



## **FULL VISITATION REPORT**

**To the University of Veterinary Medicine Hannover, Hannover, Germany**

**On 21-25 October 2024**

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## **Introduction**

Stiftung Tierärztliche Hochschule Hannover (University of Veterinary Medicine Hannover, called the VEE in this report) has been an independent establishment since its foundation in 1778. The VEE became an endowed university ("Stiftung") in January 2003.

With its two sites in the capital city of Lower Saxony, the Campus Bischofsholer Damm and the Campus Bünteweg, the VEE occupies an area of over 175,000 square metres. The VEE also operates teaching and research activities in Ruthe, Bakum, Büsum and Quakenbrück.

The VEE has been positively evaluated by EAEVE in 2008 and 2018.

The VEE offers approximately 260 places for veterinary undergraduate study. The VEE also offers education in biology (bachelor level) in cooperation with Leibniz University Hannover and Hannover Medical School. Since 2020, the VEE has offered part-time postgraduate training courses in veterinary medicine (BEST-VET). Students can obtain individual certificates or graduate with an MSc degree in "Veterinary Public Health" or "Laboratory Animal Science".

The main developments since the last visitation are:

- ) expansion of professional skills education and improvement of online teaching and learning opportunities;
- ) revised curriculum;
- ) enhanced training in the skill lab and communication skills;
- ) enhanced clinical training in all species;
- ) development of evaluation forms for extramural elective practical training (EPT);
- ) continuous training for teaching staff;
- ) development of a Moodle course on biosecurity;

- ) establishment of a Centre for E-Learning, Didactics and Educational Research (ZELDA);
- ) amended buildings and acquisition of new equipment in clinics.

The Visitation was 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**

Under its mission and vision statements, the VEE's aim is to provide evidence-based training for competent veterinarians who will be able to respond to major challenges of the present and future and fulfil society's expectations.

The educational goals of the VEE are aligned with the National veterinary curriculum (Ordinance concerning the Certification of Veterinarians – Appendix 1.3.1.1) and the Federal Veterinary Regulation, allowing day-one graduates to work in all veterinary fields in Germany.

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

The VEE's vision in the field of animal health and well-being focused on the "One Welfare" approach including One Health is worthy of praise.

The VEE offers veterinary training in agreement with the EU Directives and ESG Standards. The VM programme is research- and evidence-based enabling Vet graduates to enter all commonly recognised branches of the veterinary profession.

Lifelong learning is adequately addressed.

The mission statement of the VEE includes all ESEVT Standards.

### **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 is a University Foundation (University of Veterinary Medicine Hannover - TiHo) subject to the legal supervision of the Lower Saxony Ministry of Science and Culture. However, the supervision of the ordinance concerning the Certification of Veterinarians is the responsibility of the Lower Saxony Ministry of Nutrition, Agriculture and Consumer Protection. The formal Veterinary Licensing Authority is the Chamber of Veterinarians of Lower Saxony.

The Head of the VEE is a veterinarian.

In the SER, all Committees - relevant to the study programme - with their function and composition are clearly listed in Table 1.2.2.

The VEE is also organised into 6 species-oriented clinics, one reproduction unit and a unit for fish diseases, 18 institutes, one field station and one teaching and research farm.

The Vice-President for teaching and the Vice-president for research as well as all persons responsible for the VTH affairs (except for ethical issues) hold a veterinary degree.

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

The VEE is a University itself providing a formally recognised training to become a veterinarian.

Persons responsible for the veterinary curriculum and for the professional, ethical, and teaching affairs, as well as the head of the VTH, hold a veterinary degree.

The decision-making process, organisation and management of the VEE are adequate for the implementation of the strategic plan and for the development of a VM programme compliant 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 operates under the supervision of its Board of Trustees and the Ministry of Science and Arts (Ministerium für Wissenschaft und Kunst, MWK). Of the seven members of the Board of Trustees, there is one member as an emissary of the MWK with veto power on financial issues.

Approximately every 5 years, all universities in Lower Saxony negotiate with the MWK the University Development Treaty ("Hochschulentwicklungsvertrag") that stipulates general but

also specific goals for the universities including VEE. The agreements of the treaties are incorporated in VEE's Development Plan (Hochschulentwicklungsplan).

A mission statement drafted by the Committee for University Development (HEK) and approved by the Senate is the base for the Strategic and development plan (2020-2030). Strategic goals are specified and formalised in the Agreement on Objectives with the government (see 1.1.2). The agreement is reviewed every two years between officials of the Ministry of Science and Culture (MWK) and the Executive Board of the VEE, which must submit an annual progress report to the Ministry that serves as the basis for the allocation of funds.

The strategic and developmental plan 2020-2030 of the VEE is organised into six sections (study and teaching, research and development, internationality, personal development, equality and organisation and structure). In each section, the VEE describes the premises and the intended general objectives of its specific activities.

The VEE has also developed a complete, clear and updated SWOT analysis.

The Contract for University Development between the state of Lower Saxony and the VEE (2024-2029) provides the framework for the planning of VEE development and objectives.

The timeframe for publication of objectives/indicators is mandatory and asked for by the ministry.

As for the goals, objectives and relative indicators, there are yearly negotiations (in the fall) between VEE and MWK. The procedure involves the formulation of goals in various areas (e.g., research, education, outreach, diversity...), which are then reviewed by MWK and further refined until a written agreement is reached (usually in the spring). The objectives as formulated in the Agreement on Goals ("Zielvereinbarung") are then assessed by June of the following year. Most goals are measurable (e.g., number of publications, extramural research grants, student admission numbers, new programs, new courses, syllabi, and diversity measures such as the number of female staff/professors).

Internal targets are agreed upon between university leadership and organisational units (clinics and institutes). In the SER a brief summary of different objectives for individual goals of personal development and career planning for staff is presented.

Formal basics for strategies, policies and procedures are published on the external and internal websites of the VEE. Furthermore, the VEE communicates the plans, decisions and developments widely using the various media, clearly indicated in the SER. These ways of communication allow several opportunities for discussion with all stakeholders, which can influence decision-making concerning future plans.

Internal (teaching and support staff, students) and external stakeholders (society, business, industry, science, culture who are familiar with higher education) are diffusely present in the committees handling at different levels the strategic plan development and implementation.

Finally, in section 1.4 (fig. 1.4.1), the SER indicates a list of cyclical reports with the target group specifically involved in the strategic planning.

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

The VEE has a 10-year-long strategic plan, which includes a complete and clear SWOT analysis and an operating plan with objectives, timeframe and indicators. Internal and external stakeholders have been deeply involved in the development of the strategic plans as well as in its actual implementation. Students are widely represented within the network of committees involved in VEE's strategy development and implementation.

The strategy is formally approved by the VEE and it is publicly available.

### **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 global strategy of VEE for outcome assessment and quality assurance is based on the periodical analysis of quantitative and qualitative indicators for the achievement of objectives to integrate into future plans. All plans are discussed within the relevant committees and communicated directly to all staff, students and other stakeholders. As reported in the 1.3.1. section, the SER (fig. 1.4.1 and 1.4.2) clearly indicates the involvement of different stakeholders in the strategic planning regarding teaching, research and related services as well as the cyclical reports associated with it.

The strategy of continuous enhancement of quality is implemented within the typical PDCA cycle. A process map supporting outcome assessment and quality assurance for the VEE is clearly presented in the SER (Fig. 1.4.2. and 1.4.3).

Within QA processes, a committee or working group is dedicated to specific tasks and issues. If the issue is relevant to students (Committee for Curricular Affairs, Committee on Study Quality Funds), students' representatives are at least 50% of the members of a committee.

VEE has a tool for quality assurance in research ("Hochschulindex") that summarises quantitative measures and considers extramural research funds and publications per year for each institute and clinic.

The Executive Board has recently adopted a General Code of Conduct for all members of the VEE. The Code, which will be soon published on the internet and intranet, serves as a guide for behaviour on and off campus including respect, tolerance, civil courage, responsibility, confidentiality and professional behaviour.

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

The VEE has a policy and written procedures for QA and VM programme standards. The PDCA cycles are regularly and systematically implemented and closed in the VEE so that a continuous enhancement of quality is guaranteed.

The VEE has recently adopted a code of conduct as a guide for academic integrity.

### **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 strategies, legal frameworks, vision and mission statements, policies and procedures, and special awards by means of external websites.

It also regularly publishes on VEE's website information regarding study programmes, teaching reports, students' opinion results, teaching reports, Executive Board and research annual reports as well as public meetings and protocols, general announcements, call for applications for students, research grants and prizes. Important news and newsletters are sent by email.

Reports on accreditation procedures are publicly available on the VEE website.

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

The VEE has regular formal and informal interactions with its stakeholders and the wider society. All related information is clear, publicly available and includes updated documents about the study programme.

Full reports on VEE's ESEVT status are easily available on the VEE website.

#### **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**

The general QA framework of the VEE has been described within the 1.4.1 section.

The Executive Board receives the information needed for VEE QA strategy and decision-making from board position quality management in close cooperation with strategic controlling, where all information concerning QA is centralised. Key performance indicators and other data come from board position strategic development incl. controlling and internal audit and from the administrative units (finances, human resources, student and academic affairs, real estate and technology, information technology) and the organisation units of the VEE (clinics and institutes).



All decisions taken within the QA cycle are communicated to staff and students via dedicated information tools (committee reports, official journal, websites and intranet, VEE's journal, press releases).

Implementation, assessment and revision are performed by the administration and relevant committees and ratified by the Senate and the Executive Board. The latter is then responsible to propose and discuss the QA strategy for the next QA cycle with the Senate.

During the on-site visit, several examples of complete QA cycles related to financial and teaching activities were shown by the VEE, including the yearly progress test administered voluntarily to students of all years. At the end of the test, developed by collaborative work between German-speaking VEEs, the VEE provides by e-mail to all involved students effective feedback regarding the quality of his/her acquired knowledge and skills.

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

The VEE's excellent organisation and implementation of the QA system in all institutional activities is worthy of praise.

The VEE regularly monitors and reviews all its activities in an excellent way. All relevant information is publicly available.

Students and staff representatives are systematically involved in the analysis and implementation of relevant data.

The PDCA cycle is efficiently performed in all its parts and sets the base for the continuing enhancement of the quality of education.

