesters, and the total volume of tuition is 300 ECTS with 60 ECTS per year balance. Each ECTS includes 13-16 hours of unsupervised independent study time for students.

The curriculum must comply with detailed national regulations which dictate a minimum ECTS volume for basic subjects of 58 ECTS, professional subjects of 130 ECTS and 30 ECTS for Core Clinical.

These minimum ECTS requirements comprise 218 ECTS of 300, giving autonomy to VEE to direct 82 ECTS with its own strategic choice. Superior regulations are seen to harmonise programmes offered by all 13 Italian VEES, but also limit the ability of an individual VEE to make substantial changes to the curriculum.

Students enrolled in AY 2023-24 graduating from all Italian VEEs will have the right to practise the veterinary profession without taking the State Examination, during the transition period students enrolled earlier have to do it.

The Degree Programme Quality Assurance Committee (DPQAC) annually reviews the information given from each course on web pages and shares the monitoring with the Degree programme director and Degree programme board.

Students' annual feedback is mandatory based on national regulations and guidelines. Data are collected at the UNIBO level and publicly available for each academic year on the UNIBO web page.

The VEE actions, including teaching, also have ISO EN 9001 certification.

The graduation thesis is in the fifth year and the volume is about 1 ECTS but often thesis work is bound together with Elective Practical training (200 h) to make it possible to conduct experimental work used in the thesis.

The current curriculum was planned 10 years ago (AY 2013-14) and has run since then with minor modifications to balance students' annual workload. Renovation of the whole curriculum is planned to take place in the near future depending upon unpublished national requirements for the degree programmes in Veterinary Medicine.

Besides organised regular tuition in the curriculum, students have digital resources for asynchronous self-learning at the Veterinary Teaching Portal (VTP) and Virtuale which is a Moodle-based platform. For supervised learning, the Clinical Skills Lab (CSL) is available to students to become acquainted with practical tasks in a safe environment, besides supervised sessions, students can also book the CSL for self-learning.

The first two years students work on basic sciences, with 1 ECTS used for the introduction and motivation of clinical work in the first year. The third year takes a shift to clinical science and core clinical training is in the fourth and fifth years. In the fourth year, students acquire some credits in elective course units. In Table 3.1.1., the workload of each academic year is presented but without placing 666 h of CCT in any of the years. The use of CCT hours is as follows: 1st year: 1 ECTS (18 hours); 4th year: 4 ECTS (72 hours); 5th year: 32 ECTS (for 576 hours). The 5th year has 199 hours of lectures and 113 practical hours (for a total of 26 ECTS): these activities are delivered from mid-September to the end of November. Thereafter, the rest of the year is devoted to CCT rotations (32 ECTS). EPT (8 ECTS = 200 hours) has been inserted in the 5th year in the Table, but it is often selected and started by students also before, the 4th year, these hours are not linked to the didactic calendar and can therefore spread over the whole year/s, according to the student's needs.

In Table 3.1.2. curriculum hours are presented. Basic subjects occupy 4% (129h of a total of

3237h), basic veterinary science 34.0% (1099h), small animal clinical sciences 30.8% (996h) food-production animal clinical science 24.3% (786h) and veterinary public health 7.0% (227h).

### 3.1.1.2. Analysis of the findings/Comments

The Curriculum (Table 3.1.2.) covers all subjects listed on the D1C in Annex 2 of ESEVT SOP 2023. On the web page, individual course learning outcomes are equated in detail to Day One Competences:

(<u>https://corsi.UNIBO.it/singlecycle/VeterinaryMedicine/course-units-syllabi-and-day-one-competences</u>). Although some learning outcomes are not directly linked to D1C, it is clear that the overall aim of the degree programme is to meet all D1C by the time of graduation.

# 3.1.1.3. Suggestions for improvement

None.

#### **3.1.1.4. Decision**

The VEE is compliant with Standard 3.1.1.

#### 3.1.2. Basic Sciences

# **3.1.2.1. Findings**

Together, basic subjects (129h) and basic veterinary subjects (1099h) comprise 38% of total Curriculum hours, with all subjects listed D1C in Annex 2 of ESEVT SOP 2023 covered. Different tuition methods are applied but lectures and student non-supervised self-learning are the methodology used a lot in all subjects.

Most of these subjects are delivered in the first three years of the curriculum but in pathology, necropsy course and post-mortem diagnosis take place in the fifth year.

Students receive hands-on training with cadavers and real organs in Anatomy and Pathology. Anatomy teaching uses dead dogs and cats originating from the VTH, external private clinics, and kennels and catteries in the area. Production animal specimens are from slaughterhouses and the Department of Agri-Food Science and Technology, UNIBO. Biological material is kept in cold rooms, freezers or used formalin-free fixatives. The University Museum has a big Domestic Animal Anatomy collection. Besides anatomy, the museum also has a collection of pathology and teratology specimens. Students can also obtain osteological specimens for self-learning studies.

The VEE runs a Pathology Service whose material is also used for teaching and training. Animal owners also can donate animals used for teaching pathology (in donation form they give testimony that the animal has not been bitten in 10 days' time interval). At the time of the visit, the necropsy room was under renovation but is expected to be in use soon. During these renovations, it has not been possible to perform equine or cattle necropsies at the site, but necropsies of small companion animal species are performed.

# 3.1.2.1. Analysis of the findings/Comments

The order of the studies is logical, providing underpinning knowledge to students, for the development of clinical subjects later in the course. Positioning of the post-mortem course in the 5th year is logical enabling them to develop this skill, during their CCT.

### 3.1.2.1. Suggestions for improvement

None.

### **3.1.2.4. Decision**

The VEE is compliant with Standard 3.1.2.

### 3.1.3. Clinical Sciences in companion animals (including equine and exotic pets)

### **3.1.3.1. Findings**

Teaching in companion animals is included within the following subjects (for hours, see Table 3.1.2): obstetrics, diagnostic pathology, medicine, surgery, anaesthesia, infectious diseases, preventive medicine, diagnostic imaging, and therapy. A range of teaching methods are used, including lectures, seminars, self-directed learning, laboratory work, practical clinical work with animals, and educational visits. The bulk of teaching companion animal clinical sciences occurs in the 3<sup>rd</sup>, 4<sup>th</sup>, and 5<sup>th</sup> years, with evidence of progression towards the acquisition of Day One Competences. In 3rd year, students learn clinical methods, pathology, and legal medicine, focusing on ethical and legal responsibilities, clinical approaches, and laboratory techniques. During 4th year, there is the teaching of surgery, anaesthesiology, internal medicine, radiology, and diagnostic imaging, whilst the final year includes veterinary surgery with practical simulations, orthopaedics, clinical medicine, and medical therapy. Additionally, students explore obstetrics, gynaecology, andrology, veterinary perinatology, and necropsy techniques. Seminars cover topics like practice management, stress prevention, communication skills, and job preparation, providing a holistic approach to veterinary education.

Teaching devoted to core clinical training (CCT) is present in 1<sup>st</sup> and 4<sup>th</sup> years, although the bulk of this teaching is in the 5<sup>th</sup> year. There is an online application process for 5<sup>th</sup>-year students where they can apply for their different rotations, to ensure that prerequisites are met. Core activities on all clinical rotations are assessed and validated, with additional competences documented in their logbook. Extramural activities, such as visits to local farms and exotic pet hospitals, are recorded and verified by the teachers responsible. At the end of each CCT rotation, the teacher overseeing the rotation verifies competences, countersigns the logbook and records the activity on the online programme.

Students are usually taught on rotations in small groups (typically ~3), where they undertake day and night shifts (for emergency cases), including weekends and holidays, actively managing hospitalised patients. The training comprises various clinical tasks such as history-taking, clinical examination, sample collection and interpretation of findings. In the 4th year, students receive a personal logbook to track their activities and record seminar attendance. Lists of daily activities and skills during the 4<sup>th</sup> year are validated by the teachers supervising the rotations, with successful completion leading to validation on an online platform (AlmaEsami; <a href="https://almaesami.UNIBO.it/almaesami/welcome.htm">https://almaesami.UNIBO.it/almaesami/welcome.htm</a>).

The companion animal CCT (including exotic pets and horses) is structured into three-month blocks, focusing on internal medicine, surgery and animal reproduction. Clinical teaching of small animals (mainly cats and dogs) is mainly included in the small animal internal medicine (4 weeks), small animal surgery (4 weeks) and reproduction (4 weeks) CTT periods. However, some small animal activities occur elsewhere, for example, a pet food activity in the animal production CCT and a visit to a cat and dog establishment in the infectious diseases rotation. Equine internal medicine and surgery are taught within the large animal CCT period, whilst

equine reproduction is included within the reproduction CCT period. Horse reproduction activities are undertaken between February and July, aligning with the equine reproductive season. Students also participate in activities at the National Institute of Artificial Insemination. Exotic pets (including rabbits and small rodent species) are not seen in the VTH. An intramural wildlife clinic has been constructed but has not yet been commissioned for use (see standard 4.1). Therefore, currently, students engage in a single day of extramural activities with exotic pets at an external hospital, which is run by a European veterinary specialist, with both first opinion and referral cases.

Most of the cat and dog cases are referred, but some days are specifically dedicated to first-opinion cases. Many different clinical disciplines are represented in the caseload as detailed in the SER (pp 47-48). Internal medicine disciplines for cats and dogs include endocrinology, gastroenterology, pulmonology, nephrology and urology, haematology and transfusion medicine, as well as oncology, cardiology and neurology (each day in a separate speciality). Cases numbers are strong in most disciplines, although there are smaller numbers of cases in some areas (e.g. cat and dog dermatology: 58 cases per year; cat and dog ophthalmology: 64 cases per year), with students being involved if they coincide with their clinical rotation time. Until two years ago, the VEE had a contract with an experienced practitioner specialised in small animal dentistry, such that practical dental training occurred during the small animal surgery CCT, but this has since lapsed. Besides oral pathology cases (e.g. those requiring maxillo-facial surgery, oral inspection and biopsy), students do not currently have the opportunity to perform routine dental procedures (scale and polish, extractions) during CCT. The VEE has plans to hire a specialist in veterinary dentistry to address this. Students who wish to gain further education can opt to undertake additional training in the discipline as EPT.

The intramural equine caseload is mainly referral cases, with numbers being fairly regular throughout the year with students' exposure to most of the disciplines. The composition of disciplines during a month of rotation reflects the distribution of a general equine hospital population, with a majority of gastrointestinal, respiratory, musculoskeletal, soft tissue surgery and orthopaedic cases, and a lesser proportion of other disciplines (cardiovascular, urinary, neurology, endocrine, sports medicine, haemolymphatic, dermatology, ophthalmology, etc.). The exact types of cases that an individual student sees will depend on the cases that are booked at the time. During the foaling season (February-July), students can see cases in neonatology, obstetrics, gynaecology and andrology. Routine equine dentistry procedures (levelling, tooth extractions) are performed by academic surgical staff in the equine clinic, with students only involved if the cases arise when they are on equine CCT at the time.

In 5th year, students can allocate 8 ECTS (200 hours) to elective practical training (EPT), either extramurally or intramurally, enabling students to gain further experience in a chosen subject, many of which involve companion animal clinical science disciplines. The selection process is open, whereby students contact staff members in their chosen subject and gain support from an academic tutor. Students must compile a report on the experience gained, including skills acquired, and this is signed off by the academic tutor. Practical activities can be gained, including experimental research work, and most students write a research thesis, while only a minority write a literature-based thesis derived from an in-depth review of a specific topic.

# 3.1.3.2. Analysis of the findings/Comments

The VEE is commended for the specialist experience of their teaching staff in the field of companion animal clinical studies, given the number of EBVS veterinary specialists involved in teaching. These staff are passionate teachers and are well respected by students.

Although there have been delays to the completion of building and renovation work on the

VTH, the interim measures are sufficient to ensure that the student experience has not been compromised. The clinical facilities available in these interim facilities are state-of-the-art and are sufficiently resourced.

Students are exposed to cases across a broad range of clinical disciplines ensuring a broad range of practical training, but opportunities to gain practical dental experience in companion animals are limited. Students confirmed this limited experience in discussions during the visitation. Although this deficiency is partially compensated by the occasional oral pathology cases that students see on rotations, this is insufficient.

During the early years of the course, opportunities are limited for students to gain practical experience in handling and husbandry of exotic pets (especially rabbits and small rodents), and exposure to exotic pet medicine and surgery during the CCT is also limited (1 day). Once again, students confirmed this limited experience in discussions during the visitation. This issue is primarily related to the limited animal resources covered in standard 5.1, which itself is partly linked to delays in the availability of the new wildlife centres (as discussed in standard 4.1). The deficiency is partially compensated by the single day that students spend at the extramural exotic animal hospital, but this is not sufficient given the limited opportunities in exotic animals (especially rabbits and small rodents) throughout the course.

Finally, although practical clinical experience in equine medicine and surgery is sufficient, the organisation of CCT (where both equine and food-production animal cases are seen in the same CCT block) exacerbate the deficiency identified with production animal CCT (see Standard 3.1.4).

### 3.1.3.3. Suggestions for improvement

It is suggested that the VEE increases practical exposure to exotic pets (especially rabbits and rodents) throughout the course, including handling, husbandry and CCT.

It is also suggested that the VEE improve student opportunities for practical training in the dentistry of companion animals including cats, dogs and horses.

Finally, it is suggested that CCT within the curriculum be redesigned by separating production animal and equine practical training.

### **3.1.3.4 Decision**

The VEE is partially compliant with Standard 3.1.3 because of suboptimal practical training in dentistry.

The VEE is partially compliant with Standard 3.1.3 because of suboptimal pre-clinical and clinical training in rabbits, rodents, pet birds and exotic pets.

# **3.1.4.** Clinical Sciences in food-producing animals (including Animal Production and Herd Health Management)

### **3.1.4.1. Findings**

From the 3rd year, students study animal production in the following subjects: animal nutrition and feeding; communicable diseases and epidemiology; physiopathology of animal reproduction and ART and clinical methods; clinical pathology; and legal medicine. The main activities in clinical sciences in FPA are developed in the 4th and 5th years. In 4th year, the subject focus is exclusively FPA: Animal Production II; in 5th year, the students have the opportunity to learn about these species in veterinary surgery: horse and cattle; large animal clinical internal medicine and therapy' and obstetrics, gynaecology and andrology in livestock. CCT rotations are scheduled during the 5th year. The large animals CCT include cattle and horses and the students complete a month of rotation with these species. Up to 12 students can

be enrolled in this rotation each month. During this month, they dedicate 21 hours, usually in pairs, to the ambulatory clinic with cattle practitioners whilst, for the rest of the time, they attend to the clinical cases of equines received at VTH and any clinical cases that occur at the ETF.

Training in Avian Diseases is provided in the CCT in Avian Diseases and Diseases of Wildlife and Exotic Animals and consists of seminars, practical activities, and visits to poultry farms, providing the basis of health management and clinical and post-mortem diagnostic investigations in poultry.

The students must also complete 8 ECTS in elective subjects and, whilst they can choose among different elective courses offered by the VEE, only one is in FPA (Biosecurity in intensive pig husbandry). Alternatively, elective ECTS can be undertaken in one or more courses offered across all UNIBO Departments.

# 3.1.4.2. Analysis of the findings/Comments

Preclinical training in food-producing animals and herd health management is carried out in the experimental teaching farm and in the farms that the University has an agreement with. The clinical training in FPA is developed in the ambulatory clinic during the three days that the students spend with the cattle practitioners, and whenever animals housed at the ETF develop illnesses during their CCT period. The students perform very little training with small ruminants, both in herd health management and during clinical training. Therefore, compensations currently in place for clinical training of individual ruminant medicine are insufficient.

Due to the threat of African swine fever, the students are currently unable to visit pig farms, but this is mainly compensated with videos and theoretical lessons. Health management and biosecurity measures in poultry farms are also taught to the students.