All actions planned as a result of the closure of the PDCA cycle are described in regularly published reports.

#### **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 VEE received the last ESEVT visitation in January 2018 and sent the interim report in May 2021.

As a consequence of 2018 ECOVE recommendations, the VEE revised and adopted a central biosecurity policy for all clinics, introduced a formal biosecurity training for staff (Safety Week), developed a new elective biosecurity course in the curriculum, and introduced a more structured learning process on evidence-based veterinary medicine and special advanced training session for VEE teachers within the certified "Professional Teaching" programme (1.5-year training programme).

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

The VEE has regularly undergone ESEVT external review and has used it to improve its QA system.



### **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**

The VEE functions independently, not as part of a group of schools or faculties, which allows full autonomy and control over the VEE finances. As a global financial process, the VEE has three main sources of income the Lower Saxony government, Clinical services and research grants. Of these, the main one is the government lump-sum which is budgeted based on agreed objectives between the VEE and the Lower Saxony government. Additional sources of income are donations and third-party funds from industries. The government lump sum covers the utilities for this university.

There is a 20% overhead charge to industry, research, services and donations, which is administered centrally.

There are no tuition fees, instead the students pay an administrative fee, which is set equally for national and international students (EU or third countries alike) per semester (391.22 Euros), but these fees consist of a minor income for the VEE as they are dictated by and used to pay the Hannover student services and the public transport authority of Lower Saxony, as the students get free transport in the city. Students who prolong their studies over 17 semesters pay a tuition fee (total payment of 500 euros, although some exceptions apply for the tuition fee in case of severe disabilities or diseases); this is a rule set by the state of Lower Saxony rather than by the university. Of the total tuition fees, 75 euros/semester/student is used to cover the administrative services of the VEE. Students with low income will also need to pay this administrative fee each semester, although they can apply for and receive a monthly stipend from the federal government.

The VEE uses SAP as its financial management service software and every clinic/institute has a budget negotiated and allocated. As each institute and clinic has its specific accounts, it is possible to fully track each of the expenditures per institute/clinic.

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

In the last three years, expenditures and revenues have been similar and the annual balance is positive in 2022 and 2023. Annual revenue was negative (-1.198953) due to construction measures and the purchase of equipment (MRI). However, this did not result in debt for the VEE, since enough reserves were available. The main expenditure is personnel while the main income is government funding.

The VEE has a continuous growth in annual investment in personnel, matched by an annual steady increase in government funding, and has maintained a positive balance in the last two years. Research income has been stable in the last three years, while income from clinical services has increased annually in the last three years. A funding agreement with the state of Lower Saxony has been signed in 2024 and guarantees sound funding for the next five years.

#### **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 students at the VEE make use of three clinics (The Clinical Complex at Bünteweg includes the Clinic for Small Animals, Clinic for Horses and Clinic for Small Mammals, Reptiles and Birds) which are self-managed. The director of each clinic is the responsible person for managing the budget and paying the clinical staff with the income they generate. In addition to their own clinical income, they receive funding for research and teaching based on agreed objectives. The budget is reviewed every three months through internal audits and the admin vice president.

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

Clinical services run separately allowing enough autonomy to adapt to changes or hire personnel as required. Clinics and institutes are paid a sum based mostly on the number of teaching staff. There is an additional 20% sum which depends on performance assessed based on publications, service and the amount of extramural funding. The VEE is an endowed establishment with the legal basis of the Foundation; this gives the VEE the flexibility to acquire and accumulate extra funding through donations which can be allocated with total autonomy by the VEE and which do not affect the government lump sum.

#### **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**

Finance final decisions are taken by the Executive Board and annually discussed with the

Senate. An annual financial plan is drafted and presented to the Senate and the Board of Trustees, which have to approve the plan. The protocols of Senate and Boards of Trustees meetings are available internally and can be accessed by members of the VEE. There is no priority for resource allocation for any specific buildings, but the VEE's most recent buildings such as the RIZ and CTS have lower requirements and solar panels have been installed in the CTS building which would further reduce the maintenance costs.

The VEE has a maintenance annual expenditure which is specified in table 2.1.1 as per SOP, however, the VEE has secured an additional sum of around 10 million euros over the next 4 years for energy-related upgrades. The VEE is required by law to reduce its energy consumption and has received extra funding (10 million Euros) to upgrade buildings for this matter. The VEE has employed an external consultant to design an energy-saving plan. This plan includes, for example, an energy upgrade ongoing at BiDamm (new roofs) and in Bakum (new roofs, new building insulation, PV and heat pumps). In addition, all new vehicles, unless unavailable in the class needed, will be electric. The VEE is also employing energy-saving measures including reduced heating during holidays (e.g., Christmas/New Year). In sustainability terms, the VEE has been awarded the "Ökoprofit" label by the city of Hannover, for sound management of waste and energy.

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

Maintenance costs plus additional funding of 10 million euros for energy-related upgrades and no new buildings planned in the near future should ensure the available resources meet the requirements. The VEE is committed and required by law to reduce energy consumption and has a plan in place to invest government funding in this area for the next 4 years.

### **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 is not allowed to change the national curriculum which is mandated by law. Veterinary training in Germany is regulated by the TAppV (2006), which reflects the requirements of EU Directive 2005/36/EC and translates these into German law. Recently, suggestions to adapt the TAppV were made after discussions between all five German VEEs involving stakeholders and submitted by all five establishments to the Federal Government. Based on the results of a questionnaire completed by alumni, the main changes proposed are:

- Reduction of hours in botany, zoology, chemistry and physics
- Additional hours for acquisition of professional competences
- Increase of clinical teaching hours
- Increase of hours for immunology teaching and provision of a separate summative assessment
- For fixed subjects, an increase in the percentage of teaching hours that can vary (from 20-30%).

The timeline for the introduction of these changes is 2026 or possibly 2027 at the latest.

The VEE has influence on the internal processes and the portfolio of electives but must follow the law in all other matters. All decisions on curricular matters are discussed by the ZSK (Zentrale Studienkommission - Committee for Curricular Affairs) and a recommendation is submitted to the Senate of the University for approval. The TAppV ('trial clause') allows a variation in the number of hours taught in every subject by up to 20% provided the course duration does not drop below a minimum of 28 hours. On the basis of this 'trial clause' the VEE has decreased the course hours in botany, chemistry, and zoology in order to be able to increase course hours for clinical education and integration of professional and non-technical competences.

In summary, under the TAppV, veterinary training must comprise

1. an academic-theoretical component of studies in veterinary medicine lasting for four and a half years with 3,850 hours of compulsory and optional courses. The necessary basic knowledge is delivered to students with a view to its subsequent use in veterinary medicine;
2. a practical component of studies lasting for 1,170 hours {obligatory extramural practical training which consists of the following four compulsory blocks:
  - Practical training in agriculture, animal breeding and animal husbandry (70 h)
  - Practical training in a veterinary practice or veterinary hospital (850 h, EPT)
  - Practical training in hygiene control and control of foodstuffs and in the inspection of animals for slaughter and meat (175 h)
  - Practical extramural training in the public veterinary service (75 h).

The detailed breakdown of hours of elective practical training (EPT) is as follows:

- 70 hours on agriculture, animal breeding and animal husbandry,
- 150 hours in the therapeutic practice of a veterinarian or in an animal hospital under veterinary supervision,
- 75 hours in hygiene control and control of foodstuffs,
- 100 hours in the inspection of animals for slaughter and meat,
- 75 hours in the public veterinary service,
- 700 hours in the therapeutic practice of a veterinarian or in an animal hospital under veterinary supervision or an elective placement.

Recent data collected by the VEE indicate that clinical extramural EPT was primarily completed in small animal practices (43% of the students). Mixed practices accounted for 22% of EPT, followed by equine practices at 21%, while only 11% of the students completed EPT in the livestock sector.

The standard period of training as laid down by law is five years and six months (5020 hours). The compulsory and optional courses amount to an average of 30 hours per week in a semester, except during the clinical training and the placements. In the national curriculum, as defined by TAppV, supervised self-study (category C in Table 3.1.1) is not described. Once self-study hours are added, the total hours per student comes to 9,900 hours (i.e. 1,800 hours per year x 5.5 years = 9,900). This equates to approximately one hour of supervised self-study for each hour of didactic teaching. The number of self-study hours allocated is based on an estimate of the time required to complete assignments or to prepare for practicals and exams. This estimate varies according to the perceived difficulty of the assignment/practical, etc.

For the first four years of training, there are two semesters each year. Semester One runs for 14 weeks from early October till the end of January. Examinations of Semester One subjects are then held. Semester Two runs for 14 weeks from early April till mid-July. Examinations of Semester Two subjects are then held. In Year Five, the practical year, the training runs for 12 months from early October to the end of September. The Sixth and final year runs for six months from the start of October till the end of March. The final Clinical Examinations occur during this period.

Students have to complete a total of 308 hours of electives. According to the TAppV, 84 hours must be taken in basic subjects and sciences, and 126 hours in clinical sciences or food hygiene/VPH. The remaining 98 hours can be chosen by each individual student and are considered a useful orientation period for their future professional direction.

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

The VEE is to be commended for its well-structured and well-implemented study programme.

The VEE is a very large establishment consisting of a community of approximately 940 staff (560 teaching staff and 380 support staff) and 2,300 students. There are 260 – 280 new student entrants per year. Everything, from admission numbers to staffing to curriculum, is tightly controlled by legislation. In the SER the VEE points out that a major issue for it is the fact that student numbers are directly linked to the number of teachers as regulated by law (Teaching Capacity Regulation of Lower Saxony).

The VEE is well-financed and the curriculum is safeguarded by legislation. However, the legislation places certain constraints on the ability of the VEE to implement change. The number of hours of training received by students is high, in line with the requirements laid

down by the legislation. This impacts the time available to students for self-learning and study. Students find the course challenging but feasible. They feel well-prepared for a career in veterinary medicine.

The Centre for E-Learning, Didactics and Educational Research (ZELDA) is a significant asset for the VEE, promoting excellence in education and carrying out research into veterinary education.

#### **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**

In accordance with the TAppV, subjects in the basic sciences are well represented and taught. The VEE has decreased the course hours in botany, chemistry, and zoology in order to facilitate an increase in course hours for clinical education and integration of professional and non-technical competences.

The VEE has identified the relatively low number of small animal necropsies as an issue. This reflects the fact that owners of companion animals are more and more reluctant to donate their deceased animals to pathology. The only ESEVT metric where a slightly negative figure has been recorded is under the category ‘number of companion animal necropsies/number of students graduating annually’. This is commented on in Area 5.1. It is pointed out in the SER that students are taught pathology using organ and biopsy samples to help compensate for the low number of necropsies and that the numbers of such samples are especially high from dogs and cats.

Teaching is carried out by a large number of institutes. For example, the Institute of Microbiology has teaching responsibility for Microbiology, Infectious Diseases and Epidemic Diseases. The latter are taught together with the Institute for Virology and the Institute for Immunology. “Notifiable animal diseases” comprises part of the subject “State veterinary medicine” and is taught together with the Institute for Virology and Institute for Biometry, Epidemiology and Information Processing. Laboratory classes are repeated three times due to the number of students. In terms of microbiology, the founding of a virtual centre (“*Zentrum für Infektionsmedizin*”) has improved communication between staff thus benefiting the coordination of teaching, diagnostic work, and research across member institutes. There are regular meetings (4 to 6 per year) to discuss details and new developments related to education/teaching and research in all fields related to infection medicine (in particular Microbiology, Virology, Parasitology, Immunology, Biochemistry, Epidemiology, Bioinformatics). An annual one-day scientific symposium focusing on infection research with external and in-house speakers and poster presentations is organised by the centre. There are no additional staff assigned to the centre. The members of this virtual centre are the members of the respective institutes that are interested in infectious diseases. The head of the “*Zentrum für Infektionsmedizin*” is elected by its members for a two-year period.

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



Staff at the Institute of Pharmacology and Toxicology have received prizes for teaching, both within the VEE and nationally. Their teaching methods and emphasis on applied aspects of their subjects are very popular with the students.

The weekly sessions where interesting clinical cases (where the animal has died and undergone post-mortem examination) are presented provide a unique opportunity for clinical and pathology staff to discuss cases and to involve students in a very valuable learning opportunity.

The decrease in course hours in some of the basic subjects has permitted an increase in teaching hours in clinical education and has facilitated the integration of professional and non-technical competences. This is a reasonable approach and is in line with an increased focus on D1C.

A particular issue has arisen in relation to acquiring sufficient companion animals for necropsy; owners are less willing than in previous years to give permission for post-mortem examination. This is compensated by the fact that all students do at least a Companion animal necropsy and the number of necropsies in other species is highly above the minimal levels and the VEE has begun to offer necropsies for free and to provide cosmetic necropsies as an option for owners of dogs and cats. In order to ensure a good supply of small animals for students to work on, animals that have died are collected and frozen until needed.

#### **3.1.2.3. 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**

The VEE dedicates a total of 1,506 hours per student (excluding electives) to the teaching of Clinical Sciences in companion animals including equine and exotic pets, 249 hours of lectures, 28h of seminars, 764 hours of supervised self-learning, 39 laboratory and desk-based work, 19 hours of non-clinical animal work and 407 of clinical animal work, which are all core and distributed over the entire curriculum and taught intra and extramurally (SER table 3.1.2.).

Education in clinical competencies starts from the 1<sup>st</sup> semester in the Clinical Skills Lab where we can find manikins and simulators, some in the 47 stations devoted to clinical sciences in companion animals (Appendix 1.6.1). Students can also voluntarily join clinical rounds in the evening and during weekends or work as student assistants in all clinics.

From the 4<sup>th</sup> to the 6<sup>th</sup> semester, theoretical teaching and practical training on VEE-owned animals is scheduled in small groups using a blended learning approach, with no differentiation between FPA and companion animals. Students can only enter the 5<sup>th</sup> semester when they have passed the exams and completed the first part of the surgical logbook.

In the 6<sup>th</sup>, 7<sup>th</sup> and 8<sup>th</sup> semesters, students rotate through the different clinics, taunting and discussing clinical cases namely on internal medicine, reproduction and surgery of dogs, cats, equine, small mammals, reptiles and ornamental birds. The clinical training rotations in the 8<sup>th</sup> semester include 28 hours per student.

In each training unit, students have hands-on training in clinical examination that includes



training in clinical reasoning, critical thinking, professional skills and EBVM. In each semester during this period, students examine patients directly for one day in the clinics and are taught examinations and diagnostic workup techniques. Every student has to write case reports, with feedback from a lecturer (1-2 students per lecturer). The surgical logbook in the Clinical Skills Lab (CSL) has to be completed by the end of the 8<sup>th</sup> semester (before the assessment of surgery on all animal species and before the PY).

During the PY, students rotate between intramural training and extramural training in private practices. They can choose their individual rotation option from five clinical options and one preclinical option (SER table 3.1.3). Students are assigned to the different services for 1 to 2 weeks and become involved with e.g. the management and patient care of medical, surgical, intensive care, anaesthesia and emergency cases. The assignment includes client communication, medical history, clinical examination, clinical reasoning, EBVM and critical thinking, blood sampling, developing a diagnostic and treatment plan, treatment and documentation. To ensure that each student on clinical rotation performs a minimum number of clinical procedures, they receive a clinical logbook with a syllabus of required procedures, which will be signed off by the clinician on duty after the student has performed this task. In the middle and at the end of each rotation, the logbooks have to be handed in and will be reviewed by the rotation coordinator who decides on the pass/fail of the rotation.

Besides, all students have to complete a compulsory elective practical training (850h EPT) Table 3.5.1.) which complements the core clinical training (1,466h CCT, all species). The fields of practice are composed of 4 blocks, including 16 weeks (8,700 hours) in clinical CA.

All the calculated indicators about intra and extra-mural patients and necropsies for CA (indicators 5, 8, 10, 11, 16 and 17) are far above the minimum and the median values, except for indicator 14, which is related to companion animal necropsies.

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

VEE demonstrates a commitment to the quality of clinical education, particularly as it relates to CAs.

Students learn in small groups and are constantly monitored, having to constantly overcome challenges in order to progress to learning levels with greater clinical autonomy.

With the exception of Indicator 14, all other parameters are in compliance with the relevant Standard in SOP 2023.

Carrying out necropsies for scientific interest (without fees) or carrying out cosmetic necropsies with subsequent cremation is a possible solution to the slight insufficiency of the aforementioned indicator. Currently, the reduction in the number of necropsies of companion animals is compensated by increasing the number of evaluations of samples of biopsied organs and necropsies of a large number of other species, particularly pigs and marine mammals where general principles are taught post-mortem examinations.

### **3.1.3.3. Suggestions for improvement**

None.

### **3.1.3.4 Decision**

The VEE is compliant with Standard 3.1.3.

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

### **3.1.4.1. Findings**

The total number of hours per student (excluding electives) for Clinical Sciences in food-producing animals (including Animal Production and Herd Health Management) is 1,782 hours (SER table 3.1.2.).

Teaching in clinical sciences in food-producing animals (FPA) is spread over the entire curriculum, from early preclinical teaching (semester 1, end of the 2<sup>nd</sup> semester, and year 2) up to hands-on clinical activities during the practical year (PY), including lectures, seminars, courses, supervised self-learning, clinical work with hospitalised patients, ambulatory clinics, emergencies, and extramural training reviewed by the VEE.

Education starts from the 1<sup>st</sup> semester with a series of stations in the Clinical Skills Lab (CSL) (Appendix 1.3.3.1 surgical logbook). Furthermore, students can elect a choice of a wide range of stations, stations 6 to 9 being devoted to FPA (Appendix 1.6.1). Theoretical and hands-on training using manikins and simulators are provided so that virtual patients can be examined in a safe environment to enhance clinical and diagnostic thinking. Students can also voluntarily join clinical rounds in the evening and during weekends or work as student assistants in all clinics.

At the end of the 2<sup>nd</sup> semester, all students have to follow 70 hours on Agriculture, Animal Breeding and Animal Husbandry at the Farm for Education and Research in Ruthe (20 km south of Hannover). This farm offers examples of housing and breeding of healthy animals.

From the 4<sup>th</sup> to the 6<sup>th</sup> semester, theoretical teaching and practical training with normal animals is scheduled for all animal species, with no differentiation between FPA and companion animals. Students can only enter the 5<sup>th</sup> semester when they have passed the exams and completed the first part of the surgical logbook. Lectures are provided by each clinic continuing into the 8<sup>th</sup> semester, and all species are considered (for FPA: cattle, pigs, small ruminants, poultry, fish, bees). The details for the number and nature of education hours are given in Table 3.1.2.

In the 6<sup>th</sup>, 7<sup>th</sup> and 8<sup>th</sup> semesters, students rotate through the different clinics. Clinical cases are taught and discussed during the clinical training sessions on patients. Every student has to write case reports, with feedback from a lecturer (1-2 students per lecturer). The clinical training in the 8<sup>th</sup> semester includes 28 hours per student. In this semester there are clinical training rotations through the clinics (including all species) on 2 days per week, comprising 28 hours per student. The 8<sup>th</sup> semester also includes lectures on various clinical subjects.

During the PY, students rotate between intramural training, extramural training in private practices and food hygiene. They can choose their individual rotation option from five clinical options and one preclinical option (SER table 3.1.3).

FPA intramural clinics and the Field Station for Epidemiology in Bakum all offer 10 weeks of clinical rotations (maximum 20 students per course, divided to 1-4 students per patient, except for surgical training, 5 students). The clinical rotations are organised for 4 days a week, with a working day of 8 h am to 5 h pm. Students work in groups of two with one animal and one supervisor, while other students observe. Clinical examination and diagnostic procedures, herd health visits, ambulatory service, daily short-term farm visits and special training herd health service in cattle, pigs, poultry and swine are taught.

For cattle, students are expected to take (supervised) case responsibility from admission to the clinic until release or referral to the Department of Pathology. Students are expected to join post-mortem examinations of their cases and to report the results of necropsies to students and clinical staff. Once a week an interdisciplinary seminar (5 hours) is organised on subjects of preventive herd health management.

Students are involved in the mobile (ambulatory) clinics which are organised for FPA, and additionally in herd health services offered for ruminants, pigs, and South American camelids.