# 3.1.4.3. Suggestions for improvement

The VEE should find a strategy to improve the individual clinical training in ruminants that all students receive.

It is suggested that the CCT be aligned within the SOP 2023, i.e. to include horses with companion animals and ruminants with food-producing animals.

### **3.1.4.4. Decision**

The VEE is not compliant with Standard 3.1.4. because of insufficient clinical training in individual ruminant medicine.

# 3.1.5. Veterinary Public Health (including Food Safety and Quality)

### **3.1.5.1. Findings**

A total of 208 curriculum hours of lectures and seminars are dedicated to VPH and FSQ. The core preparatory activity comprises 19 hours of practical training, from which 15 hours are laboratory and desk-based work and 4 hours are non-clinical animal work. The practical training activities relate to the topics of Control of food, feed and animal by-products (12 hours), Food hygiene and environmental health (3 hours), and Basic food technology (4 hours). Core hours are divided between the second, fourth and fifth academic years. Regarding VPH and FSQ, 198-hour core clinical training (CCT) is undertaken mainly in the fifth year. In the fourth year, Food Inspection, Control and Certification I (2 ECTS) is compulsory, for which 20 seats in several different shifts are available for students.

In the fifth year, training places for Transmissible diseases and Veterinary Pathology are available for up to 14 students per month in a 9-month period. Thereafter, they can enrol in Food Inspection, Control and Certification II (3 ECTS), with a maximum of 10 students per month for 10 months and it complements the fourth-year training. Based on agreements with local health authorities, small groups of students (usually two) can participate in 7 different visits to slaughterhouses. In addition to these, there are two more opportunities to use the virtual slaughterhouse software.

There are 12 slaughterhouses, 21 animal farms and 4 milk processing plants included in the list of available extramural facilities. Students can visit different slaughterhouses and their production sites on seven separate days. The number of visits per student to slaughterhouses and related premises in the last academic year was 2 bovine, 2 pig and 3 poultry or rabbit slaughterhouses. Students only had the opportunity to visit a milk processing plant once in 2022-23, whilst horse, wild game, or small ruminant slaughterhouses, and food processing establishments were not visited within the framework of CCT. Slaughterhouse activities and attendance are recorded on a separate form, which is checked and countersigned by the responsible teacher in the logbook. Student's individual performance is supervised by an academic staff through the virtual bovine slaughterhouse programme.

Students learn about traceability, recall and withdrawal already in the second academic year. It is still too early as they have only basic science knowledge. In the framework of practical classes (part of the CCT), students can strengthen their related knowledge in the fourth year with recall exercises.

Elective practical training (EPT) can be achieved in 200 hours (8 ECTS) of extramural or intramural subjects, with public health disciplines including VPH and FSQ during the fourth and fifth academic years. If the chosen elective is extramural, a traineeship contract must be agreed, and educational objectives must be defined. Literature-based theses are also acceptable within the framework of EPT. At the end of the training, the external supervisor evaluates the performance of the student in writing. The EPT is coordinated by an academic tutor, who also evaluates the gained knowledge and experience and provides written opinions.

An example agreement between the VEE and an external training facility is shown in Appendix 12, which contains the phrase: "Host entity identifies an internal tutor, responsible for following the training path of the same and to certify the activities carried out" (translation by Google). The agreement describes issues of insurance, liability, undertaking responsibilities, withdrawal, and appeal conditions.

# 3.1.5.2. Analysis of the findings/Comments

Students visit bovine, pig, poultry or rabbit slaughterhouses but they are not familiarised with wild game, small ruminants, horse slaughterhouses or meat/milk processing establishments in the framework of the CCT. Their gained skills are evaluated based on a report of case studies in a virtual bovine slaughterhouse.

# 3.1.5.3. Suggestions for improvement

It is suggested to broaden the opportunities to visit various slaughterhouses.

#### 3.1.5.4. **Decision**

The VEE is compliant with Standard 3.1.5.

# 3.1.6. Professional Knowledge

# **3.1.6.1. Findings**

Subjects pertaining to professional knowledge (Table 3.1.2) are incorporated into lectures, seminars, electives and optional courses. These subjects include inter alia professional ethics and communication (4h), animal health economics and practice management (59h), clinical practical training in common companion and food-producing animals (540h), herd health management (60h) and veterinary legislation (20h). During 4th year, there are options to choose an elective course covering different topics (see Table 3.1.4) or, alternatively, students can enrol in one or more courses offered across all UNIBO Departments. As part of its commitment to integrating its educational offer with transversal competencies, UNIBO offers students enrolled in any degree programme, courses on soft skills, which are aimed at strengthening skills that are considered strategic when entering the workplace.

# 3.1.6.2. Analysis of the findings/Comments

The acquisition of skills, knowledge and attributes inter alia attitudes professionals are expected to have or develop through their education and training are complimented by soft skills like resilience, adaptability, self-efficiency and optimism. The growing appreciation of better communication training through specific courses and practical role-play exercises either among students or through the use of professional actors is not to be underestimated.

### 3.1.6.3. Suggestions for improvement

It is suggested that the VEE expand opportunities for students both to develop and demonstrate the acquisition of soft skills during CCT. In particular, enhanced training in communications between students and staff and indeed between students will reduce the need for the resolution of potential grievances.

# **3.1.6.4 Decision**

The VEE is compliant with Standard 3.1.6.

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.

# **3.2.1. Findings**

The VEE ensures programme alignment through collaboration between the DPB and DPQAC, engaging internal (commissions, staff, students) and external (alumni, stakeholders) contributors. Course webpages feature details, including objectives, teaching strategies, and assessment criteria.

Annual reviews by responsible teachers occur with DPQAC ensuring coherence based on student feedback.

The VEE promotes a conducive learning environment, with interactions among students and

staff, supported by events, projects, and resources. Initiatives like the Clinical Skills Lab and e-learning tools are being promoted to enhance self-learning, critical analysis, and skill development, while the Covid-19 situation accelerated the adoption of effective online communication and teaching tools for remote participation.

# 3.2.2. Analysis of the findings/Comments

The VEE adheres to Standard 3.2 by designing competency-based study programmes with reference to ESEVT Day One Competences for each course.

The VEE is committed to lifelong learning and self-directed learning. This action deserves to be extended, as proposed by the VEE, by reducing the proportion of passive learning exercises (traditional lectures) in favour of active and interactive teaching methods.

# 3.2.3. Suggestions for improvement

None.

#### 3.2.4. Decision

The VEE is compliant with Standard 3.2.

# **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.

### 3.3.1. Findings

The programme is aligned with national guidelines. An annual self-evaluation report, drafted by the Degree Programme Director and Teaching Officer, is sent to ANVUR (Italian Agency of Accreditation of Universities). The learning outcomes are published on the internet platform and refer to the Day One Competences. The Degree Programme Quality Assurance Committee conducts an annual review, evaluating student progression, course attractiveness, internationalisation, and teaching staff qualifications. The review includes student feedback, employability data, and analysis of corrective actions. The Faculty-Student Joint Committee analyses the document, shares it with the Degree Programme Board and undergoes final review by the University Evaluation Committee. The VEE's EAEVE Committee collaborates with faculty to align revised ESEVT Day One Competences to each course, addressing potential gaps. A detailed contribution list is available on the Degree Programme website for students and academic staff.

# 3.3.2. Analysis of the findings/Comments

The VEE demonstrates strengths in aligning Day One Competences with most courses, communicating learning outcomes online, and conducting comprehensive review processes.

### 3.3.3. Suggestions for improvement

None.

#### 3.3.4. Decision

The VEE is compliant with Standard 3.3.

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.

# 3.4.1. Findings

The VEE employs a plural committee structure to evaluate the effectiveness of its curriculum. The DPB (Degree Programme Board), composed of teachers and student representatives, manages the core curriculum, proposing plans to the VEE Board and overseeing various functions, including credit recognition and examination.

DPQAC (Degree Programme Quality Assurance Committee) collaborates with the DPD (Degree Programme Director) in monitoring and ensuring the quality of the programme based on regular reviews. Students are represented within the DPQAC.

Year Committees offer a mechanism to address issues with each year of the programme. These committees comprise Year Coordinators and Student Representatives and they aim to provide rapid responses to concerns.

FSJC (Faculty-Student Joint Committee) focuses on teaching quality and student support. Comprising 7 teachers and 7 students, FSJC provides opinions on programme-related matters and produces an annual report.

The process of an in-depth reform of the curriculum was undertaken in 2019, but was slowed down by both the COVID pandemic and the desire of the ministry in charge to introduce "qualifying degrees" for medical, veterinary and sanitary DPs and changing the recruiting method of student for courses with limited enrolment. All Italian VEEs are called to renovate their curricula from AY 2025-26.

# 3.4.2. Analysis of the findings/Comments

The VEE demonstrates a formal committee structure with effective student representation. The VEE fulfils the specified requirements of Standard 3.4 by actively involving students in various committees and conducting regular and periodic reviews.

The process of in-depth reform of the curriculum has begun but is rather late in coming.

# 3.4.3. Suggestions for improvement

It is suggested that the process of in-depth reform of the curriculum be continued, following the strategy proposed by the VEE, including reducing the number of teaching hours, introducing more active and practical teaching methods and, if possible, extending the study programme to 6 years.

#### 3.4.4. Decision

The VEE is compliant with Standard 3.4.

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) under the close supervision of teaching staff (e.g. ambulatory clinics, herd health management, practical training in VPH (including Food Safety and Quality (FSQ)). A comparison between CCT and EPT is provided in Annex 6, Standard 3.5.

### **3.5.1. Findings**

In the fifth year but often started in the 4th year, 8 ECTS (200 hours) are allocated to the EPT, which can be in any of the subjects of the degree programme or can also involve a multidisciplinary approach carried out intramurally or extramurally. This practical component is called 'Elective Practical Training in preparation for the final examination' and is used by students to gain practical experience related to the thesis project. Topics can be chosen from proposals published on each teacher's personal website or an agreed theme, if desired, with a teacher.

The EPT can be carried out extramurally by activating a traineeship contract with the hosting institution for insurance purposes. In such cases, an academic tutor with a tutor from the chosen institute will supervise the educational objectives. Every EPT must have defined formative objectives, which can be confirmed at the end of the experience by an academic tutor and then by the DP Director. Although this 'Elective Practical Training in preparation for the final examination' primarily entails practical activities, students can write a literature-based thesis after reviewing the state of the art in a particular topic. However, since both CCT and EPT are mandatory, timetable scheduling should facilitate students, primarily to avoid overlapping, as has happened occasionally in the past.

# 3.5.2. Analysis of the findings/Comments

The EPT has choices in the methodology of how students enhance their practical hands-on skills by selecting either experimental work, a traineeship in an outside institution or writing a literature-based thesis. The mixture of opportunities reflects the diversity of preferences and the overall student satisfaction with the experiences.

### 3.5.3. Suggestions for improvement

None.

#### 3.5.4. Decision

The VEE is compliant with Standard 3.5.

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.

# **3.6.1. Findings**

The EPT is initiated by the student, with support from the Teaching Services Practical Training Office, which activates the formal procedure, including insurance. Whether conducted internally or externally in Italy or abroad, the EPT is designed to acquire practical competencies and soft skills in a specific field of veterinary interest. The student must liaise with the academic tutor to define the educational objectives and programme the activities for the EPT, whether intramurally or extramurally. At the end of the EPT, the academic tutor evaluates the student's experience and provides a written opinion on the skills attained. If it is an external EPT, the opinion of the external supervisor is sought, evaluation forms and attendances are validated by the Practical Training Office, and then the DPD finally records the activity.

# 3.6.2. Analysis of the findings/Comments

The EPT operates within relevant national Veterinary Practice Standards by agreement. Assessment and feedback allow students to improve competence and enhance soft skills in their chosen field of interest.

# 3.6.3. Suggestions for improvement

None.

# 3.6.4. Decision

The VEE is compliant with Standard 3.6.

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.

# **3.7.1. Findings**

Students are obliged to be involved in the selection of EPT experiences. If conducted nationally (extra or intra-mural), the student contacts the relevant academic staff members. Students can also opt for an experience abroad and seek advice from a teacher with relevant experience to make contact with colleagues at a suitable facility.

To aid students in selecting the subject matter, each academic staff member's webpage showcases their topics and fields of research. After selections are made, the student and academic staff members establish the formative objectives of the EPT, and then, with the support of the Teaching Services Practical Training Office, the EPT is initiated.

During the EPT, the student can seek assistance from the tutor if the experience is falling short of expectations, for specific situations, for suggestions, or indeed for any needs. If the experience is not optimal, the student can suspend the course and seek an alternative EPT.

Coordinators and the DPD are available to listen to any request or complaint regarding the EPT directly or anonymously through the student year representatives.

Upon completion of the EPT, the student must furnish a detailed report on the experience gained, acquired skills, and the quality of the support received from external and academic tutors.

# 3.7.2. Analysis of the findings/Comments

The obligation is with the student for the preparation, the responsibility to learn from their selection of topic, keep records and evaluate the outcomes. Should the student change their minds about their choice after a placement has commenced, an alternative selection may be sought. Reports on the experience gained and the skills acquired must be reported.

# 3.7.3. Suggestions for improvement

None.

#### 3.7.4. Decision

The VEE is compliant with Standard 3.7.

# 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.

### **4.1.1. Findings**

The VEE is situated in Ozzano dell'Emilia, 14 km southeast of Bologna, and is accessible by car, train, or bus. The 106,000 m² campus features a core complex built in 1991, comprising three interconnected buildings. The facilities housed in this complex include administrative offices, lecture halls, laboratories, a necropsy room, student association offices, libraries, and a cafeteria. Accessible parking, mobility-friendly facilities, and scheduled gate hours ensure convenience and security. In addition to this complex, veterinary teaching also utilises UNIBO's Experimental and Teaching Farm (ETF) and the National Institute for Artificial Insemination (NIAI), offering practical teaching and research opportunities for students. Besides this, a range of extramural facilities are used including the Cesenatico Local Operative Unit and the Bologna-Ozzano Technopole (for advanced research projects).

Management and upgrading of the facilities are critical to ensuring that the VEE can achieve its goals and are directed by the VEE strategic plan. Building and renovation projects in the main complex are overseen by UNIBO's Technical, Building, and Sustainability Area (ATES), whilst the responsibility for ETF and NIAI lies with UNIBO's Azienda Agraria for efficient management. Construction projects are undertaken by private companies selected after a tender, with different rules according to the defined budget. Due to regulations outlined in the current procurement code in Italy, there is a requirement to rotate contractors, meaning that the same companies cannot always be selected. This process is completely managed by ATES. Procedures are in place to address issues that arise when there is a delay in work, which include

extension of deadlines (in the event of a force majeure) or financial penalties. Despite these procedures, there are delays with the completion of many of the existing projects, which have necessitated the implementation of remedial measures by the VEE (e.g., temporary conversion of existing facilities). Reasons for delays include the limited availability of construction companies as a result of the COVID-19 pandemic and the completion of work by construction companies who prioritise other building projects. Given that UNIBO's Technical, Building ATES oversee such projects, any further remediation is outside the control of the VEE.

It is the responsibility of CESIA (UNIBO's IT Systems and Services Area) to oversee the planning, implementation, and management of IT services, ensuring efficient resources in lecture halls, labs, and other facilities. Equipment for the veterinary teaching hospitals (VTH) is funded and maintained through its own funds, after approval by the VTH Committee, whilst funds for maintenance of research and teaching laboratories (including the clinical skills laboratory) are allocated from the VEE budget and research funds, following quality management procedures.