Except for poultry (for which a 24/24h, 365/365d service is not available), students are involved in emergency rotations (from 5h pm to 8h am).

Students have a logbook with clinical procedures, which has to be signed by the on-charge clinician, and supervised by the coordinator, in order to successfully pass the rotation.

Besides, all students have to complete a compulsory elective practical training (850h EPT) (table 3.5.1.) which complements the core clinical training (1466h CCT, all species). The fields of practice can be divided into 4 blocks.

All the calculated indicators about intra and extra-mural patients, herd visits and necropsies for FPA (Annex, last page) are far above the minimal and median values, both for individual and herd values (indicators 9, 11 to 13, 15 and 17).

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

The commitment of the VEE for clinical education for clinical education in FPA (ruminants, swine, avian species, fish) is worthy of praise and commendable.

The students are initiated to clinical work very early in the curriculum, and their competences are enhanced throughout their education. Optional and elective teaching allow the students to have customised training. The group size of students per patient and supervisor/tutors per student is small. Mobile clinics and emergency services for FPA are worthy of praise.

The conception, management, and use of the Clinical Skills Lab (CSL) are commendable.

#### **3.1.4.3. Suggestions for improvement**

None.

#### **3.1.4.4. Decision**

The VEE is compliant with Standard 3.1.4.

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

#### **3.1.5.1. Findings**

The VEE dedicates a total of 707 hours in total to the teaching of VPH (including FSQ) (including lectures, SDLs, extramural): 217 hours of lectures, 176 hours of supervised self-learning, 150 laboratory and desk-based work, and 164 hours of non-clinical work which are all core and distributed from year 3 to 6 (semesters 5th-11th) and taught intra and extramurally. There are 250 compulsory extramural practical training (EPT) set by the National Authority (the TAppV) (2 x 2 weeks, 1 x 3 weeks, which include 100h in an abattoir) in government or private institutes working on different aspects of food hygiene (including slaughterhouse hygiene) and consumer protection. The VEE is situated in an area with a large population of food-producing animals, which allows the students to have enough opportunities to visit different abattoirs as well as access to carcasses for their intra-mural training. There is an in-house facility (the Institute for Food Quality and Food Safety) for teaching food science as well as a small in-house food processing unit and a butcher is employed for the VEE, so the students learn the basics of meat processing and sausage production. Food hygiene training in an abattoir is compulsory in the practical year (year 5). In addition to the core teaching in VPH, the students have to complete 308 hours of elective studies, out of which Food Hygiene is an optional subject (140h are offered in the summer term and 168h in the winter term) offered after the 2nd year (5th semester), once most of the VPH core curriculum has been covered. The groups in the in-house practical meat inspection training are of 10 students and the practicals are done at

the Bischofsholer Damm Campus. The specimens for in-house training are received from five slaughterhouses (cattle, pig, turkey and chicken abattoirs), as well as from two packing facilities. For the compulsory abattoir training the teaching is agreed between the abattoir and the VPH lecturers of the VEE.

EPT is done in public or private organisations in groups of 1-4 students (2-4 in abattoirs and public or private institutes for food hygiene, and 1-2 students during the 2 weeks at public veterinary services).

In the 9th or 10th semesters, students also have the option to complete 10-14 weeks (460h) of Food Science practical training as one of their six possible choices which is a combination of theoretical and lab work.

Students need to complete a logbook for all EPTs. The students as well as supervising official veterinarians at the external abattoirs fill in an extensive questionnaire to assess the adequacy of the training. In 2021/22 and 2022/23, 355 students completed the questionnaires with mostly positive results. 350 Veterinarians also completed the questionnaires. These are analysed to highlight potential areas to reinforce during the in-house training.

The VEE offers a relatively new (from 2022) optional Master in Food Process and Product Engineering (FPPE) at a branch office at the German Centre for Food Technology (DIL) in Quakenbrück. Veterinary students can enrol in the FPPE program in individual modules as electives.

During the COVID-19 pandemic, there was no agreement with the government to replace visits with an alternative resource, but the students were allowed to visit smaller facilities when available. The VEE staff created an extensive practical course with additional digital material to give students the opportunity to perform the extramural meat inspection at the VEE facility. Additionally, all students were offered a visit to a small slaughterhouse in Celle located close to Hannover, as most of the bigger slaughterhouses usually visited were closed for practical training.

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

The VEE staff is to be commended for their dedication to VPH teaching, especially during the COVID-19 challenging time. As part of the VEE One Welfare mission and vision, the VEE is dedicated to embedding VPH throughout the curriculum. The VEE provides higher than the average number of hours to all VPH indicators (indicators 16 and 17). Students receive a good mixture of in-house training and extramural compulsory training in VPH (including FSQ and environmental hygiene) in small groups and are well-supervised at all times. Assessment of the VPH and FSQ component of the curriculum is similar to the rest of the components and done with a mixture of written (60% weight towards final mark) and oral and practical assessments (40% weight).

#### **3.1.5.3. Suggestions for improvement**

The VEE is encouraged to continue supporting the students in finding abattoir placements where they can fulfil the 100h national requirement.

#### **3.1.5.4. Decision**

The VEE is compliant with Standard 3.1.5.

### **3.1.6. Professional Knowledge**

#### **3.1.6.1. Findings**

The teaching of professional ethics and communication begins in the first semester and runs throughout the whole course and concepts are developed as the students progress. Communication skills are taught using actors as well as through clinics when students are on rotations in the VEE or on EPT. Communication when taught in propaedeutics consists of 4 hours of lectures and 3 hours of online material.

There are a total of 88 hours of teaching on ethics and communication with 42 being lectures, 14 being seminars and 32 on supervised self-learning.

The 1st-semester course in professional studies teaches students strategies for learning and how to build the relevance of lifelong learning.

There have been changes in the curriculum increasing the hours for the acquisition of professional competences, proposed changes of the TAppV include further increase of these hours.

None of the subjects within the professional knowledge is directly assessed in summative examinations as per the TAppV.

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

The subjects taught in this section give insight for students into the variety of career options open to graduates.

Students are given information to assist in their studies, how to learn how to handle stress and in communication with clients as well as working within a team.

Communication skills are tested in the context of E-OSCEs.

They also receive formal feedback during their PY about their soft skills and performance in the clinics is checked then.

### **3.1.6.3. Suggestions for improvement**

None.

### **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**

In the SER (Fig. 3.2) there is a clear view of the QA cycle of curriculum development, its application, monitoring and actions for improvements as well as related tools and responsibilities.

The general VM programme and course-specific teaching objectives and intended learning

outcomes, available for students and teachers online, are aligned to both national and EAEVE DIC standards.

Learning objectives, clearly described in terms of knowledge and skills in a link to the SER, are regularly checked and updated before the beginning of the semester by the responsible teacher.

The VEE has in place an educational research project aimed at giving new teaching and learning tools/methods after collecting comments and suggestions regarding teaching activities from students, teachers and graduates. Comments and suggestions coming from students, graduates and teachers are discussed with lecturers by the Vice President for Teaching as mandated by the Executive Board.

Regular students' opinion results are used for curricular, organisational and infrastructural improvements. Vice-President for Teaching reads the students' evaluation and results are included in the teaching report, discussed in the ZSK, Executive Board and Senate.

Students' opinions and subsequent improvement are published yearly.

Courses are discussed with lecturers and updated according to the results of educational research (see publications of ZELDA).

Teaching and learning in an adequate environment is guaranteed by didactic training for teachers and practitioners. All new staff have to take a course in teaching at the start of their academic careers in the VEE.

Students are taught learning strategies and the relevance of lifelong learning from the 1<sup>st</sup> semester. VEE is also offering students elective courses aimed at improving learning skills in specific areas.

Regarding the monitor activities, as already reported in section 1.6, during the on-site visit, the VEE presented the yearly progress test administered voluntarily to the students of all five years.

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

The educational research project aiming to enhance the quality of teaching activities is worthy of praise.

The study programme at VEE is clearly competency-based and it is developed and implemented adequately.

Learning objectives and outcomes expected are available to both students and staff.

The students are made aware of the qualifications they will acquire and what is needed post-graduate to progress in their careers.

The PDCA cycle was clearly shown and minuted at meetings to show the constant evaluation processes being used and changes made as necessary.

The membership of the committees at all levels shows that students are involved in decision-making at all levels and that they are listened to in their requests for amendments when possible. The VEE is limited to change in some areas due to the legal framework of Lower Saxony/Germany.

Students are well aware of the importance of lifelong learning.

### **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**

Curricular content including course-specific intended learning outcomes are developed with the contribution of Expert Committees, Committee for Curriculum Affairs, E-Learning Services and the Senate and published via the learning management system.

As part of the VEE strategy and based on the results of students' opinions and assessments, learning and teaching outcomes are regularly reviewed and improved.

In a bottom-up process, institutes and clinics, previously informed about SOP D1C, are asked to propose which competence they will teach and assess. They will also decide on the theoretical/practical teaching ratio and the specific teaching format and approach. Based on this proposal and students' opinion and assessment Expert Committees, Committee for Curriculum Affairs, E-Learning Services and the Senate, develop the study programme for the next academic year.

Regular checks by members of ZELDA led by the Vice President for Teaching ensure that all D1C are taught and assessed.

Learning objectives, which include D1C, are formulated for each subject and the corresponding lectures/courses. As part of a doctoral thesis, the examiners were asked via survey which D1Cs they examine. It was shown that all D1Cs are assessed in the exams. (Ehrich, F.: Investigations on competence-oriented examinations at the University of Veterinary Medicine Hannover, Foundation, 2019 [https://elib.tiho-hannover.de/servlets/MCRFileNodeServlet/tiho\\_derivate\\_00000153/ehrichf-ws19.pdf](https://elib.tiho-hannover.de/servlets/MCRFileNodeServlet/tiho_derivate_00000153/ehrichf-ws19.pdf), p. 68-85.

The table in the chapter « 1.3.2.2 D1C » in the appendix shows that all D1Cs are taught and assessed.

Regarding the monitor activities, as already reported in sections 1.6.1 and 3.2.1, during the on-site visit, the VEE presented the yearly progress test administered voluntarily to the students of all five years.

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

Within the PDCA cycle, teaching, learning, and assessment activities as well as subjects' content and alignment are regularly monitored, reviewed and updated for each individual teaching unit.

All relevant information is available for students and teachers.

### **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 is not allowed to change the national curriculum as mandated by law and bylaws but has influence on the internal processes and the portfolio of electives.

All decisions on curricular matters are discussed in the Committee for Curricular Affairs which in turn submits the proposal to the Senate for approval.

Although the balance between theoretical and practical teaching is decided by institutes and clinics, the allocation of hours to individual courses and lectures is indicated in the “Ordinance concerning the Certification of Veterinarians” (TAppV).

As a didactical training for teaching staff, a lunch talk on “how to write learning outcomes” as well as guidelines are available within Moodle (#Lehre/ #Teaching).

In the SER (Fig. 4) a clear view of the PDCA cycle regarding curricular development, management, monitoring and improvement as well as the specific institutional responsibilities are available.

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

The excellent support to the students, analysis of their feedback and implementation of the relevant changes performed within the VEE is worthy of praise.

The VEE has a committee structure which is responsible for overseeing, managing and regularly reviewing and making changes to the curriculum and its delivery.

The PDCA cycle of teaching activities is performed in an excellent way and with a contribution from internal and external stakeholders.

At the VEE, training opportunities to enhance specific competences are available for all staff involved in curriculum delivery.

#### **3.4.3. Suggestions for improvement**

None.

#### **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**

EPT is offered

- in production animals - preclinical (70 hours)
- in each of production and companion animals - clinical 150 hours after 5th or 6th semester and 700 in 5th Year
- FSQ and VPH (250 hours)
  - Food hygiene (slaughterhouse) 100 hours in 5th-year
  - The rest of the hours (150) are done in the private or public sector.

Students must enrol, submit evaluations and sign off logbooks for EPT.

Evaluations are completed by students and supervisors.

EPT takes place on the VEE sites under the direction of academic staff as well as off-site supervised by trained staff e.g. veterinarians in practice.

EPT as described in the SER is part of the core training for students to reach D1Cs.

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

EPT is well organised with clear procedures for students to organise placements. All placements must be signed off before they are undertaken.

Students can complement and study practical aspects of the CSL. Students receive elective hour credits for all booked stations in the CSL.

Logbooks must be completed for EPT as well as internal core teachings.

### **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 five VEES in Germany have harmonised the formal elements for EPT and external

providers. These include agreements between the VEE and providers, definitions of learning objectives and logbooks, and how to monitor quality through feedback options and mutual evaluations. External supervisors must undergo a one-time training course. Feedback from students and supervisors is regularly reviewed and updated. Assigned representatives help students meet their obligations. The VP for Teaching oversees the processes alongside the DSAA.

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

The system is well organised with all the VEEs in Germany making the process simpler and standardised for students and external providers alike.

Training is given to those veterinarians/supervisors involved.

Feedback is taken from students and amends are made as appropriate.

### **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 have two information sessions covering the possible EPT placements before they enter the PY. Students are responsible for organising their schedules. Students apply to do specific placements. There are more placements available than are required for the number of students.

Within internal placements, there is a clinical logbook with learning objectives.

Different logbooks and evaluation forms are also used for external placements. These are kept under regular review.

Students are responsible for having the logbooks filled in and signed off.

Students are informed before any EPT that they can complain about placements at any time and there are clear guidelines on how to do this as well as a system for investigating and addressing complaints.

Students can use the CSL to prepare for clinical placements and improve their competences before going on placements.

Students can join placements outside of their designated ones if they wish to expand their knowledge in other areas e.g. if the focus of their placements is small animals, they can still attend one in production animal medicine.

As part of the PDCA cycle, feedback on placement preparation was taken which was lower than most feedback on EPT.

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

Evaluation forms show that over 96% of students are rated in the external EPT in small animal

clinics as good or better. Students were able to carry out their learning objectives and do many practical skills while there. 97% of students rated their supervising veterinarian as good or better.

Similar evaluations were made on slaughterhouse placements by both students and supervisors. Students rated their preparation for the placements as well, with 83% agreeing or partially agreeing it was sufficient. The VEE trialled preparation for one placement in depth and the VEE has subsequently decided to move forward to develop better training for other placements as well.

Student motivation was rated high in all cases.

Students are aware of who to contact if they have any issues while on a placement.

Students generally get the placements they have applied for.

Students can remain in touch with all aspects of the course even in their PY by attending some of the elective courses offered on top of their required ones. This is felt to be a very positive aspect of the VEE.

### **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 located on two sites: The Bischofsholer Damm Campus, situated 2 km from the town centre and the Bünteweg Campus, both connected by a tram line and a public road with a cycle track. The Bünteweg Clinical Complex includes 10 institutes and 4 clinics, namely for small animals, horses, poultry and small mammals, reptiles and birds. The Bischofsholer Damm Campus has 9 institutes, the clinical skills lab, the mobile clinic, a clinic for cattle, and a clinic for pigs, small ruminants and forensic medicine. The Establishment also has other facilities in a field station for aquatic wildlife research at Büsum, a farm in Ruthe and a field station for epidemiology in Bakum. In addition, located at the VEE, is the Research Centre for Emerging Infections and Zoonoses (RIZ), which houses and operates multidisciplinary research with biosafety levels 2 and 3 laboratories. Recently a Centre for Translational Studies (CTS) focusing on technology transfer and development of new therapeutics was added to the Campus Bünteweg.

Since 1973, the Institute of Virology at the VEE has been the EU reference laboratory for classical Swine fever with close links with the FAO, the OIE and the WHO. The Institute of Biometry, Epidemiology and Information Processing has been appointed the “WHO Collaborating Centre for Research and Training for Health at the Human-Animal Environment Interface”.

The institution's strategic plan highlights a clear strategy to deepen the growth of the digital dimension of teaching and foresees the maintenance, modernisation and expansion of its buildings and equipment. The Department of Real Estate and Facilities, responsible for the maintenance and renovation of buildings, conversions and extensions, establishes a list of priorities, prioritising those related to sustainability.

VEE demonstrates that it has policies that aim to support the health, safety and biosecurity of students, employees and animals. Specialised staff is helping and controlling institutes and clinics to maintain the needed standards as required by law. External controls are performed – animal keeping (animal welfare and care standards are controlled by the respective state authority (LAVES). Occupational health and safety, including regarding fire codes, and exposure to hazardous chemicals and substances are done by dedicated officers who report directly to the president and the Executive Board. A dedicated VEE physician provides examinations for staff and provides guidance that includes psychological stressors. VEE organises through the VEE physician vaccination campaigns (e.g., influenza vaccination, COVID-19 vaccinations). The physician is also involved in guiding students and staff in case of pregnancy. Students and staff are trained in biosecurity measures in all institutes and clinics – documents are published. A commissioner for the disabled is involved in recruitment and help for students. Internet is available to all students and staff on the entire campus (WLAN, Eduroam).

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

The VEE has a diverse and well-sized set of buildings and support farms where it is possible to conveniently develop teaching activities, with a direct connection to research that is focused on society's concerns such as the production of vaccines, for example.

VEE demonstrates in its strategic plan 2030 that it has a clear strategic vision of development in the national, European and global context, not only in the strict sense of Veterinary Medicine but aiming to lead the One Welfare, including One Health, One Medicine paradigm.

Currently, VEE has an ongoing project aimed at renovating teaching and research properties for laying hens and pigs. In the design phase is a feasibility study for the development of the BD campus with a view to integrating the food production clinic with a translational research centre and an extension centre, reconciling the space with the development of housing space.

There is a clear commitment to policies relating to accessibility, health and safety for everyone who works or visits the establishment, as well as animal welfare.

#### **4.1.3. Suggestions for improvement**

None.

#### **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**

During the period under observation, annually, an average of 265 students were enrolled in the college. In the two most important blocks (BW and BD) 3,635 seats are available in classrooms equipped with modern media resources. Students have an offer of 1,784 m<sup>2</sup> for group work, 3,860 m<sup>2</sup> for practical work and the skills laboratory provides 265 m<sup>2</sup> of useful area. The total teaching area is 5,909 m<sup>2</sup> and the total area for other activities such as study and self-learning, library, catering, locker rooms, accommodation for on-call students, and leisure, is 3,878 m<sup>2</sup>. For study or self-study 1,662 m<sup>2</sup>, 588 m<sup>2</sup> for catering, 1,300 m<sup>2</sup> for locker rooms, 210 m<sup>2</sup> for on-call students and 118 m<sup>2</sup> for leisure activities. For staff offices 14,653 m<sup>2</sup>, 13,881 m<sup>2</sup> for research laboratories,

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

The establishment has extensive, well-equipped and well-maintained facilities for teaching, research and services, worthy of praise for their relevance in promoting quality education.

The VEE demonstrates a permanent concern with the re-equipment of auditoriums and self-study rooms, taking into account technical innovation and the current number of students.

A sponsorship effort enabled the installation of more than 20 conference cameras for recording and hybrid teaching in classrooms and smaller study/teaching rooms. A very high-quality camera was also purchased to enable high quality during broadcasts. It is planned to hire IT technicians to support the auditoriums, a process that is nearing completion.

There is a plan, at a very advanced planning stage, to establish a self-study centre in the former horse clinic on the BD campus. A project to streamline communication and internal processes ("TiHo WiKi") also began.

In the bovine clinic, the access for students to lockers and changing rooms is not optimal (see 4.3.3.).

#### **4.2.3. Suggestions for improvement**

The use of an alternative location for installing student lockers should be considered.

#### **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**

VEE provides accommodation facilities including 2,106 m<sup>2</sup> for healthy animals, 2,132 m<sup>2</sup> for research animals and 2,174 m<sup>2</sup> for hospitalised animals. At the Ruthe Campus, 7,165 m<sup>2</sup> are available for healthy farm animals used for teaching purposes. 8,400 m<sup>2</sup> are available to carry out diagnostic activities and 3,074 m<sup>2</sup> are dedicated to clinical activities for different species.

During their training, students have access to state-of-the-art diagnostic and treatment



equipment.

Within the scope of VPH teaching activities and more precisely in the area of food technology of animal origin, VEE has the Institute for Food Quality and Food Safety which has an in-house facility (75 m<sup>2</sup>) for training students with carcasses collected in three slaughterhouses with which VEE has a partnership.