All teaching facilities comply with relevant legislation such as health and safety, biosecurity, accessibility and also animal welfare and care standards. This is guaranteed by QA mechanisms to ensure the compliance of all facilities with regulations, including the promotion of health and safety, is overseen by ATES, whilst the responsibility for maintenance responsibilities falls under the relevant scientific educational service of the VEE, ensuring adherence with ISO 9001 standards. Biosecurity and safety procedures are disseminated by the Biosecurity Committee and Safety Officer. In order to ensure compliance with animal welfare and biosecurity regulations, there are regular inspections by the Ministry of Health and Regional Veterinary Service. Further, the Service for Animal Welfare of the university oversees ethical animal use and ensures that all housing premises are compliant.

Financial resources from government funding, university investments, research projects and private donations have driven significant initiatives for the development of the VEE facilities in recent years. Projects have included the construction or renovation of key facilities construction, acquisition of high-level equipment, and renovations to common areas. Ongoing projects include the complete renovation of the necropsy facility, the construction of a small animal intensive care unit and the development of a veterinary biobank. Other ongoing projects include the installation of smart feeders at the ETF, smart beehives, and the development of new locker room facilities at various locations. The cafeteria relocation, when completed, will help to consolidate these facilities on campus and also enable the creation of a modular lecture theatre in the space vacated. Infrastructure projects like the campus heating and cooling system replacement and energy efficiency upgrades for VTH buildings are also underway. Moreover, in 2024, initiatives focused on improving quality of life and security within the VEE will be implemented, including comprehensive renovation of the swine breeding facilities, and resurfacing of internal roads.

An additional construction project is the Wildlife Veterinary Centre. Although the building work has been completed, the VEE is awaiting approval for the facility to be used for clinical work involving exotic pets. Discussions within the VEE are also ongoing about how the centre will be staffed, be it from existing staff or by employing an external specialist.

# 4.1.2. Analysis of the findings/Comments

Many of the existing construction projects have stalled, and timeframes for completion have not been agreed. This is further impacted by lack of coordination amongst the existing projects.

The delay in construction work affects key areas that are commonly used within the VEE, such as the staff and student changing rooms, lecture halls, waiting rooms and the pharmacy. Construction delays are not the fault of the VEE, instead being the result of external factors and the fact that ultimate responsibility lies with UNIBO's Technical, Building and ATES. These problems are well-recognised by the VEE and, despite the challenges, the remedial measures that have been implemented are sufficient to ensure compliance with this standard.

# **4.1.3.** Suggestions for improvement

It is suggested that the VEE continue to lobby the University for the allocation of adequate resources and to ensure the completion of all outstanding building projects.

### 4.1.4. Decision

The VEE is compliant with Standard 4.1.

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.

# 4.2.1. Findings

Details of all premises used for lectures, seminars, group work and skills training are provided in the SER (section 4.2.1; Tables 4.2.1-4.2.3). Significant numbers of seminar rooms are available, whilst there are only a small number of larger spaces (~2) capable of accommodating whole-year groups. All lecture theatres are equipped with computer systems, touch monitors, video projectors, audio/video connections, microphones, webcams, whiteboards and Wi-Fi. The Messieri auditorium is the largest space and, in addition to teaching activities, it can also be used for graduation ceremonies. Some of the facilities have been renovated recently including lecture halls E6 and E41. There are various practical workspaces to accommodate small student groups, and all such spaces have computer facilities, video projectors and Wi-Fi. Various research laboratories and diagnostic facilities are used to support practical work, with clinical activities primarily conducted at the VTH, ETF, NIAI, as well as at various external facilities. The clinical skills laboratory (CSL) is a space of 205 m², and comprises 16 stations, including a communication laboratory.

The VEE has a two-storey library (G.B. Ercolani Central Library), which can accommodate up to 88 people. The library is open on weekdays and is Wi-Fi enabled throughout. The space is subdivided into study rooms with additional study areas situated in corridors, common areas, and external spaces.

Lockers for students are available throughout the main building, although the number currently in use is somewhat limited due to ongoing building work. New locker rooms are planned so that capacity can be expanded beyond what is currently available.

As mentioned above, a major construction project is underway, to relocate the cafeteria, and build a new seating capacity for 56 people, including an outdoor area. Vending machines for beverages and snacks are distributed within the VEE, and a larger canteen is located nearby.

Plastic seating in green areas will be replaced by more durable metal ones. Leisure spaces include student association headquarters, a student lounge, and the Preziosi University Sports Centre nearby. Restroom facilities are available throughout the VEE, with recent renovations to larger ones on the ground floor, including facilities for people with reduced mobility.

There are office spaces in the main building for academic and support staff, PhD students and temporary personnel. Most academic staff have individual offices, and all such rooms are equipped with both wired connections and Wi-Fi. Each floor features multiple network printers. VEE's Scientific-Educational Services include various research laboratories (see Appendix 3).

# 4.2.2. Analysis of the findings/Comments

The places available for teaching are well-equipped and have sufficient capacity to accommodate the current number of students. Given the maximum capacity of larger teaching spaces (e.g., lecture halls), any expansion of student numbers would require new facilities to be available, or be accommodated by timetabling (e.g., split classes for lectures).

# **4.2.3.** Suggestions for improvement

None.

### 4.2.4. Decision

The VEE is compliant with Standard 4.2.

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.

# **4.3.1. Findings**

The ETF of the VEE accommodates 180 Holstein cows, including lactating cows, dry cows, calves, and heifers. The lactating cows are housed in free stalls with straw-bedded cubicles, and there are two milking pens. Pens are equipped with headlocks for cattle restraint during clinical procedures such as pregnancy checks, artificial insemination, clinical visits, and sampling. The barn's environmental conditions (temperature and humidity) are monitored and regulated using a cooling system with fans and sprinklers. The individual daily milk production and composition of all cows is measured using two automatic Fullwood Merlin M2 milking systems, coupled with Afimilk software. Accelerometers are also attached to each cow, so that rumination time, resting behaviour and activity can be regularly monitored. Management software is employed to record individual health, fertility, and movement data, serving both management and research purposes.

At the NIAI, mares and stallions are housed for clinical reproductive activity and semen production. The facility includes indoor and outdoor stalls, an andrology laboratory equipped with instruments like a computer-assisted sperm analyser and a FacsCalibur flow cytometer.

Other parts of the NIAI include an equine semen production centre, an equine artificial insemination centre and a small ruminant semen production centre.

Besides this, an authorised slaughterhouse is available for veterinary teaching, which is operated by an external company (LEM CARNI Srl). This facility includes a bovine slaughter line processing 20 adult animals per week, refrigeration rooms, offices, and changing rooms. Teaching activities within the slaughterhouse focus on slaughter hygiene, facility sanitisation, inspection methods, sampling techniques and practices related to traceability and meat product certification. During their compulsory clinical training, students also visit different types of slaughterhouses to enhance their practical experience, whilst other extramural facilities are also used for veterinary public health (VPH) and food safety and quality training (see Appendix 11).

The CCT in companion animals is undertaken, intramurally, within the VTH, as discussed in standard 4.4. These are well-equipped to allow appropriate hands-on training and demonstration in most areas. However, the audio-visual facilities in some areas, such as large animal operating theatres, are suboptimal.

Although building work has been completed on a new Wildlife Centre, as discussed in standard 4.1, the VEE is still awaiting ministerial authorisation to use the facility in clinical work with exotic pets, as well as deciding on how the facility should be staffed.

Biosecurity policies, tailored to the specific facility are prominently displayed throughout the clinical areas, through means of a QR code system.

# 4.3.2 Analysis of the findings/Comments

The facilities used for intramural companion animal CCT are well-equipped, allowing appropriate hands-on training for veterinary students. However, audio-visual resources in some teaching spaces (such as large animal operating theatres) could be better developed. Currently, some students in CCT in these areas struggle to observe surgical procedures.

The crush, flooring and feeders within the intramural facilities used for housing ruminants are suboptimal. Overall maintenance of these facilities is also suboptimal. However, these deficiencies are satisfactorily accommodated by the fact that the caseload utilising these facilities is small, meaning that corrective measures can be implemented.

# **4.3.3.** Suggestions for improvement

It is suggested that the VEE upgrade the audiovisual facilities in the large-animal operating theatres, for example, by installing a camera (live transmission system) and monitor, to facilitate student observation.

#### 4.3.4. Decision

The VEE is compliant with Standard 4.3.

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.

# **4.4.1. Findings**

In the Italian University System, subjects are grouped into scientific-disciplinary sectors (SSDs) only 3 of which are clinical disciplines: internal medicine (VET-08), surgery (VET-09) and reproduction (VET-10). As a consequence, the internal organisation of clinical facilities at Italian VEEs has traditionally followed this subdivision. The Giuseppe Gentile Veterinary Teaching Hospital (VTH) has expanded these sectors into the six scientific-educational services (SES) they provide. As part of the small animal clinical services (SERCLIPA), cats and dogs are seen in four units:

- Emergency and Critical Care Unit (MEDURG): The unit operates 24/7 and handles major clinical emergencies (including surgical emergencies) as well as providing continuous care for critically ill animals.
- Internal Medicine Unit (MED): This unit operates on weekdays to offer expertise in all small animal medicine (including cardiology, dermatology, oncology and internal medicine) disciplines by providing general and specialist consultations. Continuous care is also provided for hospitalised animals.
- Reproduction Unit (RIPRO): This unit caters for both healthy and diseased animals, providing reproduction consultations, both during the week and also as emergencies. Services include assisted reproduction, pregnancy monitoring and surgical interventions.
- **Surgery Unit (CHIR):** This unit conducts both elective and emergency surgical treatments for small animals. Both traditional surgical approaches and minimally invasive techniques are used in various disciplines (e.g., general surgery, orthopaedics, neurosurgery, and ophthalmology).

The **Equine Clinical Service (SERE)** has four subunits: perinatology and reproduction (UPER), laboratory of reproduction and animal biotechnology laboratory (LRBA), surgery (UC), and internal medicine (UMI). The service is available 24/7 for emergency cases and, offering both general and specialist consultations in internal medicine, surgery, orthopaedics, and perinatology-reproduction.

The Cattle and Small Ruminants Clinical Service (BUIATRIA) specialises in food-producing animal species (predominantly bovine, but also caprine medicine), by providing clinical assistance to some of the animals seen at the VTH (e.g. goats); animals that develop illnesses at the ETF are attended by one of the hired bovine practitioners (see standard 4.7) Opportunities for students teaching in ovine and swine medicine are limited and, besides occasional cases owned by the VEE (e.g. in the ETF). The on-call service for production animals is limited and unavailable during the night. Clinical experience in production animal medicine is augmented by the ambulatory clinic for production animals (see standard 4.7).

Other integral services include the **Anaesthesia and Resuscitation Service** (SANE), **Diagnostic Imaging Service** (SDIMM), and **Clinical Pathology Service** (CLINLAB), offering specialist anaesthesia support, a range of diagnostic imaging techniques and clinicopathological analyses, respectively.

There has been a recent reorganisation of the VTH in an effort to maximise individual handson training through small group rotations and extramural activities. Increases in staff members have enabled better support of students who are typically taught in groups of up to 3 students. Clinical activities adhere to a quality assurance framework, which align with ESEVT standards and also meeting national practice standards. As discussed for standard 8.5, the VEE uses a logbook to monitor the acquisition of practical competences documented before graduation.

# 4.4.2. Analysis of the findings/Comments

Core clinical teaching facilities for companion animals demonstrate that education and clinical research undertaken are compliant with ESEVT Standards, with clinical training supervised by teaching staff trained to teach and to assess, availability of teaching staff and patients and relevant QA. However, this is not the case for the CCT rotations for production animals. Whilst the ambulatory clinics enable the VEE to address some issues with education, the on-call service is insufficient, with only partial compensation by the ambulatory clinic (see also Standard 3.1.4).

# 4.4.3. Suggestions for improvement

It is suggested that the VEE review its provision of on-call services for production animals to ensure that it fully complies with the requirements of Standard 4.4.

# 4.4.4. Decision

The VEE is partially compliant with Standard 4.4. because of the suboptimal on-call service for ruminants.

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.

# **4.5.1. Findings**

Details of all diagnostic and therapeutic facilities are described in detail in Table 4.3.4 and 4.3.5. Students have access to all these diagnostic and therapeutic facilities, mainly in the 3<sup>rd</sup>, 4<sup>th</sup> and 5<sup>th</sup> years of their veterinary course. Most of this exposure occurs during CTT, where they have full access to the appropriate areas under the direction of academic and support staff. However, there is also a well-equipped clinical skill laboratory, which is run by highly dedicated and competent staff, who facilitate the creation of bespoke models upon request. A communication laboratory has recently been developed within the existing clinical skills laboratory, which is expected to be fully operational soon. Within the clinical skills laboratory, there are scheduled clinical skills classes, but also the opportunity for students to undertake additional, bookable training, on a voluntary basis. During their CCT, students actively engage in clinical activities undertaken in the hospitals and practices, including clinical rounds, clinical case discussions and daily planning of clinical work.

A new necropsy room is under construction (see Standard 4.1), with tables that will accommodate smaller (e.g., cats and dogs, small ruminants etc) and larger (equines and large production animals) animal species. Until such facilities become operational, necropsies on smaller animal species are undertaken in the existing facilities, whilst the state laboratory (Istituto Zooprofilattico Sperimentale della Lombardia e dell'Emilia Romagna; IZSLER, Bologna) is currently being used to compensate for necropsies on larger animal species.

Diagnostic equipment for use in CCT is widely available, with the exception of the ambulatory service for production animals, where endoscopic and ultrasonographic equipment is suboptimal for on-call staff.

# 4.5.2. Analysis of the findings/Comments

Whilst clinical skills laboratories are now commonplace in veterinary education, the VEE should be commended for its dedicated staff that run their laboratory, not least their willingness to create bespoke solutions to facilitate EAEVE's "never the first time on a live animal" concept.

No intramural facilities are currently available where necropsies can be undertaken on larger animal species (horses and larger production animals). The VEE is compensating for this by using the state laboratory, although the caseload is suboptimal as discussed in Standard 5.1. These issues will be addressed once the new necropsy facility is available.

Although the availability of diagnostic equipment (endoscopes, ultrasound) is suboptimal for on-call staff in the ambulatory service, student education on such equipment is compensated by teaching elsewhere (e.g., within the SDDI).

# 4.5.3. Suggestions for improvement

It is suggested that the VEE use its reasonable endeavours to ensure that the necropsy facilities are available.

It is further suggested the VEE review the diagnostic imaging equipment for the ambulatory service to ensure that this is optimal for student education and the delivery of the clinical service.

### 4.5.4. Decision

The VEE is compliant with Standard 4.5.

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.

# **4.6.1. Findings**

The existing isolation for cats and dogs is 19m<sup>2</sup> with 3 cages. A new isolation unit is under

construction, which will accommodate two medium/large dogs or three small dogs/cats in individual cages. It will feature a negative pressure ventilation area, a 13 m² quarantine area dedicated to intensive care monitors, infusion pumps, and oxygen supply. There is also an adult horse isolation facility which comprises a delimited outdoor area, staff entrance room and a 25 m² box for horses with highly contagious diseases. There are padded walls, separate ventilation and also equipment for both oxygen delivery and fluid therapy.

There are two 23 m² boxes for critically ill neonatal foals with their mothers in the Perinatology and Reproduction Unit, whilst the Cattle and Small Ruminants Clinical Service has a 24 m² stall that can be used for patient isolation. Appropriate arrangements for isolation are already in place in the extramural exotic animal hospital, whilst facilities for isolation in the proposed new wildlife centre are under construction.

Protocols for infectious patient management are well established and are outlined in a biosecurity manual created by the VEE, and staff and students must undergo specific training. Information is readily available, electronically, in all facilities through the use of a QR code system.

# 4.6.2. Analysis of the findings/Comments

The VEE takes biosecurity matters very seriously and has both the facilities and protocols in place to ensure compliance with all aspects of standard 4.6.

# 4.6.3. Suggestions for improvement

None.