This institute has a good implementation with private companies in the food technology sector, which regularly provide the establishment with food samples used in its small in-house foodstuff processing unit (200m<sup>2</sup>) and allow students to visit its facilities.

A butcher is part of the staff to support meat processing and sausage production classes.

#### **4.3.2 Analysis of the findings/Comments**

The creation of a Sustainable Development Office is worthy of praise.

The analysis of the document, confirmed by the findings of the onsite visit, allows us to verify the diversity and breadth of the facilities as well as the excellence of the equipment available for the teaching-learning process. With regard to extramural teaching and particularly in the area of FSQ cooperation protocols are in place with slaughterhouses and companies that produce food of animal origin.

Related to the biosecurity in the bovine clinic, there was no clear differentiation of the clean routes and potentially infected routes for staff and students, no clean barriers at the entrance of the bovine isolation unit and insufficient separation between teaching cattle and potentially infected ones. This issue is partially compensated by excellent training in biosecurity for all students and staff and by excellent biosecurity procedures in all other departments/institutes of the VEE.

#### **4.3.3. Suggestions for improvement**

It is suggested to develop and implement in the bovine clinic the same biosecurity procedures as in the other departments/institutes of the VEE.

#### **4.3.4. Decision**

The VEE is partially compliant with Standard 4.3 because of suboptimal biosecurity procedures in the bovine clinic.

**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**



Based on a quality assessment system, VEE guarantees the provision of the highest standard in veterinary education and clinical services, applies the national fee schedule for veterinarians and is firmly committed to ESEVT standards.

With the exception of the Clinic for Poultry and the Fish Disease Research Unit, all clinical establishments have hospitalisation, emergency and intensive care units that operate permanently 5 days a week from 8 am to 5 pm. Additionally, there is an emergency service during the rest of the day and a 24-hour service during the weekend.

The Veterinary Teaching Hospital and outpatient clinics are organised to provide all students with the most comprehensive and effective practical training that begins in the 4th semester with propaedeutics and continues until PY where students are exposed to multiple cases, which facilitates the development of clinical reasoning and other practical and professional skills. All activities are recorded in the logbook and monitored by staff who regularly provide each student with individualised feedback at least twice during each clinical rotation.

The teaching-learning process includes moments in which younger students from the 6th semester onwards are immersed in the real work environment, following the activities carried out by students who are studying the PY.

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

The VEE shows outstanding companion and exotic animal clinics worthy of praise.

VTH continuously provides (24/7) its reference services with a high-quality standard, demonstrating a commitment to offering top-quality services, based on research and the best scientific evidence, which in the case of the small animal clinic was recognised with a national award in the gold category in June this year.

To maintain and even exceed the level already demonstrated, evaluation of the quality of procedures by clients (animal owners), peers and an external certification company as well as regular audits carried out within the scope of an internal quality assurance system guarantee the provision of the highest quality veterinary education and clinical services.

#### **4.4.3. Suggestions for improvement**

None.

#### **4.4.4. Decision**

The VEE is compliant with Standard 4.4.

**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**

Students have electronic cards to guarantee access to facilities.

For workplace clinical training, students must register in advance online.

During PY, students have full access to clinics including in-house pharmacies and the patient registration system and are treated as employees.

To access some facilities, such as laboratories, clinics or, more specifically, imaging facilities, students must undergo complete training in biosafety and specific training on the equipment to

be used. Communication training is provided prior to the start of the PY.

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

Access to facilities in general or specific departments is regulated by electronic devices and in some circumstances requires demonstration of prior training, as in the case of access to imaging facilities or laboratories in general.

#### **4.5.3. Suggestions for improvement**

None.

#### **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 VEE has isolation facilities for several species such as birds, cats, cattle, dogs, fishes, horses, pigs, reptiles, small mammals, small ruminants and South American camelids.

In the equine clinic patients suspected of being infectious are brought to the equine clinic by owners, unloaded in front of one of the 4 isolation boxes and moved into an isolation box without coming in contact with other horses in the clinic. The isolation boxes are located in a remote area of the clinic complex. They are completely separated from the rest of the clinic area but also separated from each other by airlocks with individual HEPA-filtered ventilation.

In the clinic for small animals, if there is a suspicion of an infection, if an infectious disease has already been confirmed, or if the patient suffers from haemorrhagic gastroenteritis, the owner is requested to bring the animal to a separate entrance at the far end of the clinic to a separate and dedicated entrance of the isolation facilities. After entering the premises, patients are examined in the isolation consultation room in the isolation facilities. Dogs remain within the isolation facilities in one of the three isolation wards with separate ventilation systems. Cats are placed into a clean transport cage lined with a waterproof pad, transported first outside and then over a staircase to the isolation ward on the 1<sup>st</sup> floor. All further investigations, treatment and exit of patients follow strict SOPs depending on the infectious agent. To further minimise the risk of infections and their spread, a traffic light system has been established:

Green Zones (e.g., general and specialised consultations, general wards, imaging) are considered infection-free, though infections can never be completely ruled out. Standard clinical clothing (elbow-free) is worn here, and no special protective measures are needed aside from basic hygiene practices. For patient treatments in normal wards, simple disposable plastic aprons are worn to protect clinical clothing and single-use gloves are used when in contact with bodily fluids.

Yellow Zones (quarantine areas) are where patients are examined, treated, or isolated under suspicion of infection, although the infection has not yet been confirmed. Special precautions

(special hygiene measures) and local barrier measures (e.g., disinfection mats, room or cage signage, personal protective equipment (PPE)) must be implemented. The prescribed PPE must be worn over the usual clinical clothing. Students may only enter these areas or examine and treat these patients when accompanied by trained personnel.

Red Zones include isolation wards (separate for cats and dogs), the isolation consultation area, and the septic operating room. These areas are for patients with confirmed infectious disease or suffering from haemorrhagic gastroenteritis (patients suspected of infection are also operated on in the septic operating room). These patients are isolated in specialised wards with a lock system, and entry and exit protocols must be followed. Only trained staff are permitted to enter the isolation wards. In addition, patient records are colour-coded: Red Dot: Confirmed infection.

Exotic pets with influenza, rabies, West Nile or Usutu virus infection are not admitted, and veterinary authorities are informed.

Animals with a suspicion of contagious diseases (e.g., chlamydia, RHD, canine distemper, myxomatosis) must not enter the building through the general entrance hall but use a dedicated external access to the isolation facility in the Clinic for Small Animals. The initial examination takes place there, and further treatment of infectious cases is either in the small animal clinic isolation facility or the animal (bird) is transferred in a box via an external door into the avian isolation room of the clinic. In neither case, the general pathways are used.

Birds (e.g., suspected chlamydiosis, psittacosis) are transferred to the avian quarantine room located in the Clinic for Small Mammals, Reptiles, and Birds. This room has special hospitalisation requirements. Birds are transported via the side entrance. The bird is first placed in a sealed box outside the clinic, then brought into the quarantine room, a restricted area under red security level protocols. The bird is placed in individual digestoriums. Comprehensive hygiene measures are implemented in this room. The first floor is devoid of other birds as the consultation rooms and bird waiting area are located on the third floor.

Reptiles: For reptiles, examination of suspicious cases in the isolation facility at the clinic for dogs and cats is also possible but we currently identify no disease that requires this procedure. Reptiles are generally brought to the clinic in sealed boxes, and we have some available (such as those in the radiology room). Reptile examinations are always conducted on the first floor. If a suspected infectious disease is identified, the reptile will remain in the quarantine room in a separate terrarium, with measures similar to those implemented in the avian room, based on the type of infection.

In-House Patients: All other hospitalised small mammals, birds, and reptiles are housed on the third floor. Special protocols for avian and small mammal patients are aligned with veterinary authorities. For reptiles, no specific legal requirements are currently in place.

Related to the cattle clinic incoming animals stay in a special entrance area until they are tested free of BHV-1. Only then can they leave the entrance area to be housed in other wards that feature single-animal boxes to avoid any direct animal-animal contact. Empty boxes in the entrance area are cleaned and disinfected right away so that there will always be enough room for new patients. Animals suspected to have a transmissible (zoonotic) infection are brought to the quarantine wards where extended biosecurity measures are followed (e.g., restricted access, disposable coveralls and aprons, cleaning and disinfection). Until the results of further diagnostic assays are obtained, animals are kept there and can only leave the area when the results are negative. Furthermore, during the daily routine work, a given order of entering the boxes is followed: BHV-1-free animals with no signs of infectious disease first, animals without clear BHV-1 status next, and animals in quarantine last. Boxes are marked with appropriate signs so that access by mistake is prevented.

With regard to the pigs and small ruminants clinics, when new patients arrive or register, the patients are first divided into the following categories: A) healthy patients for standard procedures (e.g., castration); B) patients, which are highly likely not to suffer from an infectious disease and come from a herd with a special health status (CAE, MAEDI); C) patients, which are highly likely not to suffer from an infectious disease but from a herd without specific status; D) patients, which likely suffer from an infectious disease that is less contagious and does not fall within the scope of zoonotic or notifiable diseases; E) patients with an infectious disease that is highly contagious to other animals; and F) patients with suspected notifiable disease or zoonotic infection or animals for which there is no negative result of an exclusion examination for these diseases. After categorisation, the patients of categories B), E) and F) are assigned to boxes and units dedicated to housing infected patients. The barn for category B animals does not have an isolation status but special biosecurity measures are followed. For animals of categories E) and F), separate isolation boxes and units are available, which are separated from any other area of the clinic. They can only be entered from the outside and not through other entrances in the clinic. Since both isolation units can only be entered from outside the clinic, both also have their own gates for animal delivery. The gates of the animal delivery are designed in such a way that animal transport vehicles can be placed in front of the entrances so that the animals can be unloaded or unloaded directly into or uploaded from the isolation units without entering other areas of the clinic or the public paths in front of them. The station of category F) has the highest security status. In addition to the animal stables, it has its own operating room where animals with an unclear status can undergo surgical interventions under special safety conditions, if necessary. Animals from Category E) can also be placed and treated in the stable of Category F). Animals that are placed in these stables are sampled immediately upon arrival and appropriate exclusion examinations are initiated. Regarding zoonoses and notifiable diseases, there are special arrangements agreed upon with the competent authorities to ensure that samples are processed quickly. The animals remain in the isolation stables until the results of the examination are available. For category F isolation stables, there are additional special protective measures for entering the stables, which are also closely coordinated with the trade supervisory office about occupational safety. If the presence of a corresponding infectious disease cannot be confirmed, the animals may be moved to other areas of the clinic. If the presence of the disease is confirmed, the animals remain in the isolation house and are treated in accordance with the existing disease and corresponding legal provisions.