#### 4.6.4. Decision

The VEE is compliant with Standard 4.6.

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.

### **4.7.1. Findings**

Both field-based veterinary medicine and herd health management are integral to the veterinary curriculum, being taught in years 3, 4 and 5. Teaching includes practical visits to dairy and poultry farms, offering students real-world exposure to farm-animal medicine, comprising health assessments and risk management under academic and official veterinarian supervision. Although, previously, there were visits to pig farms, including a pig breeding farm (to instruct students on Herd Health Management, including vaccination plans, nutrition and animal welfare), this is currently not permitted as a result of concerns over swine flu. Ambulatory clinic activities were expanded significantly in 2022-23, and now involve five experienced bovine practitioners and almost 300 farms.

### 4.7.2. Analysis of the findings/Comments

The ambulatory clinic enables students also to engage in clinical activities for horses and large ruminants (but not sheep), supervised by academic and non-academic staff, and is a means of compensating for deficiencies in the provision of intramural production animal facilities within the VTH (see Standard 4.4).

Although pig farms cannot be visited currently due to ASF, this fact is compensated with videos

and teaching material.

# **4.7.3.** Suggestions for improvement

None.

#### **4.7.4. Decision**

The VEE is compliant with Standard 4.7.

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.

### **4.8.1. Findings**

Contracted companies manage the transport of live animals, cadavers, materials from animal origin and other teaching materials. In addition, the VEE owns two Fiat Doblò Cargo minivans, with appropriate containers for transport, which can be used for the transport of small cadavers and other specimens. Besides this, the VEE provides electric and hybrid cars (including Nissan Leaf, Hyundai Ioniq, and Fiat Panda Hybrid) and also a Fiat Panda with a petrol engine. However, when transport is required for large groups (e.g., external visits), the VEE rents buses. Vehicles owned by the VEE can be reserved through an online system, whilst the VEE is also responsible for all maintenance and insurance.

In addition, staff members may use personal vehicles for transportation associated with their work, including providing lifts for colleagues and students. However, most students are required to make their own arrangements and use their own vehicles (with car sharing) to travel to extramural training facilities. There is no formal organisation of such student transport, and concerns about this were raised in discussions with students.

Finally, owners are responsible for transporting their own animals to and from the VTH.

# 4.8.2. Analysis of the findings/Comments

The procedures for the transport of live animals, cadavers, materials from animal origin and other teaching materials are compliant with relevant national and EU standards for animal welfare and prevention of infectious disease spread, ensuring compliance with this aspect of Standard 4.8. However, the lack of appropriate organisation of transport to extramural facilities presents challenges for students.

# 4.8.3. Suggestions for improvement

It is suggested that the VEE review the provision of transport for students to ensure better coordination and support.

### 4.8.4. Decision

The VEE is partially compliant with Standard 4.8. because of suboptimal organisation of student transportation for extramural CCT.

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.

# **4.9.1. Findings**

The VEE places a strong emphasis on the safety, biosecurity, and continuous improvement of its facilities, adhering both to central and departmental guidelines. Any changes to facilities must be planned centrally, with requests for specific maintenance being formally requested by the department. Replacement of safety and biosecurity equipment is overseen by the university's service for health and safety in the workplace (SHSW) in collaboration with the safety officer of the VEE.

Separate services of the VEE are responsible for independently maintaining their research and teaching equipment, with costs covered through approved budgets. The VTH committee oversees the maintenance and renewal of any VTH equipment, utilising its own funds as well as those of the VEE and university. The safety officer and the Biosecurity Committee (which meets 4 times a year) of the VEE are jointly responsible for ensuring that safety and biosecurity standards are maintained, partly by maintaining a manual for biosecurity, which is regularly updated.

Management of special waste is regulated at the university level, although there are additional procedures in place for the VEE, given the nature of the waste that is handled. Biological and chemical materials are collected in suitable containers and stored in a dedicated facility before collection by a specialised company. Any runoff water and straw from isolation facilities are collected in specific containers and disposed of separately.

Operational policies are continuously reviewed, and any changes are communicated by email as well as being detailed on the website of the VEE. To ensure safe working, the doors of many premises have a QR code system that staff and students can scan, enabling them to access the relevant safety information about working in that particular area. All students, postgraduate students, academic staff, and support staff must attend a compulsory occupational health and safety training course before they can access VEE facilities. This training encompasses chemical, biological, and physical hazards. Formative events and seminars contribute to student awareness of biosafety procedures. Manuals for animal clinical management are provided, and students undergo evaluation tests before engaging in clinical companion training. The Biosecurity Committee also organises staff training, including the integration of biosecurity content in teacher training programmes.

Pages on Health and Safety are available on the VEE's website

(https://scienzemedicheveterinarie.UNIBO.it/it/dipartimento/sedi-e-spazi/salute-e-sicurezza), and provide a comprehensive resource for staff and students. There are dedicated email addresses to facilitate the reporting of safety and biosafety concerns. The department actively pursues ISO 9001 standards, seeking informal feedback from VTH clients through online forms. Formal complaints are managed through a structured process, ensuring timely evaluation and implementation of corrective actions. All clinical rotation activities undergo regular student evaluation, with results shared and corrective actions proposed by the VEE.

# 4.9.2. Analysis of the findings/Comments

The VEE should be commended for its biosecurity policies and procedures which are very well developed throughout the VEE, combined with a strong culture of compliance throughout. The availability of biosecurity information in all facilities (educational, clinical and research), in an electronic format through means of an innovative QR code system, greatly facilitates the dissemination of information tailored to each facility.

# 4.9.3. Suggestions for improvement

None.

#### 4.9.4. Decision

The VEE is compliant with Standard 4.9.

# 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.

# **5.1.1. Findings**

All procedures adopted follow the requirements set by current Italian legislation (Legislative Decree No 26/2014, implementing Directive 2010/63/EU). The UNIBO's Animal Welfare Committee (CoBA), which is chaired by a member of the VEE academic staff, operates as the ethics committee for animal experiments and is the reference for animal-related ethical issues. Students are trained in the fundamentals of animal welfare in different courses throughout their studies. To promote animal welfare and ensure student safety during practical training involving animals, academic staff members responsible for these educational activities have developed two manuals for the clinical management of companion animals and food-producing animals. Students must read these documents and successfully pass the related evaluation tests before beginning the CCT. Intramural and extramural activities carried out by students on animals are supervised by staff members and/or tutors. Animals are used for teaching purposes only after obtaining owner authorisation through written informative consent (at the VTH) or oral consent (in field activities).

Practical activities are conducted at the VTH, ETF, NIAI, and various external facilities. The rotations at the VTH are organised so that each student (alone or in pairs) is exposed to a comparable variety of activities in all major clinical disciplines, including internal medicine, surgery, anaesthesia, reproduction, clinical pathology, image diagnostics, emergency, and critical care. To maintain a balance between first opinion and referral cases in companion animals (CA), the scheduled rotations specifically include shifts at the first consultation room and the emergency service. For food-producing species, off-campus visits to bovine and poultry farms are organised starting from 3rd year to train the students in herd health management, nutrition, and animal welfare.

In the last academic year, the VEE introduced two new extramural activities to improve the clinical training of the students: one on exotic pets at a local veterinary hospital specialised in these species and new practical sessions with cattle thanks to hiring external practitioners who take the students in their daily work activity.

Cadavers of CA, poultry, exotic pets, aquatic animals, and organs of healthy animals from all different species are used for practical training in **anatomy**. Dead dogs and cats are provided by the VTH, external private clinics, and kennels and catteries in the area. Lesion-free organs and carcasses of farm animals are purchased at local slaughterhouses or supplied by facilities within the VEE and other UNIBO sources, such as the nearby Department of Agri-Food Science and Technology. Resources available for students training in anatomy also include a range of dry-prepared bones, joints, and muscles of the main domestic species, as well as fixed specimens (in formalin-free fixative), organ preparations made from polyurethane casts, and 3D models. Students can also access the VEE Museum of Domestic Animal Anatomy, which collects more than 1,600 preparations, including about 80 natural and artificial skeletons. In addition, various slide collections are used for training in microscopic anatomy.

The mean number of **healthy live animals** indicated in the SER for pre-clinical training is 194 cattle, 50 small ruminants, 105 pigs, 10 CA, and 3 equines. The mean number of **patients seen intramurally** is 148 cattle, 1 small ruminant, 6,343 cats and dogs, 468 equine, and 39 exotic pets, and the mean number of **patients seen extramurally** is 697 cattle (with a relevant increase in the last AY due to the hire of 5 new practitioners for the AC), 187 pigs, 83 equine, 80 poultry and rabbit and 49 exotic pets. Finally, the **percentage of first opinion** cases is referred to as 100% in poultry, 75% in cattle, 80% in exotic pets, 34% in CA, and 15% in equine.

Over the last 3 academic years, the **Pathology Service** has received a mean of 141 cat and dog cadavers, 17 cattle and 3 small ruminants, 14 horses, 80 poultry and rabbits, and 129 wild animals that have died or been euthanised at the VTH, as well as from external private clinics, owners and shelters. However, in the last academic year, the number of necropsies, especially cattle and pigs, has been considerably reduced mainly due to renovation of the necropsy room. These animals are provided for diagnostic necropsies to determine the cause of death or for teaching purposes upon owner's authorisation, recorded through a dedicated form. As the necropsy room underwent a renovation process starting in 2022-23, practical training involving companion animals and small-size farm animals is conducted in another dissection room available at the VEE, and an agreement has been made with the Istituto Zooprofilattico Sperimentale della Lombardia e dell'Emilia Romagna (IZSLER) in Bologna, where students carry out practical training on FPA and wild animals, under the supervision of one member of the VEE teaching staff.

Vita Nova Srl and VTL Snc are contracted companies responsible for transporting and disposing of animal cadavers and organs at the VEE. Vita Nova Srl transports the materials from external sources to the VEE up to 3 times per week, according to teaching needs. VTL Snc collects the materials from a dedicated cold room (4°C) at the VEE and disposes of them through incineration at an external facility. Both companies use vehicles authorised for the transport of animal by-products in compliance with Regulation (EC) No 1069/2009 and Commission Regulation (EU) No 142/2011.

The mean number of **visits in herds/flocks/units** for training in Animal Production and Herd Health Management is 112 cattle farms (with a relevant increase in the last academic year due to the hire of new practitioners) and 16 poultry farms.

Finally, the students visit 2 ruminant, 2 pig and 2 poultry **slaughterhouses**, as well as one milk processing plant (albeit only in the last year).

# 5.1.2. Analysis of the findings/Comments

The number of healthy and diseased animals, first opinion and referral cases, cadavers, and material of animal origin is adequate for providing the practical and safe hands-on training in all relevant areas and is well-adapted to the number of students enrolled. Thanks to the cattle experimental teaching farm, the students can obtain experience with healthy animals. For biosecurity reasons (African swine fever), pigs are not referred to the VTH and access to large

pig farms is limited. Poultry are seen in farms where the VEE has collaboration.

The number of companion animals patients seen intramurally is adequate for clinical training but the number of healthy and sick exotic pets is reduced. The students are exposed to a large number of companion animal necropsies; however, the number of FPA necropsies, especially pigs and cattle, is low. This is partially compensated by a high number of equine necropsies and by the opening of the renovated necropsy room.

## **5.1.3.** Suggestions for improvement

It is suggested that the VEE develop a strategy to increase the number of cattle and pig necropsies.

It is also suggested that the VEE attempts to increase the number of healthy and diseased exotic pets (see Standard 3.1.3.).

#### 5.1.4. Decision

The VEE is partially compliant with Standard 5.1. because of suboptimal number of ruminant and pig necropsies.

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.

#### **5.2.1. Findings**

The practical training at external sites starts in the 3rd year within the integrated course in Communicable Diseases and Epidemiology, visiting a dairy cow farm and a swine farm located in the Modena area. Likewise, as part of the integrated course in Animal Production, students visit a dog breeding farm and poultry farming facilities, hatcheries, slaughterhouses, and feed mills. External training on avian species is also scheduled during the 4th year of CCT in Avian Pathology, when students first learn and practise the proper techniques for handling and restraining animals at UNIBO's Department of Agri-Food Science and Technology (DISTAL). Students next visit one of the three types (broilers, pullets, or laying hens) of selected farms in the area, where an agreement is in place with the VEE to allow students to work alongside official veterinarians while carrying out inspections of prevention and biosecurity measures; there are also opportunities to perform blood sampling, respiratory swabs, and cloacal swabs. Due to the avian influenza emergency, it was impossible to carry out some of the visits to breeding farms during the AY 2022-23. As compensation, the Animal Production teacher arranged visits to the DISTAL experimental facility for avian species, where he conducts experiments in the field of nutrition.

The ambulatory clinic activities, involving students during the 5th year CCT in food-producing animals, have been significantly expanded from 2022-23. Five practitioners in the bovine sector have been trained and contracted as non-academic teaching staff to allow students (individually or in pairs) to follow them on three different days in their daily activities in the cattle farms of the area. At the end of the day, students record the patients they have personally cared for on the dedicated form, which is checked and validated by the practitioner. In addition, visits are organised under the supervision of academic staff to beef cattle farms, dairy cattle farms, and cheese dairies in the Parmigiano Reggiano production zone to provide students with specific competences in farm management, morphological evaluation of animals, and haymaking and forage dehydration systems. Similarly, academic staff members take students to one kennel and catteries, allowing them to assist the official veterinarian during surveillance activities on management and health aspects.

The external training in VPH also focuses on the Food Safety and Quality area: during seven separate days, students individually visit slaughterhouses of different types, including poultry/wild game, pigs, and cattle.

Finally, starting from 2022-23, the VEE contracted a recognised expert in exotic pets to improve the core clinical training in this field. Small groups (3, maximum 4) of students spend one full day at this external facility under his supervision.

## 5.2.2. Analysis of the findings/Comments

The VEE offers practical training at external sites, organised under the supervision of teaching staff and following the same standards as those applied in the VEE.

### **5.2.3.** Suggestions for improvement

None.

#### 5.2.4. Decision

The VEE is compliant with Standard 5.2.

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.

## **5.3.1. Findings**

Students start developing their nursing care skills during the activities organised at the VTH in the 1st year. In groups of 2-3 people, they experience the facility and its organisation for the first time, receiving preliminary training on how a clinical case is managed and how to safely approach, restrain, and correctly position the patient on the examination table. These primary skills are reinforced, and basic clinical procedures are taught on small animals and large animals during the practical classes of the 2nd year Physiology course and 3rd year Communicable Diseases and Epidemiology course. The training continues during practical activities with companion animals, horses, and ruminants within the 4th-year clinical courses and 5th-year CCT. Clinical rotations engage students in routine activities across various areas of the VTH, enabling the acquisition of a diverse range of nursing care skills in a clinical setting.

## 5.3.2. Analysis of the findings/Comments

Specific nursing skills are developed as students take core species-specific health management courses during different activities of the veterinary curriculum. Specific care for individual animal species is part of the clinical subjects within practical training at VTH.

The number of students per group in the practical training and ambulatory clinic is appropriate.

### **5.3.3.** Suggestions for improvement

None.

### 5.3.4. Decision

The VEE is compliant with Standard 5.3.

Standard 5.4: Medical records for patients seen intra- and extra-murally 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.

### **5.4.1. Findings**

The Fenice patient record system was introduced in the VEE in 1994, although it changed its name recently. This Microsoft SQL Server-based software, which is also currently in use in other Italian VEEs, facilitates the collective management of all clinical, imaging, laboratory, microbiological, parasitological, and pathological data relating to each individual patient. Fenice is integrated with the official Italian electronic veterinary prescription system and is also equipped with an administrative section that streamlines the process of issuing direct invoices to clients. This centralised data warehouse is accessible by staff members through their personal UNIBO credentials from multiple access points in the VEE. Students are taught how to access Fenice during practical lessons in clinical courses and also through the access points. Individual patient information, except for private financial and personal owner data, is readily available to students for learning purposes.