In fish pathology and fish farming, animals are hospitalised only in exceptional cases. This is done for animals that require continuous medical care, which is not possible in a captive environment. There is no separate isolation area. Koi that are hospitalised are tested for Cyprinid Herpesvirus 3 and Carp Edema Virus. Should an animal be tested positive for one of the pathogens, no other Koi will be accommodated in the same room. All animals that must be kept stationary are kept in individual tanks with their own filter, heating, ventilation, and other equipment as required. All equipment is cleaned and disinfected between uses. Water changes are only done with our own hoses per basin. Partitions between the tanks and a sufficient distance between the tanks provide protection against splashing water. Covers on the tanks prevent the animals from jumping out. Stationary animals are only cared for by people who have not had contact with other fish during the diagnostic hours on the same day.

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

The VEE provides a detailed description of the internal trajectory of animals of each species, in the VTH when a hypothetical situation arises in which isolation is necessary. Related to cattle clinics please see 4.3.3.

#### **4.6.3. Suggestions for improvement**

Please see 4.3.3.

#### **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**

A 12-hour ambulatory training (2 x 6 hours) is mandatory for each student during the 7th and 8th semesters. In this context, home visits are carried out to cattle, pigs, small ruminants and horses in the Hannover and Bakum region. Students, in small groups of 3 students per senior veterinarian, are mandatorily assigned to the ambulatory clinics for practical field training in field veterinary medicine and herd health management in all food-producing animals such as cattle (3,845 animals, mean animals/year), small ruminants (9,876), swine (2,519), fish (260) and poultry (77).

Qualified veterinarians recruited by a national platform and working in outpatient clinics receive mandatory training from VEE, as well as guidelines and checklists that allow for standardisation and qualification of the tasks performed. These professionals are continually subject to an evaluation system that allows VEE to assess the quality of the teaching-learning process at each moment.

Students are assigned in groups from Semester 6 to 8 for clinical training to ensure that every student gains ample experience with all species. The allocation to the clinics is divided evenly. The group work in all clinics consists of workplace training and clinical training on patients. Each student has to examine at least one patient per semester and per clinic and write a report, which is to be included in the logbook. In the logbook, students have to include as a minimum one to two patients with different diseases (annotated in the resp. clinic) per clinical training session (2 hours). Training days vary depending on the semester from 4 days (6th semester) to 3 days (7th semester) to 2 days (8th semester) per week. The same number of patients/different species is examined in the Unit for Reproductive Medicine.

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

VEE has farms where all students, without exception, carry out their training supervised by professionals dedicated to the areas of field veterinary medicine and Herd Health Management.

#### **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**

This section describes the types and number of vehicles that VEE has for all assigned functions, including 28 vans with 7 to 9 spaces for transporting students. For the transport of live animals, 3 trucks, 6 vans and 3 trailers are also available, in addition to 2 vans and 3 trailers for transporting corpses. In case of bottlenecks, vehicles from other facilities are borrowed for outpatient trips so that there are always enough vehicles available.

Four live animals, drivers with appropriate transport licences and qualifications for transporting livestock are responsible for transporting the animals as well as cleaning, disinfecting and maintaining the vehicles.

There are separate trailers for transporting dead animals. Drivers are responsible for disinfection and must have completed appropriate training. The buses/vans for transporting students are driven by veterinarians, without special drivers. As the number of passengers is limited and the ride is non-commercial, a passenger transport licence is not legally required.

Vaccines when carried in vans are placed in appropriate cold boxes attached to the battery of the van. They are kept charged at night in the clinic.

All vans which carry controlled substances have a locked safe, under the rear seats which is attached to the car and can only be opened by a keyboard, known to the veterinarian in charge.

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

The transport of students, live animals, cadavers, materials of animal origin and other teaching materials occurs in accordance with national and EU standards, ensuring the safety of students and staff and the welfare of animals, and preventing the spread of infectious agents.

#### **4.8.3. Suggestions for improvement**

None.

#### **4.8.4. Decision**

The VEE is compliant with Standard 4.8.

**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 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.**

#### **4.9.1. Findings**

The Executive Board after being advised by the Department of Properties and Facilities decides on all plans for development and alteration of facilities and equipment. The Executive Board discusses these plans with the Senate, which must ratify the plans drawn up. Subsequently, budgetary issues are decided by the Board of Trustees based on annual reports, as well as internal and external audits.

Currently, issues such as occupational and safety medicine, biological safety, radiation protection and animal welfare are vectors of the greatest importance in the management of a



veterinary medicine teaching establishment.

As a result of the last assessment carried out in 2018, the central biosafety policy for people and the environment was rethought and a mandatory course on the Moodle platform on biosafety and occupational safety issues (includes training sections for laboratory classes, and clinical scenarios) was created by the Centre for Research on Emerging Infections and Zoonoses to improve biosecurity education levels. Through the creation of a “Security Week”, VEE intended to immerse all staff in an environment that facilitated their training to address these topics, referring to the central requirements, as well as the specific issues of the different services. All institutes and clinics develop biosafety/biosecurity manuals and appoint a safety officer who regularly checks and implements improvements in occupational health and safety. All students undergo biosafety training prior to assisting or working at laboratories, clinics or pathology, or their visits to farms. In particular, they are informed about organisational issues (emergency escape routes, behaviour in case of fire, etc.) and biosafety concerns (in addition to the general Moodle course) namely risks (e.g., pregnancy), hazardous chemicals, waste management or use of PPE. This information is also available on the StudIS internet platform and on billboards and wall posters.

Laboratory and animal care personnel are regularly educated on important biosafety topics.

The feedback is included in the various PDCA cycles depending on the nature of the feedback. In case staff or students have complaints, they report either to the heads of clinics or institutes (e.g., the safety of isolation facilities), to the Executive Board or directly to the Senate (e.g., animal welfare) or Senate committees including the ZSK (e.g., feedback on lecture halls, curriculum). In the case of smaller issues, the Executive Board discusses and organises immediate and quick changes for improvement. In case of major issues, the decisions are made after discussion in the respective committees and then following the entire PDCA cycle as appropriate.

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

Operational policies and procedures are regularly taught to students and systematically posted and available for students, staff and visitors, as well as the biosecurity manual.

By analysing the document, we can see VEE's commitment to issues of biosafety for people and the environment.

#### **4.9.3. Suggestions for improvement**

Please see 4.3.3.

#### **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**



The practical and safe hands-on training in all relevant areas needs a variety of animal resources.

Cadavers for training in anatomy are obtained from either VEE clinics or from external sources (e.g., veterinary clinics, veterinary practitioners, and owners) (SER table 5.1.1.). For courses in zoology, animals are obtained from commercial providers. Carcasses, isolated organs, fixed specimens, biopsies and tissue samples used in dissection courses or for demonstration during anatomy and embryology lectures are stored. Cadavers for training in necropsies and anatomy are obtained either from animals regularly submitted for diagnostic purposes or from animals submitted for non-hazardous disposal, and from the abattoirs (SER table 5.1.6. and 5.1.6b.). The number of cadavers of companion animals is slightly decreasing year after year (SER table 5.1.6. and Appendix).

Before the clinics, all students have to validate the skills they practise in the Clinical Skills Lab and learn animal handling, physiology, animal production, and propaedeutic ending by the 4<sup>th</sup> and 5<sup>th</sup> semesters. Healthy live animals used for these pre-clinical training are described in SER table 5.1.2.

From the 6<sup>th</sup> to the 8<sup>th</sup> semesters, all students rotate within the clinics to learn about patients. Diseased animals are used for undergraduate and graduate student teaching and research with informed consent of the owners. The clinics are organised as species clinics, each one has first-opinion and referral cases, and for the food-producing animals' clinics, herd health management and consultation are mandatory (SER table 5.1.7.). The number of patients is balanced for delivering teaching in all clinics. The balanced education of different species and diseases is guaranteed using the patient tracking system (SER tables 5.1.3 and 5.1.4.).

The number of first-opinion patients and referral patients is balanced for the needs for teaching. On average, about one-third of patients in the clinics are first opinion cases and two-thirds are referrals, with extreme variations depending on the species (from 0% first opinion patients in equine to 99% first opinion patients for cattle in ambulatory clinics-SER table 5.1.5.). VEE also purchases animals, especially cattle, small ruminants and pigs for particular practical exercises such as bovine C-sections, anatomy and specialised surgical techniques.

For training in FSQ, external practical training of at least 100 hours in slaughterhouses is obligatory. In addition, visits to slaughterhouses and related premises are offered in the intramural elective courses at VEE (see 3.1.5.).

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

The excellent teaching farm devoted to FPA is commendable: the management of multiple species is exemplary, the students have first and subsequent contact with species they barely know before integrating the VEE, they early learn all aspects of breeding and curing farm animals, it is also the first step to apprehend herd management and health.

The very high caseload in most species and disciplines is commendable, all indicators are far away from the minimum and most of the time far from the median values.

Food-producing animals are particularly well represented, either in individual medicine or in herd health medicine.

Cadavers of companion animals for necropsy and pathology teaching might be a point of concern in the near future, but alternative solutions have been set up (see section 3.1.3.2.).

#### **5.1.3. Suggestions for improvement**

We encourage the VEE to continue the efforts to find alternative solutions for cadavers of companion animals.

#### **5.1.4. Decision**

The VEE is compliant with Standard 5.1.

**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**

Preclinical practical training and preventive veterinary medicine take place in the teaching farm in Ruthe (20 km from VEE) and in the field station for epidemiology in Bakum (185 km from the VEE) respectively. In the farm, after the 2<sup>nd</sup> semester, the students receive instruction in veterinary measures necessary for evaluating and defining housing and feeding conditions, animal genetics, animal health, animal welfare, animal feeding, animal hygiene, botany, and biosecurity. They are involved in routine work of care and handling of cows, pigs and various kinds of poultry, under staff management (2 weeks, 70h). In the field station, 4th-year students are instructed in preventive veterinary medicine, herd health management, and farm visits (2 weeks, 70 h) with dedicated staff and close cooperation with local farmers and local practitioners (Appendix Chapter 5).