Healthy life cows and calves at the ETF are recorded in dedicated software (AfiFarm) that is accessible at the facility, due to the need for continuous real-time monitoring of multiple parameters for each animal and the unavailability of Fenice outside of the VEE campus. Other patients seen under CCT extramural activities are cloud-stored through a dedicated electronic form (created with Microsoft Forms) by the supervising teaching staff. Following the implementation of extramural bovine and exotic pet training activities from the 2022-23 academic year, students are required to record the patients they have worked with on paper forms that are reviewed and approved on-site by the academic tutor. The data are then transferred by the student in an electronic form that can be accessed by teaching staff for both teaching purposes and statistical analysis.

#### **5.4.2.** Analysis of the findings/Comments

The VEE has a very comprehensive electronic patient record system for recording horse and companion animal cases at VTH and AC. The students have access to all data except financial recordings. Healthy life cows and calves at the ETF are recorded in a dedicated software.

### **5.4.3.** Suggestions for improvement

None.

### 5.4.4. Decision

The VEE is compliant with Standard 5.4.

## 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.

## 6.1.1. Findings

The VEE is committed continuously to improving the learning resources available to students. Actions have been undertaken and resources allocated to experiment with innovative teaching strategies that stimulate interest and active participation. This involves the availability of state-of-the-art shared infrastructure, virtual laboratories, and physical spaces in compliance with the basic objectives of the VEE-SP and the 'never the first time on a live animal' concept. Additional hours are available, between the first and second year, for basic English teaching where this is needed by students.

The University of Bologna provides each student with a life-lasting email account and an environment for IT work (for example Office 365 and MS Teams). UNIBO provides a shared E-Learning platform for all degree and postgraduate programmes Virtuale; a personal page on My Portal and a virtual office tool to manage studies from enrolment to graduation. A dedicated Veterinary Teaching Portal (VTP) is accessible to students and teachers with a relative YouTube channel and Facebook page. The VTP has undergone substantial updates to align with the evolving requirements of remote learning, with the YouTube channel being the primary platform for adding new educational materials. Fenice, the patient record system has had a new add-on for specific teaching objectives, compiling records, getting feedback, and allowing supervised personal access by each student attending CCT.

The VEE houses the G.B. Ercolani Central Library, established in 1991, which is part of the broader UNIBO bibliothecarial system. The library offers bibliographic resources and services encompassing all the scientific areas at the VEE, easily accessible to users who can retrieve and consult on-site or remotely, with dedicated library staff.

In 2018, the VetSimLab was established for the production of simulators and in 2020 the VEE opened a new Clinical Skills Lab. Now, students acquire their initial clinical skills by practising on anatomical models, mannequins, or simulated animals within the CSL or remotely due to a loan service for anatomical preparations and models. Teaching staff have procedures for accessing and requesting simulators for the CSL. Students contracted by the VEE to stay at the CSL reception during scheduled sessions enable their peers to independently access the facility for self-learning activities. In addition, various software applications are available for teaching purposes (e.g. Virtual Physiology, SmartZoom, and Virtual Slaughterhouse Simulator).

First-year students have an orientation day and are introduced to the VEE environment and to academic staff with specific responsibilities, year coordinators, and student representatives. Learning resources and related services, access to the library and study rooms are presented. The dedicated webpage for Students Online Services is introduced, and activation of their UNIBO accounts granting full access to email and online resources takes place. The library website has a page on 'how to use the library'. This orientation process ensures students are well-prepared to make the most of the VTP. The selection of new materials to be published and developed in the VTP is driven by the specific requirements of each course and feedback from the students.

Library collections, both print and electronic, respond to teaching and research needs. Since 1995 the library has subscribed to all journals deemed of interest. Students and staff can recommend new books for purchase, and the Library Scientific Committee takes the final decision depending on available financial resources.

## **6.1.2.** Analysis of the findings/Comments

The library as a space for students, staff and stakeholders is a state-of-the-art facility, with good opening hours and access to learning resources in print, and electronic media including

platforms like Virtual and the Veterinary Teaching Portal (permanent availability and good for visual memory). YouTube, Facebook and Instagram have a fashionable functionality and are freely used at this time to enhance the learning opportunities and experience. The teaching of bibliographical research in the first year to students is an essential exposure to the library staff.

### **6.1.3.** Suggestions for improvement

None.

#### 6.1.4. Decision

The VEE is compliant with Standard 6.1.

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).

#### 6.2.1. Findings

The G.B.Ercolani Central Library belongs to the Medical macro-area of the UNIBO Library System. The library is managed by the Library Manager and the Library Scientific Committee (LSC), chaired by a VEE professor. The manager supervises activities and services, and drafts budgets and accounts. The library staff consists of seven members (five diplomates and two graduates), equalling 6.17 FTE. In 2022 14 students were employed at the circulation desk for a total of 2,041 hours. The library opens Monday to Friday 8.45 to 6.00 pm during term. The library operates under the UNIBO Cultural Heritage Area (ARPAC), and funding is allocated through this channel. Since 2018, the library has been granted a budget of 73,150 euros, primarily used for disciplinary electronic resources. For cross-disciplinary resources, a total amount of 3,328,203 euros is allocated by UNIBO to ARPAC, with 74,776 euros dedicated to the library. The VEE also contributes to this budget with 32,000 annually. The core collection of bibliographic resources is housed within the Central Library on the ground floor of the VEE. Reading rooms offering 88 seats are available on both the ground floor and the first floor (total area 1,139 m2 with 500 m2 for users). The library through the University of Bologna extends access to an array of online databases and electronic resources, including electronic journals, e-books, and encyclopaedias. Specialised tools for document supply (NILDE) and inter-library loan services (Subito) are available. Subsidiary libraries are used as spaces for small group work or for conducting oral examinations. A further subsidiary library, a branch of the Central Library of the Cesena campus of UNIBO, located within the Cesenatico Local Operative Unit, focuses on themes related to blue growth.

The primary learning platform for teaching is Virtuale which is a versatile Moodle-based platform. It serves as a repository for teaching materials for all UNIBO courses and is used for formative assessment, student self-evaluation, and in-class live testing through the integrated Wooclap add-on. This resource is accessible to both students and staff from everywhere through a Single Sign-On IdP process.

The Veterinary Teaching Portal (VTP) is specifically designed to support the DP and hosts a wide range of multidisciplinary educational content, freely accessible as supplementary

material related to practical learning activities. All the contents are original and voluntarily produced by the VEE staff with the valuable assistance of recent graduates, paid with scholarships. They include videos, image galleries of normal histology, histopathology, cytology, radiography, ultrasonography, surgical instruments, animal breeds, 3D animations of bones, a searchable pathology database, and self-evaluation tests. The VTP allows integration of digital learning with traditional teaching and promotes independent learning emphasising objective OSI.2 of the strategic plan of the VEE on the significance of information and communication technologies.

The VEE campus offers comprehensive Wi-Fi coverage. At the UNIBO level, the Information Systems and Service Area (CESIA) provides and maintains the IT environment, and takes care of accounts, email boxes, general software, tools supporting teaching activities, and phones. There are two dedicated IT halls: Laboratorio Informatico featuring specialised software (Virtual Slaughterhouse and Virtual Physiology) and Laboratorio Diapason where students have full access to UNIBO's SmartZoom digital microscopy platform.

All UNIBO users can connect to the Alma Wi-Fi network using their personal credentials. The Eduroam Wi-Fi is available for hosts affiliated with universities with subscriptions and visiting scholars and professors are given UNIBO credentials upon check-in, ensuring seamless secure access to the network.

## **6.2.2.** Analysis of the findings/Comments

The library has suitable staff and appropriate IT support. The e-learning platforms are resourced and with good accessibility via Wi-Fi and from the outside as well as with VPN. Rather than reading books and journals, the use of the library is more as a place of study and interface with the extensive array of electronic material, rather than to read physical copies of books and journals.

### **6.2.3.** Suggestions for improvement

None.

#### 6.2.4. Decision

The VEE is compliant with Standard 6.2.

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.

#### 6.3.1. Findings

The G.B. Ercolani Library hosts about 27,500 books, 278 textbooks (of which 240 are in Italian), and 408 antique books. These items can be borrowed for 30 days and loans renewed for 30 days. Each year the library receives 17 hard copy journals. Full access is available to 44 electronic journals subscribed directly to the library, 5,250 electronic journals subscribed to by the UNIBO Library System, and 377 bibliographic databases for online research, 45 of which are specific to veterinary sciences. In addition, hundreds of veterinary textbooks are freely downloadable as e-books by UNIBO users.

The Naldo Maestrini Historical Collection contains both antique volumes (pre-1830) and more modern publications. The collection was assembled in 1994 following the donation of the

"Antique Library of Veterinary Medicine" by the late Professor Naldo Maestrini. The historical collection expanded through donations of antique books from subsidiary libraries which were former libraries of the old Institutes. The Maestrini Collection comprises 2,422 volumes as well as other materials such as edicts, posters, and calls for funding programmes on animal health issues.

The clinical skills laboratory is used for practical activities in many courses under the responsibility of a full professor of the VEE and a support staff member. Each station within the CSL is equipped with a simulator, a QR code for online instructions and a QR code for feedback which also records usage. Instagram and Facebook facilitate communication and stimulate student engagement. An evaluation procedure enables students to express opinions on specific teaching activities and their alignment with course content. This feedback is reviewed by the responsible staff members along with inputs from teachers when making decisions about improvement strategies.

### 6.3.2. Analysis of the findings/Comments

Hundreds of veterinary textbooks are downloadable as e-books complemented by extensive hard copy, mostly in Italian, with loan facilities of 30 days (renewable for another 30 days). The clinical skills laboratory is relatively new with excellent technicians who design, make, and adapt models and simulators as well as being good mentors to students. There is pride in this work and the principle of 'never, for the first time, on a live animal'. The addition of a new room for communications training in the clinical skills laboratory will allow for role-play to be viewed by observers through a two-way mirror facility, allowing for feedback in real time. This is a significant development and opportune considering the need to continually improve quality training in communication skills. There is potential for greater usage by students and staff but students need to be encouraged to use the facility not only in supervised situations but also with the intention of increased opening hours, for self-learning and repeated opportunities to practise techniques.

#### **6.3.3.** Suggestions for improvement

None.

#### 6.3.4. Decision

The VEE is compliant with Standard 6.3.

## 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.

## **7.1.1. Findings**

The primary tool for disseminating information is the degree programme website of the VEE. The website provides insights into the programme overview, learning outcomes, regulations, organisational structure, and quality assurance policies.

Prospective students can access information on admission requirements, and enrolment

procedures. Open days and guided tours are organised as well as Welcome Day for the 1st year students and incoming exchange students. Opportunities, such as scholarships, housing support, international mobility programmes, job market access, and city services, are highlighted. For prospective students, advertising efforts encompass various platforms, including UNIBO Guidance Services. The UNIBO Public Relations Office serves as a central hub for communication with the university, offering information on academic and administrative matters.

Future plans include activities under the "OrientaVet" project, focusing on guidance and tutoring to support students, in partnership with the other 12 Italian VEEs.

The VEE also engages in school-to-work alternation projects, providing upper secondary school students with educational experiences and guiding their university paths.

## 7.1.2. Analysis of the findings/Comments

The VEE clearly and consistently applies regulations throughout the student life cycle, publishes information on its website and attracts potential students through various platforms and initiatives.

## 7.1.3. Suggestions for improvement

None.

#### 7.1.4. Decision

The VEE is compliant with Standard 7.1.

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.

#### **7.2.1. Findings**

Student enrolment in the VEE is subject to national regulations, which limit the number of available places. Annually, the Ministry of University and Research determines these positions based on university proposals.

For the academic year 2023-24, the VEE saw an increase in allocated places from 100 to 118. This includes 108 positions for Italian and EU students and an additional 10 for non-EU students. Any remaining vacancies for non-EU students may be assigned to EU students.

For the academic year 2022-23, 62 students graduated, compared with 80 in 2020-21.

The number of out-of-course students (registered at the degree programme for more than 5 years) is greater than the number of students enrolled in the 5th year (mean 2020-2023: 95.3 out-of-course students vs 72.7 5<sup>th</sup>-year students). In 2022-23, only 63% of students graduated from a 5-year course, while more than 11% of 2022-23 graduates exceeded the normal length of the programme by 3 years.

The number of postgraduate students enrolled in various programmes at the VEE, including interns, residents, PhD students, research fellows, and master's students is high.

The ESEVT indicators for which the number of undergraduate students or the number of students graduating annually are used as the denominator of the fraction are within the norms (above the minimum value, or even the median value), except for indicator I15 (n° of ruminant and pig necropsies / n° of students graduating annually).

### 7.2.2. Analysis of the findings/Comments

Except for indicator I15 (n° of ruminant and pig necropsies / n° of students graduating

annually), the number of students admitted is consistent with the resources available at the VEE to date.

The 18% increase in the number of students in 2023-24 will ultimately have an impact on the ESEVT indicators, for which the index is divided by the number of students. Attention should be given to adapting resources to accommodate the increase in student numbers.

### 7.2.3. Suggestions for improvement

None.

#### 7.2.4. Decision

The VEE is compliant with Standard 7.2.

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.

## **7.3.1. Findings**

The admission process for Veterinary Medicine programmes in Italy requires candidates to possess a bachelor's degree or an equivalent foreign degree. Prerequisites include adequate knowledge and skills, as defined by the Ministerial Decree on the subjects of an admission test, proficiency in English at a minimum B1 level, and for non-EU students residing abroad, proficiency in the Italian language.

Candidates must pass the CISIA TOLC-VET test for enrolment. The test covers subjects such as reading skills, biology, chemistry and physics, mathematics, and logical reasoning. The TOLC-VET score is determined with an equalisation coefficient. Italian and EU students need a minimum equalised score of 10 for admission, whilst non-EU students must have a score higher than 0.

The admission procedure involves sitting the TOLC-VET test, applying for inclusion in the national ranking, and subsequently applying for enrolment. The ranking, published in early September, allows candidates to specify preferences for universities. The selection process is managed by MUR, CINECA, and CISIA, with an internal Selection Committee ensuring proper implementation, and considering policies for students with disabilities.

Previously, a different admission exam was conducted nationwide. Candidates with disabilities or special needs can request additional time or aids during the admission test by providing relevant certification. The local Selection Committee, appointed by the Rector, oversees the admission procedure and organises training meetings for its members.

Appeals against the selection process can be lodged according to Italian law, involving the Regional Administrative Court (TAR) and, if necessary, the Italian Council of State.

## 7.3.2. Analysis of the findings/Comments

The admission process includes a national test (TOLC-VET) organised by the ministry in charge. In this state-imposed selection process, the VEE has little or no influence. This can be

a barrier to recruiting students who best meet the needs of the profession.

## 7.3.3. Suggestions for improvement

It is suggested that the Ministry give more weight and influence to the VEE in the selection process for its students.

#### 7.3.4. Decision

The VEE is compliant with Standard 7.3.

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.

## **7.4.1. Findings**

The University of Bologna has established a dedicated Service for students with special needs, aiming to ensure equal learning opportunities. This service supports students with disabilities, learning disorders, or conditions hindering their full participation in educational and personal growth at the university.

Students seeking specific services or teaching activity adaptations must provide the Service with certification of their disability or Specific Learning Disorder diagnosis. An introductory meeting follows, where individual needs are discussed, and relevant measures and aids are identified.

The Service caters to various conditions, including ADHD, Autism Spectrum Disorder, health issues, sensory impairments, psychological vulnerability, and temporary clinical conditions. Support measures encompass exam adaptations, lecture attendance adjustments, and study strategy advice.

The VEE has designated a teaching staff member as a coordinator for students with disabilities.

### 7.4.2. Analysis of the findings/Comments

The procedures for managing students with disabilities are handled by dedicated service at the Bologna University, with an additional teaching staff member appointed by the VEE for local coordination. The system in place is clear and comprehensive.

### 7.4.3. Suggestions for improvement

None.

### 7.4.4. Decision

The VEE is compliant with Standard 7.4.

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.

### **7.5.1. Findings**

The academic progression rules at UNIBO categorise students as either on-course, regularly enrolled in one of the five curricular years, or out-of-course, having exceeded the prescribed degree completion duration.

Students can advance, except for those with Additional Learning Requirements (ALR). Some students are admitted to the 1st year with ALR, and they can progress to the 2nd year only if these requirements are fulfilled by March 31st of the following year.

Exam guidelines are outlined in Degree Programme Teaching Regulations, requiring students to pass preparatory examinations before specific exams, maintain minimum attendance for course examination eligibility, and pass all exams for graduation. Students lose their status if they do not take any examination for eight consecutive years from the year of their last exam. ANVUR, the National Agency for the Evaluation of Universities and Research Institutes, monitors student progression and performance, reviewing criteria and quality indicators annually. The Departmental Board (DPB) reviews ANVUR indicators, student evaluation questionnaires, and graduate opinions, submitting recommendations to the DPB for corrective actions.

The dropout rate is generally low, primarily affecting 1st-year students, with a decreasing trend below 5%. The Ministry of University and Research (MUR) manages all aspects related to student admission.

Quality assurance involves a system evaluated by ANVUR, and cyclically accredited by MUR.

### 7.5.2. Analysis of the findings/Comments

The rules for student progression are clear, and there are mechanisms for monitoring attrition and progression.

However, there is a large cohort of "out-of-course" students, raising the question about remediation and support for students who are not performing adequately. Quality processes are in place to identify the problem, but remedial solutions are not sufficiently developed to solve it (or at least improve it within the limits of national regulations).

### 7.5.3. Suggestions for improvement

It is suggested that a strategy be developed to provide individualised support to students who have exceeded (or are at risk of exceeding) the time required to complete their degree ("out-of-course" students).

#### **7.5.4. Decision**

The VEE is partially compliant with Standard 7.5. because of suboptimal remediation procedures for students who do not progress within the expected timeframe for the degree.

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.

## **7.6.1. Findings**

Students face no restrictions on supplementary enrolments. There is therefore no exclusion of students from the programme. Loss of student status occurs only after eight consecutive years without exams. Admitted students with prior academic history can apply for credit recognition,

potentially shortening their programme. Options for suspension, interruption, or withdrawal exist, at the student's request, with students notifying the VEE of their decisions.

Disciplinary actions, outlined in the Regulation of Student Disciplinary Proceedings, may be taken for serious misconduct, with measures including warnings, exam exclusions, and temporary suspensions. Fairness criteria consider the violation's nature, course events, evidence assessment, and prior sanctions.

In severe cases, this Regulation ensures an inter-procedural process to safeguard students' rights during disciplinary proceedings. Italian law grants students the right to appeal disciplinary actions and exclusion from admission rankings through the Regional Administrative Court.

### 7.6.2. Analysis of the findings/Comments

The VEE's policies for managing appeals are transparent and publicly available.

Students cannot be excluded from the programme, and there are no restrictions on re-enrolling if they fail their exams.

### 7.6.3. Suggestions for improvement

None.

#### **7.6.4. Decision**

The VEE is compliant with Standard 7.6.

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).

### **7.7.1. Findings**

UNIBO provides support to students through UNIBO Student Services (ASES) and the VEE Teaching Services. The ASES handles various aspects of students' academic careers, including enrolment, degree changes, foreign qualification recognition, tuition fees, insurance, etc; the VEE Teaching Services offer guidance on teaching regulations, study plans, examinations, and international mobility opportunities.

The VEE initiated the "Veterinario al tuo fianco" project, supported by MSD Animal Health, focusing on improving students' interaction abilities and well-being. The project includes surveys, lectures on effective communication, stress management, and Lego Serious Play for team-building.

To address students' personal and academic challenges, a pilot project was launched in 2022-23 by the UNIBO Guidance and Tutoring Service. This initiative assists students in overcoming difficulties, with tutors providing personalised feedback and conducting workshops on academic and career skills. This project will involve Veterinary Medicine students during the AY 2023-24.

Students suffering from emotional or relational problems can call upon a Psychological Support Service (SAP) for all people between 20 and 28 years old.

A designated staff member focuses on the themes of Equity, diversity, and inclusion, and

student-led initiatives, such as the "Veterinary by your side" project, aiming to raise awareness and support for gender-based violence.

Students engaging in practical activities are treated as workers under Italian occupational health and safety regulations mandating a medical check at the University Hospital's Occupational Medicine division.

The University provides health care services, psychological support, and insurance coverage for students involved in practical activities. International students benefit from dedicated services, including guidance on enrolment, immigration, and health care.

Students can address grievances by different means, including year student representatives, year coordinators, and the VEE's Faculty-Student Joint Committee. Formal complaint reporting mechanisms, including an online form, are part of the ISO 9001 quality management system. During the visit, some students mentioned difficulties in talking to the teaching staff through their representatives.

### 7.7.2. Analysis of the findings/Comments

The mechanisms in place demonstrate that the VEE pays close attention to the well-being of its students. However, many of these mechanisms are based on tools or services set up by UNIBO University, in central Bologna; it can be challenging for veterinary students (on the VEE's campus located at Ozzano dell'Emilia) to access these physical services.

Difficulties in communication between students and their representatives have been reported, as well as with some members of staff, creating problems with sharing information and reporting difficulties.

## 7.7.3. Suggestions for improvement

It is suggested that the VEE explore solutions to offer face-to-face appointments on the VEE's site, to facilitate possible relays to UNIBO's psychological support services.

It is suggested that the VEE explore current communication issues between staff, students and their representatives, and investigate possible solutions.

#### 7.7.4. Decision

The VEE is compliant with Standard 7.7.

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.

### **7.8.1. Findings**

Students have different ways of addressing their concerns. They can contact year coordinators, the Degree Programme Director, or the Faculty-Student Joint Committee. Students participate in governance through elected representatives in the Degree Programme Board and in the Department Board of the VEE. At the University level, they are also represented in the Student Council.

The Student Ombudsman, an independent entity, handles reports on dysfunctions and rights restrictions, maintaining strict confidentiality and allowing for anonymous submissions. Additionally, evaluation forms at the end of each course provide students with a platform to offer suggestions, comments, and complaints about the teaching process.

### 7.8.2. Analysis of the findings/Comments

Several mechanisms have been implemented to enable students to express their needs. Student involvement in the various councils and the culture of a student-centred approach are clearly evident.

## 7.8.3. Suggestions for improvement

None.

#### **7.8.4. Decision**

The VEE is compliant with Standard 7.8.

## 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.

## **8.1.1. Findings**

University-level regulations outline the strategy of the assessment (art 16 UNIBO Teaching regulations). Based on those regulations to obtain ECTS students must have a summative assessment at the end of the course ("6. Il credito è acquisito con il superamento dell'esame o valutazione finale di profitto." The credit is acquired by passing the final exam or assessment.) VEE has invested in enhancement of the evaluation process, which is included as a strategy goal: "OB1.2 Promote quality, innovative and highly qualified education". However, no specific action points are directed to assessment.

VEE has organised staff education courses and workshops to develop students' assessments. Special action has been on developing Structured Practical Examinations (OSPE) still not commonly in use yet.

For the final exam, students have to provide a supervised dissertation-type thesis and publicly defend it. The workload of this is 1 ECT, however, the thesis is often combined with EPT if it is based on experimental studies. Students enrolled in 2023-2024 before final exams have to pass three practical exams concerning Clinical training (1, companion animal, equine, and exotic pets clinical practice; 2 animal production and livestock medicine; 3 veterinary public veterinary health and food safety).

There is a transition period for all Italian VEEs to move from a common State Exam to a profession-oriented degree from a University which qualifies graduates to work as veterinarians in the country and EU.

In exams, oral, written and practical or combined modes are used in summative assessment. Between the years oral exam volume is from 33 to 53% (Table 8.1.1.).

#### 8.1.2. Analysis of the findings/Comments

VEE has demonstrated progressive development towards entry-level competence assessments.

## **8.1.3.** Suggestions for improvement

None.

#### 8.1.4. Decision

The VEE is compliant with Standard 8.1.

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.

### **8.2.1. Findings**

Students get information about the exam modes and dates on the webpage. Mainly exams are evaluated on a 30-point scale and the minimum passing rate is 60% (18/30) but the final examination scale is 110 with the same 60% passing limit. Students can get extra points in the final exam if they graduate on time. Scale in the State exam is up to 100 credits.

There are subjects for which passing is a prerequisite to undertake the examination of other activities.

Feedback on grading of specific questions in individual assessments seems to vary between teachers.

Students have several ways to appeal to the outcome of the exam. At the university level, they have a student Ombudsman whose role is to guarantee that the activities related to teaching, research, and services, are conducted in alignment with the values and regulations outlined in the University's Code of Ethics. Local-level students can contact the student's year representatives who can take a case to the Year coordinator. Students' year representative names and contact info are on the webpage. The year coordinator is the first institutional representative that students can contact for questions or issues related to teaching.

### 8.2.2. Analysis of the findings/Comments

The practice surrounding giving model answers to exam questions is not uniform.

### **8.2.3.** Suggestions for improvement

It is suggested to synchronise model answers to exam questions between the students and teachers.

## 8.2.4. Decision

The VEE is compliant with Standard 8.2.

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.

#### **8.3.1. Findings**

Annually, student examination results are analysed by the DPOAC and DPB meetings.

Members of examination committees are nominated at the beginning of Academic years by DPB. Members of the final examination committee are decided by the DPD a few weeks before the examination to include a supervisor in the committee. These are informed on the web page.

A responsible teacher has to align assessment tasks to learning objectives and report the relevant information on the webpage. DPOAC annually verifies the content of web pages. However, there is no formal analysis of the quality of examinations by means of questionnaires enabling students to give their opinion on examinations. Students complain about the situation.

## 8.3.2. Analysis of the findings/Comments

Committees and an organisation are in place to analyse the quality of examinations and their alignment with teaching. However, there is no questionnaire to collect feedback from students on the quality of the exams. This data is missing for efficient analysis and closing the PDCA loop.

### **8.3.3.** Suggestions for improvement

It is suggested that the QA processes for examinations be strengthened by introducing student assessment of examinations.

#### 8.3.4. Decision

The VEE is compliant with Standard 8.3.

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.

#### **8.4.1. Findings**

Each teacher can choose the assessment method used in the subject. Oral examination is commonly used but also written and practical exams are used or a mixture of them. Accumulation of clinical skills is followed by a CCT logbook which teachers confirm by signature.

All certified grades are recorded in a digital platform (AlmaEsami) access is restricted only to individual students and academic staff.

#### 8.4.2. Analysis of the findings/Comments

VEE has demonstrated that it has strategies to certify student achievements in their studies.

### 8.4.3. Suggestions for improvement

None.

#### 8.4.4. Decision

The VEE is compliant with Standard 8.4.

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.

## **8.5.1. Findings**

Besides summative assessment at the end of courses, formative assessment is also applied in the curriculum.

Each student receives a personal logbook at the beginning of 4th year, which is used both to track activities undertaken during CCT rotations, and confirm their ability to perform a list of clinical tasks, some of which are also graded using a 4-category grading system (1 = sufficient; 4 = excellent) is given. To complement the logbook, activities carried out extramurally are recorded in dedicated forms, verified and signed by the responsible teacher. At the end of each CCT rotation, the responsible teacher verifies the information recorded in the logbook by signing off the completed activities (and grading where necessary) in the logbook. The activity is then recorded on AlmaEsami by the responsible teacher of the CCT or of the integrated course, depending on the specific rotation.

The logbook is the main method by which the VEE assesses the acquisition of D1C. In previous academic years, it was expected that the student complete at least 75% of the tasks in the CCT logbook before final examinations although, since the current academic year, the expectation is that all tasks are completed. The VEE does not currently keep a record of the logbooks for QA purposes.

For the future, the VEE is planning to introduce a new electronic logbook, which includes activities more directly linked to the Day One Competences.

### 8.5.2. Analysis of the findings/Comments

The activities monitored by the logbook are practical tasks undertaken by a veterinarian (for example, history taking, triage of an emergency case, radiographic reporting, performing clinicopathological investigations etc). These tasks indirectly support the acquisition of soft skills, although such skills are not directly assessed, in particular communication skills and other professional attributes such as demonstrating commitment to health and safety, prescribing drugs, working in a team and recognising own limitations.

During the visit, the team was given several different versions of the logbook template for review, and there was a lack of clarity as to which version was current. Given that logbooks are not retained, the visitors were only able to review one logbook to verify completion and grading of activities; in this one example, the majority of (but not all) activities had been signed off by the responsible teacher.

Besides the responsible teacher's sign-off and recording of scores in the online recording system, there is no further quality assurance of logbooks; for example, completion rates are not monitored to confirm that students are meeting D1C, with such information being used to inform future curriculum developments.

It is recognised that there is ongoing work within the VEE to develop a new digital logbook, where activities recorded more directly relate to D1C. Implementation of such a logbook in the future will improve both the delivery of training towards all professional attributes and their monitoring by the VEE.

## **8.5.3.** Suggestions for improvement

It is suggested that the VEE review and improve its policies and procedures for recording and auditing clinical activity using a logbook system to improve quality assurance in this area. To facilitate this, it is suggested that the VEE prioritise the implementation of their updated digital logbook, ensuring that activities monitored better facilitate the development of soft skills by students.

#### 8.5.4. Decision

The VEE is partially compliant with Standard 8.5. because of a suboptimal quality control of the student logbooks.

## 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 (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.

### 9.1.1. Findings

According to Law No 240/2010, the academic staff comprises permanent positions (full professors and associate professors) and temporary positions (temporary assistant professors, classified into type A assistant professors (RTDa, untenured) and type B assistant professors (RTDb, with tenure-track). The University can stipulate one-year contracts for highly qualified teaching activities with non-academic experts possessing extensive scientific or professional backgrounds and experienced and specifically trained practitioners may be hired to supervise students during CCT activities. Additionally, PhD students can support teaching activities, subject to approval by the PhD Programme Board.

Access to academic positions requires passing a national public selection. For the positions of associate professor and full professor, candidates must hold the National Scientific Qualification at the time of participating in the selection. Annual assignments of individual courses to academic staff members are proposed by the DP Board to the VEE Board, which decides for approval.

Over 80% of the teaching staff involved in the degree programme are qualified veterinarians. Currently, 28 members of the academic staff are board-certified (and 5 residents) at EBVS colleges, and 13 have held or hold board or committee positions (including the presidency) within the European Colleges they belong to. In addition, 7 members of the academic staff currently hold a National Veterinary Specialisation. Also, 11 professors collaborate or have collaborated with important European and global institutions (e.g. EFSA, FAO, WAB).

Support staff contributing to the operation of the VEE is selected and trained for specific competences and UNIBO offers the academic community numerous initiatives, both in-person and online. Workshops were proposed on creativity, design thinking, questioning, tools and

strategies for interaction in mixed classrooms, methods, and strategies for evaluating university learning, digital tools, and e-learning platforms. In addition, UNIBO offers specific courses to newly-recruited academic staff. In addition, two formal training courses have been specifically created for the staff involved in the degree programme: an intermediate-level course, which is required for all non-academic teaching staff participating in educational activities, and an advanced-level course, strongly recommended for all the academic staff and required to newly appointed staff. The quality of teaching is monitored through the anonymous acquisition of student opinions at the end of each teaching unit.

According to Legislative Decree No 81/2008, students are considered equivalent to workers during practical activities carried out under the supervision of teachers, who are responsible for their safety. In this context, both students and VEE's staff are required to periodically attend a three-level occupational health and safety training. In addition, several staff members are part of the VEE's emergency team and have therefore been specifically trained in firefighting and first aid. The staff is required to also attend the mandatory training on personal data protection.

## 9.1.2. Analysis of the findings/Comments

More than 2/3 of all academic staff involved in the veterinary programme are trained veterinarians. The rest of the lecturers are specialists in other fields according to their competent capabilities. The scientific experience of academic staff is evaluated through an assessment of teacher activities every two years. A formal training is in place for all the staff involved in the VEE.

The VEE is commended for its extensive array of EBVS diplomates and residency programmes developed in the VEE.

## 9.1.3. Suggestions for improvement

None.

#### 9.1.4. Decision

The VEE is compliant with Standard 9.1.

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.

#### **9.2.1. Findings**

In 2022-23, the VEE had 104 academic staff and two practitioners with 79% of the permanent staff being veterinarians and 86% of the temporary staff. The VEE has 77 permanent support staff for the veterinary programme and 91 temporary research staff. In addition, each year tutoring contracts may be established according to specific needs to provide support for activities within the degree programme.

Almost all academic staff have full-time employment and are gender balanced (currently 48.1% women and 51.9% men). About 90% of permanent teaching staff are affiliated with the VEE. The number of FTE academic and support staff involved in the veterinary programme is not

expected to change significantly in the next three academic years, but the VEE is currently hiring and promoting academic staff to compensate for the forthcoming retirement of senior colleagues and potential strategic scientific areas.

The recruitment and advancement of academic staff is dependent on public funding. Every year, UNIBO allocates variable amounts of "budget points" to the Departments. The Italian Ministry of University and Research defines one point as the budget required to hire a full professor. The recruitment of academic staff occurs through public selection procedures. To access an associate professor or full professor position, candidates must hold the National Scientific Qualification, as established by Law no 240/2010. The "direct call", as per Law no 230/2005, is an alternative and less frequent recruitment method reserved for Italian and foreign individuals with specific merits, primarily based on their significant scientific reputation. As for fixed-term assistant professor positions, holding a PhD is a prerequisite for both RTDa and RTDb, and in both cases, candidates must pass a national public selection. RTDa has a three-year contract, with the possibility of a two-year extension. RTDb can only be hired for a maximum of 3 years and, at the end of the period, they are evaluated by an internal commission for their research and teaching activities in order to be eligible for the position of associate professor. Academic staff newly (less than 3 years) hired at the VEE and with teaching assignments in the DP are required to also complete the "Educational training for the VEE academic staff" training course.

The recruitment of support staff takes place annually through a public selection process managed by the Department after authorisation from UNIBO. Candidates undergo a competitive selection process, evaluated against a profile outlining the general and specific skills required for the position.

According to Law no 240/2010, full-time teaching staff are prohibited from engaging in any private professional activity as Veterinarians. However, subject to authorisation from UNIBO, they may carry out some external activities, as long as they are occasional, do not conflict with UNIBO's interests, do not exceed 340 hours per year, and do not interfere with institutional tasks. Part-time staff members are allowed to conduct private veterinary activities.

### 9.2.2. Analysis of the findings/Comments

The total number, qualifications and skills of all staff involved with the programme are both sufficient and appropriate to enable both the delivery of the educational programme and the fulfilment of the VEE's mission.

## 9.2.3. Suggestions for improvement

None.

#### 9.2.4. Decision

The VEE is compliant with Standard 9.2.

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.

### **9.3.1. Findings**

Full-time professors are expected to teach 120 hours/year and devote 350 hours/year in total to educational tasks. For part-time academic staff, these figures are reduced to 80 and 250 hours/year, respectively. RTDb assistant professors have a teaching commitment of 60 hours/year, while RTDa assistant professors have no obligation and can teach up to 60 hours/year. Reductions in teaching load are allowed in the case of concurrent demanding academic assignments.

The Italian University System heavily favours the recognition and valorisation of research activities over teaching. Consequently, neither UNIBO nor the VEE currently offers an officially recognised reward system for excellence in teaching. The University of Bologna has an extensive network of international contacts and participates in various programmes (e.g. Erasmus+, Marie Curie actions) for teachers, support staff, and students, providing staff with many opportunities to spend a period abroad (EU and non-EU countries) for training and research activities; to facilitate this, financial support is available, whilst insurance cover for staff travelling abroad is refundable.

Salaries for both teaching and support staff are mandated by law. Academic staff receive preestablished salary increases every two years following a positive evaluation; support staff undergo periodic evaluations to determine category pay raises.

## 9.3.2. Analysis of the findings/Comments

Staff are given opportunities to develop and extend their teaching and assessment knowledge. Opportunities for didactic and pedagogic training and specialisation are available and teaching positions offer the security and benefits necessary to maintain the stability, continuity, and competence of the teaching staff. In addition, teaching staff have a balanced workload of teaching, research and service and they have opportunities and resources for participation in scholarly activities.

### 9.3.3. Suggestions for improvement

None.

#### 9.3.4. Decision

The VEE is compliant with Standard 9.3.

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.

#### **9.4.1. Findings**

The Department encourages the participation of the academic staff in courses, seminars, workshops, as well as national and international conferences. The costs for these initiatives can involve public funds available to the teachers. Membership fees for scientific societies and colleges can also be reimbursed. Additionally, international mobility and exchange

programmes are facilitated through various UNIBO programmes. Foreign language courses are available for the staff. Advanced professional training initiatives are also offered for support staff.

Formal appraisal of academic staff takes place through student evaluations and the attainment of the National Scientific Qualification. Vertical promotions from one category to another take place through a public call, followed by an evaluation by a Commission specifically appointed that consists of three full professors, two of whom are external to UNIBO, belonging to the academic recruitment field for which the selection was announced. The selected candidate for the academic position is finally submitted for approval by the Department Board, where only teachers of equal or higher academic rank participate in the voting process.

The horizontal economic progression of teaching staff occurs on a two-year basis. To obtain the salary increase, teachers must demonstrate that they have fulfilled research, teaching, and institutional tasks established by UNIBO. An ad hoc commission, consisting of 3 full professors from UNIBO, evaluates the applications twice a year. Also, support staff may benefit from horizontal and vertical economic progressions after evaluation, depending on the needs of the Department and available resources.

All members of the VEE community are encouraged to take on organisational roles. Academic staff, along with support staff representatives, participate in both the VEE Board and the VEE Executive Committee. All motions are submitted to the vote of the assemblies, and each member has the right to vote.

## 9.4.2. Analysis of the findings/Comments

The VEE ensures the professional development of academic staff, being encouraged to participate in various courses, congresses and workshops to acquire new knowledge.

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

### 9.4.3. Suggestions for improvement

None.

#### 9.4.4. Decision

The VEE is compliant with Standard 9.4.

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.

#### **9.5.1. Findings**

At the end of each teaching unit, students are required to fill out a mandatory and anonymous online evaluation form to evaluate the quality of the teaching through the UNIBO evaluation system. At the end of each AY, the UNIBO Quality Assurance Office transmits the survey results to the individual teachers, the DPD, and the FSJC of the VEE. The discussion of the student opinions takes place openly during the meetings of the DPB. Cut-off thresholds have been set for sub-optimal (66% positive ratings) and potentially critical (50% positive ratings) situations. In such cases, the DPD arranges a meeting with the relevant teacher to discuss the reasons for the failure and take corrective measures.

Similarly, students assess CCT and non-academic teaching staff involved in CCT activities

through a dedicated online form.

### 9.5.2. Analysis of the findings/Comments

A system for the assessment of teaching staff is in operation, and results are available for those undertaking external reviews.

### 9.5.3. Suggestions for improvement

None.

#### 9.5.4. Decision

The VEE is compliant with Standard 9.5.

## 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).

### **10.1.1. Findings**

In 2018, VEE participated in research projects and programmes and, in terms of public and private research funds, it was the first among other Italian VEEs. Thanks to this active participation, VEE received a special ministerial fund of around 8.1 million euros (Eccellenza project).

The research activities of the VEE are grouped into four areas: Basic sciences; Veterinary clinical sciences; Veterinary public health and animal pathology; and Food safety and animal production. The number of ongoing research programmes in the four major scientific topics was 98 in AY 2022-23 (Table 10.1.1). When total funding is divided per project numbers the average funding per project varies from 17 500 to 34 300 per project. The detailed list in Appendix 14 includes many small projects funded at the UNIBO/local/national level but also some bigger grants and some from the European Commission.

VEE academic staff had a total of 752 indexed scientific publications in the last three years. The staff has been publishing actively, the total number of publications yearly is about 226 (2023) to 267 (2021).

### 10.1.2. Analysis of the findings/Comments

The average number of academic staff is 101, meaning an average productivity of 2.2-2.7 peer-reviewed publications per academic year. Of course, it should be noted that this is a crude metric and is a poor indicator of the quality. Instead, the quality of research is demonstrated by the fact that the VEE has been ranked first in Italy and has received special funding from the ministry. In addition, the VEE is participating actively in missions in Italy (Italian National Recovery and Resilience Plan).

## **10.1.3.** Suggestions for improvement

None.

#### **10.1.4. Decision**

The VEE is compliant with Standard 10.1.

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.

## **10.2.1. Findings**

During the early stage of the studies, students receive training in research including the acquisition of skills such as the importance of data in scientific thinking, understanding its analysis, interpretation, and proper presentation. Research experience is shared in various ways, such as classroom discussion, small group practical activities or flipped classrooms, and these entail constant interactivity and collaboration.

Students can earn 1 ECTS by participating in bespoke library training, which includes accessing scientific literature databases, and performing bibliographic searches; however, this training is not mandatory. Students can apply these skills in teacher-provided case studies drawn from teachers' own research experience, participating in classroom discussions, and small-group practical activities. Students are invited to participate in research-oriented events, such as Journal Clubs, Research Night or IVSA-organised events dedicated to sharing scientific research carried out within VEE. Moreover, seminars organised in the framework of Specialisation Schools and PhD programmes, as well as the PhD thesis defence are open for undergraduate students.

The thesis work of the final examination can be either experiment-based or a literature review. The opportunity to participate in research projects is offered to students through EPT and experimental thesis activities for the final examination and they have opportunities to conduct thesis research abroad with partial cover of living expenses.

The final examination can be used as a draft for peer-reviewed publication.

#### 10.2.2. Analysis of the findings/Comments

Students are trained in scientific methods and research techniques relevant to evidence-based veterinary medicine and have opportunities to participate in research programmes.

### 10.2.3. Suggestions for improvement

None.

#### **10.2.4. Decision**

The VEE is compliant with Standard 10.2.

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.

#### **10.3.1. Findings**

VEE offers many opportunities and various postgraduate training programmes in principle on two paths: clinical and research training. According to Table 10.3.1. of the SER, in the past three AYs, 14 different programmes were available to residents, 7 programmes were offered for internships, graduates could apply for 3 second-level master's programmes, and after comparative evaluation of applicants, four different veterinary PhD programmes were

accessible. In addition, Specialisation schools and Research Fellowship grants have broadened the possibilities for obtaining a postgraduate degree.

In PhD programmes, research training is three years in duration and candidates must produce at a minimum of two high-level publications during their studies. PhD students commonly spend a period of training abroad. Agreements for awarding double doctoral degrees have been signed with the University of Litoral (Argentina) and the University of Mekelle (Ethiopia). Training during the programme comprises research courses and laboratory or clinical work. The PhD programme in Veterinary Sciences is characterised by four different curricula: Basic Sciences, Animal Production and Food Safety, Animal Health, and Clinical Sciences. There was an average of 30.7 students registered in PhD training,

Over twice as many students (75) are registered in clinical training. The VEE offers residency training towards EBVS specialisation in 14 different disciplines. One year of Master's studies can also be taken in three different subjects in the VEE; this has been taken by an average of 30.7 students, whilst an average of 15.7 students have taken internships in clinics.

The specialisation Diploma is an essential requirement for participating in public selections for positions in the National Health System. This can be taken in Specialisation School in Animal Health, Livestock Breeding and Animal Production.

Research Fellowships for 1-5 years periods are available for graduate students and postdocs. In the last three years, an average of 15 Research Fellowships have been granted annually.

In the past three academic years, resident numbers have remained static (24 or 25), on account of the fact that residency positions are not officially recognised by Italian legislation. For this reason, there are no scholarships dedicated to residents. Residents are paid through grants associated with their research project or may also have a PhD position receiving the PhD grant. The VTH also offers internship positions, but no funding is available to support them. The number of participants in internships offered by VTH has decreased significantly, whilst the increase in the number of students in master's and PhD programmes was exceptional. VEE also offers postgraduate programmes not related to clinical or research work and actively organised veterinary continuing education, which is mandatory in Italy.

#### 10.3.2. Analysis of the findings/Comments

VEE has many diplomates and runs a large variety of residency programmes.

## 10.3.3. Suggestions for improvement

It is suggested that the VEE investigate the possibility of offering some financial support for those undertaking internship programmes.

#### **10.3.4. Decision**

The VEE is compliant with Standard 10.3.

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.

#### **10.4.1. Findings**

The Quality of research activities is monitored at different levels. Monitoring at national level includes The National Agency for the Evaluation of Universities and Research Institutes: ANVUR provides a model for periodic accreditation of universities and degree programmes taking into consideration special European quality assurance systems. The latest version is AVA3. ANVUR evaluates research quality, institutional and management activities with a special focus on PhD programmes, through Research Quality Assessment (VQR). VQR has an impact on the allocation of financial resources from the Ordinary Financing Fund.

At UNIBO level, there is The University Quality Assurance Office (UQAO) provides guidelines for QA in different areas, including training activities, quality of teaching, and research activities.

At the VEE level, there is The Research Committee which is the main body to evaluate research quality, monitor research activities, allocate research resources, and provide dissemination of research results.

VEE has obtained UNI EN ISO 9001 certification (voluntary) for research and analytical activities which integrate requirements on safety, environment, and worker health.

Via the Single Annual Report of Departmental Research (Scheda Annuale della Ricerca Dipartimentale, SUA-RD), the VEE collects information on research and the third mission and is drawn up by the department. By monitoring indicators of SUA-RD the three-year objectives for research and third mission activities are followed and analysed. Based on self-evaluation the areas that require improvement are identified.

## 10.4.2. Analysis of the findings/Comments

The quality of research activities is monitored and provides a wide range of opportunities for students.

### 10.4.3. Suggestions for improvement

None.

#### **10.4.4. Decision**

The VEE is compliant with Standard 10.4.

# **ESEVT Indicators**



### ESEVT Indicators

	Name of the VEE:	VEE of the University of Bo	logna (Ozzano	Emilia)			
	Name & mail of the VEE's Hea	Giuliano Bettini (giuliano.b	ettini@unibo.it	t)			
	Date of the form filling:	18/12/23					
	Raw data from the last 3 comp	ete academic years	Year -1	Year -2	Year -3	Mean	
1	no of FTE teaching staff involved in vet	rinary training	106,4	100,9	101,2	102,8	
2	n° of undergraduate students		554	517	517	529,3	
3	n° of FTE veterinarians involved in vete	rinary training	83,5	81,0	80,3	81,6	
4	n° of students graduating annually		62	79	80	73,7	
5	n° of FTE support staff involved in vete		77,3	76,3	76,9	76,8	
6	nº of hours of practical (non-clinical) tra		705	705	705	705,0	
7	n° of hours of Core Clinical Training (C		800	800	800	800,0	
8	n° of hours of VPH (including FSQ) tra		366	366	366	366,0	
9	nº of hours of extra-mural practical train		107	107	107	107,0	
10	no of companion animal patients seen in		6402	6517	6111	6343,3	
11	n° of individual ruminant and pig patien	s seen intra-murally	147	149	152	149,3	
12	n° of equine patients seen intra-murally		489	496	420	468,3	
13	nº of rabbit, rodent, bird and exotic patie		28	48	40	38,7	
14	nº of companion animal patients seen ex		0	0	0	0,0	
15	n° of individual ruminants and pig patie	its seen extra-murally	1785	412	516	904,3	
16	n° of equine patients seen extra-murally		96	74	79	83,0	
17	no of rabbit, rodent, bird and exotic patie	nts seen extra-murally	229	91	68	129,3	
18	n° of visits to ruminant and pig herds		226	92	43	120,3	
19	n° of visits to poultry and farmed rabbit	units	13	21	4	12,7	
20	no of companion animal necropsies		138	201	84	141,0	
21	no of ruminant and pig necropsies		26	85	18	43,0	
22	n° of equine necropsies		6	14	22	14,0	
23	n° of rabbit, rodent, bird and exotic pet i		85	94	90	89,7	
24	n° of FTE specialised veterinarians invo	lved in veterinary training	33	30	30	31,0	
25	n° of PhD graduating annually		22	11	11	14,7	



## **ESEVT Indicators**

Name o	me of the VEE: VEE of the University of Bologna (Ozzano Emilia)						
Date of	Date of the form filling: 18/12/23						
Calcul	Calculated Indicators from raw data			Median	Minimal	Balance <sup>3</sup>	
			values	values1	values <sup>2</sup>		
I1	n° of FTE teaching staff in	volved in veterinary training / no of undergraduate students	0,194	0,150	0,126	0,068	
12	n° of FTE veterinarians inv	olved in veterinary training / n° of students graduating annually	1,108	0,840	0,630	0,478	
13	n° of FTE support staff inv	olved in veterinary training / n° of students graduating annually	1,043	0,880	0,540	0,503	
I4	n° of hours of practical (no	n-clinical) training	705,000	953,500	700,590	4,410	
15	n° of hours of Core Clinica	l Training (CCT)	800,000	941,580	704,800	95,200	
16	n° of hours of VPH (include	ling FSQ) training	366,000	293,500	191,800	174,200	
17	n° of hours of extra-mural	practical training in VPH (including FSQ)	107,000	75,000	31,800	75,200	
18	n° of companion animal pa	tients seen intra-murally and extra-murally / n° of students graduat	86,109	67,370	44,010	42,099	
19	n° of individual ruminants	and pig patients seen intra-murally and extra-murally / n° of studer	14,303	18,750	9,740	4,563	
I10	n° of equine patients seen i	ntra-murally and extra-murally / n° of students graduating annually	7,484	5,960	2,150	5,334	
I11	n° of rabbit, rodent, bird ar	d exotic seen intra-murally and extra-murally/ n° of students gradu	2,281	3,110	1,160	1,121	
I12	n° of visits to ruminant and	pig herds / n° of students graduating annually	1,633	1,290	0,540	1,093	
I13	no of visits of poultry and t	farmed rabbit units / n° of students graduating annually	0,172	0,110	0,045	0,127	
I14	n° of companion animal ne	cropsies / n° of students graduating annually	1,914	2,110	1,400	0,514	
I15	n° of ruminant and pig nec	ropsies / n° of students graduating annually	0,584	1,360	0,900	-0,316	
I16	no of equine necropsies / no	of students graduating annually	0,190	0,180	0,100	0,090	
I17	n° of rabbit, rodent, bird ar	d exotic pet necropsies / n° of students graduating annually	1,217	2,650	0,880	0,337	
I18	n° of FTE specialised veter	inarians involved in veterinary training / n° of students graduating	0,421	0,270	0,060	0,361	
I19	n° of PhD graduating annu	ally / n° of students graduating annually	0,199	0,150	0,070	0,129	
1	Median values defined by	lata from VEEs with Accreditation/Approval status in May 2019					
2	Recommended minimal val	ues calculated as the 20th percentile of data from VEEs with Accredit	tation/Approval st	atus in May 20	19		
3	A negative balance indicate	s that the Indicator is below the recommended minimal value					
*	Indicators used only for sta	tistical purpose					

All Indicators are above the minimal value, except I15.

## 11.2. Analysis of the findings/Comments

The number of ruminant and pig necropsies is low, although the VEE is located in an agricultural region.

## 11.3. Suggestions for improvement

It is suggested to continue the efforts to increase the number of ruminant and pig necropsies.

ESEVT Rubrics (summary of the Decisions regarding the compliance of the VEE for each ESEVT Standard, i.e. (total or substantial) compliance (C), partial compliance (PC) (Minor Deficiency) or non-compliance (NC) (Major Deficiency))

Area 1. Objectives, Organisation and Quality Assurance Policy	С	PC	N C
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	х		
lifelong learning.  The VEE must develop and follow its mission statement which must embrace the ESEVT Standards.			
Standard 1.2: The VEE must be part of a university or a higher education institution providing training	Х		
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 teaching 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.			
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	Х		
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.  Standard 1.4: The VEE must have a policy and associated written procedures for the assurance of the	Х		
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.	X		
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.  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.	^		
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.	X		
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.	Х		
Area 2. Finances Standard 2.1: Finances must be demonstrably adequate to sustain the requirements for the VEE to	Х		
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).	^		
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	Х		
plan and to meet the ESEVT Standards.  Standard 2.3: Resources allocation must be regularly reviewed to ensure that available resources meet the requirements.	Х		
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.	Х		

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.			
3.1.1. General findings			
3.1.2. Basic sciences	Х		
3.1.3. Clinical Sciences in companion animals (including equine and exotic pets)		Х	
3.1.4. Clinical Sciences in food-producing animals (including Animal Production and Herd Health Management)			Х
3.1.5. Veterinary Public Health (including Food Safety and Quality)	Х		
3.1.6. Professional Knowledge (including soft skills, e.g. communication, team working skills, management skills)	Х		
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.	X		
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.  Standard 3.4: The VEE must have a formally constituted committee structure (which includes effective	X		
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.			
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) under the close supervision of teaching staff (e.g. ambulatory clinics, herd health management, practical training in VPH (including Food	X		

Safety and Quality (FSQ)). A comparison between CCT and EPT is provided in Annex 6, Standard 3.5.			
Standard 3.6: The EPT providers must meet the relevant national Veterinary Practice Standards, have	Х		
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.			
Standard 3.7: Students must take responsibility for their own learning during EPT. This includes	Χ		
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.			
Area 4. Facilities and equipment			
Standard 4.1: All aspects of the physical facilities must provide an environment conducive to learning,	Χ		
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.			
Standard 4.2: Lecture theatres, teaching laboratories, tutorial rooms, clinical facilities and other	Χ		
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.			
Standard 4.3: The livestock facilities, animal housing, core clinical teaching facilities and equipment	Χ		
used by the VEE for teaching purposes must:			
<ul> <li>be sufficient in capacity and adapted for the number of students enrolled in order to allow safe hands-on training for all students</li> </ul>			
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			
<ul> <li>be designed to enhance learning</li> <li>Standard 4.4: Core clinical teaching facilities must be provided in a veterinary teaching hospital (VTH)</li> </ul>		Х	
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.			
Standard 4.5: The VEE must ensure that students have access to a broad range of diagnostic and	Χ		
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.  Standard 4.6: Appropriate isolation facilities must be provided to meet the need for the isolation and	Х		
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.			
Standard 4.7: The VEE must have an ambulatory clinic for production animals or equivalent facilities	Χ		
so that students can practise field veterinary medicine and Herd Health Management under the			
supervision of teaching staff.			
Standard 4.8: The transport of students, live animals, cadavers, materials from animal origin and other		Χ	
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.			
Standard 4.9: Operational policies and procedures (including biosecurity, good laboratory practice	Х		
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 to			
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.			
regular monitoring of the recuback norm students, stall and chemis.			

Area 5. Animal recourses and topobing material of animal origin			
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,		Х	
cadavers, and material of animal origin must be adequate for providing practical and safe hands-		^	
on training in all relevant areas and adapted to the number of students enrolled.	1		
Evidence must be provided that these data are regularly recorded and that procedures are in place			
for correcting any deficiencies.			
Standard 5.2: In addition to the training provided in the VEE, experience can include practical training	Χ		
at external sites, provided this training is organised under the supervision of teaching staff and	1		
follows the same standards as those applied in the VEE.			
Standard 5.3: The VTH must provide nursing care skills and instruction in nursing procedures. Under	Х		
all situations, students must be active participants in the clinical workup of patients, including	1		
problem-oriented diagnostic approach together with diagnostic decision-making.  Standard 5.4: Medical records for patients seen intra- and extra-murally under Core Clinical Training	Х		
(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.	1		
Area 6. Learning Resources			
Standard 6.1: State-of-the-art learning resources must be adequate and available to support veterinary	Χ		
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	1		
the study programme is provided in several tracks/languages, the learning resources must be	1		
available in all used languages. Timely access to learning resources, whether through print,	1		
electronic media or other means, must be available to students and staff and, when appropriate,	1		
to stakeholders. State-of-the-art procedures for bibliographical search and for access to	1		
databases and learning resources must be taught to undergraduate students, together with basic	1		
English teaching if necessary.	V		
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-	Х		
learning platform, and the relevant human and physical resources necessary for the development	1		
of instructional materials by the staff and their use by the students.	1		
The relevant electronic information, database and other intranet resources must be easily	1		
available for students and staff both in the VEE's core facilities via wireless connection (Wi-Fi) and	1		
from outside the VEE through a hosted secured connection, e.g. Virtual Private Network (VPN).	1		
Standard 6.3: The VEE must provide students with unimpeded access to learning resources, internet	Χ		
and internal study resources, as well as facilities and equipment for the development of procedural	1		
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	1		
place to evaluate the teaching value of changes in learning resources.	-		
Area 7. Student admission, progression and welfare  Standard 7.1: The VEE must consistently apply pre-defined and published regulations covering all	Х		
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	1		
educational programme in all advertisements for prospective national and international students.	1		
Formal cooperation with other VEEs must also be clearly advertised.			
Standard 7.2: The number of students admitted must be consistent with the resources available at the	Χ		
VEE for staff, buildings, equipment, healthy and diseased animals, and materials of animal origin.	L		
Standard 7.3: The selection and progression criteria must be clearly defined, consistent, and	Х		
defensible, be free of discrimination or bias, and take into account the fact that students are	1		
admitted with a view to their entry to the veterinary profession in due course.	1		
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	1		
decided by another authority, the latter must regularly receive feedback from the VEE.	1		
Adequate training (including periodic refresher training) must be provided for those involved in			
the selection process to ensure applicants are evaluated fairly and consistently.	_		L
Standard 7.4: There must be clear policies and procedures on how applicants with disabilities or	Χ		
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.	<b> </b>		
Standard 7.5: The basis for decisions on progression (including academic progression and	i	Х	
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.	i l		
Standard 7.6: Mechanisms for the exclusion of students from the programme for any reason must be	Χ		
explicit.			
The VEE's policies for managing appeals against decisions, including admissions, academic and			
progression decisions and exclusion, must be transparent and publicly available.	اجبا		
Standard 7.7: Provisions must be made by the VEE to support the physical, emotional and welfare	Х		
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	i l		
with all relevant equality, diversity and/or human rights legislation.			
a reference equality, arreferry andrer manufiring negotiation.			

There must be effective mechanisms for the resolution of student grievances (e.g. interpersonal conflict or harassment).			
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.	X		
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	Х		
towards entry-level competence.			
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	Х		
feedback on their assessments.			
Mechanisms for students to appeal against assessment outcomes must be explicit.			
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.	Х		
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	Х		
take an active role in creating the learning process and that the assessment of students reflects this approach.			
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		Х	
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.			
Area 9. Teaching and support staff	Х		
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.	Α		
A formal quality-assured programme of teacher training (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.			
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.	Х		
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.  Standard 9.3: Staff must be given opportunities to develop and extend their teaching and assessment	Х		
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.			
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	X		
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.  Standard 9.5: A system for assessment of teaching and teaching staff must be implemented on a	Х		
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.		
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).	Х	
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.	Х	
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.	Х	
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.	Х	
C: (total or substantial) compliance; PC: partial compliance; NC: non-compliant		

## **Executive Summary**

The first lectures on veterinary medicine were held in the city of Bologna in 1784. Initially operating under the medical school, it gained autonomy in 1876 with the establishment of the School of Veterinary Medicine of the University of Bologna. Over time, the school evolved into a faculty and then a department (called the VEE in this report). In the early 1990s, it moved from Bologna's historical centre to Ozzano dell'Emilia.

The VEE has been successfully evaluated by EAEVE in 1996, 2005 and 2014. The VEE was also accredited in 2017 by ANVUR (the Italian Agency of Accreditation of Universities) and recognised as a 'Department of Excellence' by the Italian Minister of Universities and Research.

The SER was provided on time and written in agreement with the SOP 2023, although some data had to be corrected or added during the visitation process. Replies to the pre-visitation questions from the experts were provided before the start of the Visitation.

The Liaison Officer did an excellent job adapting the Visitation schedule, searching for the requested information, organising relevant meetings and ensuring the health and safety of the visitors.

Several areas worthy of praise have been identified:

- Committed staff focused on high-quality Education, Research, and Clinical Services
- Robust Quality Assurance culture aligned with EAEVE, ANVUR, and ISO Standards
- Effective collaborations with local institutions and companies
- Efficient student exchange programme
- Well-established equine neonatology facilities
- Comprehensive biosecurity policy, which is effectively taught and communicated
- Rich and diverse E-Resources for students and staff
- Highly dedicated and competent Staff for the Skill Lab
- Wide array of EBVS Diplomates and Residency Programmes.

Additional commendations are described in the Visitation Report.

The VEE is compliant with most ESEVT Standards. However, some areas of concern have been identified.

Several Minor Deficiencies have been identified:

- The VEE is partially compliant with Standard 3.1.3 because of suboptimal practical training in dentistry.
- The VEE is partially compliant with Standard 3.1.3 because of suboptimal pre-clinical and clinical training in rabbits, rodents, pet birds and exotic pets.
- The VEE is partially compliant with Standard 4.4. because of suboptimal on-call service for ruminants.
- The VEE is partially compliant with Standard 4.8. because of suboptimal organisation of student transportation for extramural CCT.
- The VEE is partially compliant with Standard 5.1. because of suboptimal number of ruminant and pig necropsies.
- The VEE is partially compliant with Standard 7.5. because of suboptimal remediation procedures for students who do not progress within the expected timeframe for the degree.

- The VEE is partially compliant with Standard 8.5. because of a suboptimal quality control of the student logbooks.

One Major Deficiency has been identified:

The VEE is not compliant with Standard 3.1.4. because of insufficient clinical training in individual ruminant medicine.

Additional suggestions for improvement are described in this Visitation Report.

## Glossary

**CCT**: Core Clinical Training

D1C: ESEVT Day One Competences

DIMEVET: Department of Veterinary Sciences (called the VEE in the report) EAEVE: European Association of Establishments for Veterinary Education

EBVS: European Board of Veterinary Specialisation ECOVE: European Committee on Veterinary Education

**EPT: Elective Practical Training** 

ESEVT: European System of Evaluation of Veterinary Training

ESG: Standards and Guidelines for Quality Assurance in the European Higher Education

Area

FSQ: Food Safety and Quality FTE: Full-Time Equivalent IT: Information Technology

OSCE: Objective Structured Clinical Examination

PDCA: Plan Do Check Adjust

QA: Quality Assurance SER: Self Evaluation Report

SOP: 2023 Standard Operating Procedure

UNIBO: University of Bologna

VEE: Veterinary Education Establishment (DIMEVET)

VPH: Veterinary Public Health VTH: Veterinary Teaching Hospital

# **Decision of ECOVE**

The Committee concluded that one Major Deficiency had been identified.

The Veterinary Education Establishment (VEE) of the Bologna University is therefore classified as holding the status of: **PENDING ACCREDITATION**.