From the VEE herd/flock, visits in FAP are organised under the supervision of staff in a multidisciplinary approach (SER table 5.1.7.)

Clinical practical training at external sites in ambulatory clinics for all species except small animals, rabbits and pigeons is organised (SER table 5.1.4). One professor and veterinarians from farm animal clinics and the poultry clinic specialise in this field. Training by experienced veterinarians in VEE's ambulatory service is mandatory for all students (SER 4.7.).

External practical training is mandatory in FPA and companion animals. To support extramural practical providers, the five VEEs in Germany have harmonised the formal elements and initiated suitable training courses. The forms provided are (1) the agreement between the provider and VEE, (2) the definition of learning objectives and the documentation of the achievement of learning objectives (logbook), (3) quality monitoring through mutual evaluations and feedback options, and (4) a one-time training course for the veterinarians providing extramural training. These criteria are agreed with the Federal Association of Practising Veterinarians (BpT) which awards in addition a certificate for qualified veterinarians.

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

Practical training at external sites is organised under the supervision of teaching staff and follows the same standards as those applied in the VEE, and providers follow mandatory training. For clinical practical training in FPA, the number of animals and herds/flocks seen in the ambulatory clinics is adequate and worthy of praise. Therefore, all students are assured that they receive qualified extramural practical training.

#### **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**

In the core curriculum, nursing care skills are taught along with all clinical training. Support staff and outside trained providers teach how to monitor and manage patients with different disease severities, from routine perioperative care to critically ill patients, passing through wound management, care for recumbent patients, physiotherapy, enteral and parenteral nutrition of patients, catheter care, fluid therapy and blood transfusions, maintaining cardiovascular, renal and respiratory functions. In large animals, the skills also include milking by hand or with a machine, physiotherapy of calves with orthopaedic problems, and care of newborn calves (e.g., physical stimulation of breathing, colostrum supply).

Most of the nursing care skills are also taught in the CSL to prepare students for their work on live animals.

To ensure that each student on clinical rotation performs a minimum number of clinical procedures, they receive a logbook with a syllabus of required procedures, to be signed by the clinician on duty after the student has performed this task. At the end of each rotation, the logbooks are handed in and will be reviewed by the rotation coordinator to pass the rotation (logbooks PY).

For all extramural practical training, VEE offers guidelines and checklists (Appendix, chapter 1.3.4, pages 71-87) for veterinarians or animal clinics with all hands-on learning targets.

Each student has to write several case reports: at least one per semester in every clinic during clinical training and in PY and at least one in each clinical examination. This represents over the whole study time a total of at least 10 reports. All reports are discussed with staff, veterinarians and peers.

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

Students are trained to face all situations in the clinical work-up. The training starts with and in the CSL. Then, they are active participants for live animals from breeding and care, and from routine situations to emergency procedures in the species of veterinarian concern, under supervision and in small groups.

### **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**

In all clinics since 2010 (except for the fish unit using a different recording system), the patient record system utilised is EasyVet. This system is also used in many commercial veterinary practices. EasyVet contains approximately 840,000 cases and adds 5-6 TB of image data

annually. It holds all patient records, including DICOM pictures of X-ray, CT, MRI and ultrasound, photos and videos (endoscopy, treadmill, gait abnormalities, clinical and special examinations, surgery), and also financial and laboratory data. Students must access all the data for case discussions or record writing, and eventually discussion of costs.

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

The EasyVet system is the key tool supporting clinical examinations, clinical records and clinical teaching for students and all clinics. Its capacity and accessibility are strong points in the curriculum.

#### **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 has developed with the University a comprehensive strategy to ensure accessibility and effective learning resources for students and staff. The university has a strategy to enhance support in the area of digital learning with support through e.g. ZELDA.

Alongside traditional teaching e.g. lectures face-to-face, online lectures are also provided. Analogue resources work are used alongside digital resources to give an integrated learning experience for students and staff.

The Clinical Skills Lab is the place used for practical and clinical learning alongside those for communication skills. It comprises 90 learning stations. New models are developed here. Simulators are evaluated in electives before being more widely used.

Learning through various interactive digital formats and video materials is used as a resource to ensure that the concept of ‘never the first time on a live animal’ can be adhered to.

Some E-learning resources are disseminated through Open Educational Resources through platforms like YouTube. Competitive grant money is available to develop new concepts.

The VEE aims to support learning with students with special needs.

The library provides access to staff and students to both a large store of books as well as an ever-increasing number of open-access journals and e-books.

There are different ways to develop new teaching methods with funding and support, one for teaching students, secondly to develop new concepts and thirdly grants from Lower Saxony.

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

The VEE has an active and forward-looking approach to learning resources and is developing new ways for students to learn in person and also online.

Staff and students have used the grants available from the State to develop new E-Learning concepts.

Staff can put forward ideas for new teaching formats and have used the systems in place to support the development of these.

Staff who cannot find a course to train them in certain aspects can ask ZELDA where to find such courses and ZELDA will develop and deliver such courses if they are not available already.

### **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 library has 14 FTEs and the head of the library has a background in veterinary medicine. The staff has the requisite qualifications.

The IDS team has 15 staff of which three are veterinarians and the head is also a veterinarian specialising in IT and documentation. IT administration has three sub-teams all of which are staffed with people with advanced training or academic qualifications.

Students are given tuition in the basic IT facilities by IT support personnel. They also offer one-to-one learning if necessary. E-learning resources are available on Moodle, TiHoStudIS/TiHoDozIS and the internal homepage and other media.

The introduction to the library services begins in week one of the 1st Semester where students are given lessons in searching literature as well as database management.

Students and staff have access to reference tools.

A library committee oversees the services offered. The committee has representatives of staff and students.

Clinics, departments and institutes have small subsidiary libraries.

There is dedicated IT support for students.

The students' library cards allow them to have entrance into the libraries of all the other universities in Hannover.

The Campus Management System allows for a student's life cycle to be in one place. The MOODLE system is available to all staff and students through their email.

There are two central systems that allow students and staff access to the patient records for both clinical and laboratory data.

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

There are many dedicated staff in the libraries and IT serving both students and staff, a number of whom are trained veterinarians.

IDS provides comprehensive support for students and staff.

The Wi-Fi is available throughout the campus.

The same computer system EasyVet is used in all clinics and in ambulatory practices, although spreadsheets are also used for clinical information relating to herd health data.

#### **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 wireless network options have significantly been expanded over the past few years to allow students and staff good access across the VEE.

The VEE provides a variety of programmes for staff and students to access information including Eduroam.

To ensure the development of the learning resources, staff representing E-Learning, the CSL, the library, IDS, the Executive Board and the DSAA meet regularly.

The assessment for emerging electronic technologies is addressed through strategic planning within the IDS.

The VEE reported that there were some cyberattacks in another German university.

The library has extensive resources with over 247,800 printed media. The VEE holds subscriptions to over 329 journals in print form. Students can either purchase or borrow e-books. The library also holds dissertations and digitised historical books.

As well as the official seminars for students on the use of the library and database searches, the VEE provides self-study courses.

A campus-wide licence for EndNote is available to students and staff.

The E-Learning service provides access to many programmes such as MOODLE, instructional materials via Moodle, videos through TiHoVideos and CASUS for case-based learning.

The CSL is well equipped and has a large number of staff including veterinarians and student assistants which allows many classes to take place and practical sessions to be arranged as required. Many items are made by the technicians of the VEE.

The process is in place within the CSL to listen to suggestions and evaluations from students in the creation of new models or simulators. All learning materials are assessed by staff specialising in that particular area and existing materials are also reviewed in the same manner.



Innovative concepts like video tours of slaughterhouse practicals are being considered. Staff can use a number of different modalities for their lectures, information etc. Students need to access a variety of programmes in order to find all the information available.

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

The VEE is to be commended on its well-organised, well-equipped and well-supervised clinical skills lab.

The CSL is extending the number of staff to ensure good coverage for classes at all times. It is very responsive to new ideas, the development of new manikins and videos on practical skills to aid students.

There is continuing work taking place to enhance these systems above and this requires DSAA and IDS working together.

The electronic campus management system is currently being expanded to allow for synchronisation of individual timetables in personal apps. It is aimed that this will be linked to the electronic learning management system.

Staff report the speed in getting support for their ideas through the e-learning group.

The VEE is working to improve cybersecurity through systems and training of staff and students.

The library has sufficient funding for their needs.

Different staff use different programmes or websites to store and disseminate information for students, this can be difficult for the students to ensure they have all the information available.

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

To enhance student experiences, the continued development of virtual tours is encouraged.

A universal sign-on for the different systems would be useful for all.

The consideration of using one modality for the storage of learning materials by academic staff would be helpful.

As IT continues to evolve rapidly, continual upgrading is encouraged with appropriate budgets being allocated.

### **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 VEE advertises the VM study programme and all its relative regulations through detailed information on several websites ([www.tiho-hannover.de](http://www.tiho-hannover.de); [www.studieren-in-niedersachsen.de](http://www.studieren-in-niedersachsen.de); [www.wissen-hannover.de](http://www.wissen-hannover.de)) and on social media (YouTube channel TiHoVideos).

The VEE also takes part in public events (HochschulInformationsTage; “ABInsStudium”),

aimed at informing and interacting with prospective students regarding the study programme. Finally, every two years the VEE organises for interested people site visits to the VEE's facilities where participants can receive information on studying and working at the VEE (the last event held in November 2023).

VEE is a member of the VEE Association (Association of Veterinary Faculties) of the German-speaking countries (Austria, Germany and Switzerland). Once a year, Deans, vice deans, representatives of the professorial and non-professorial teaching staff, students, professional organisations and representatives of the Federal Government meet once a year.

Official academic partnerships and international exchange programs are described and advertised on the VEE's website.

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

All regulations related to all student's admission, progression and certification as well as adequate information regarding available educational programmes and formal cooperation with other VEEs are thoroughly advertised by different means.

#### **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**

The number of students admitted each year is restricted, identified yearly based on budgeted staff and fixed in the agreement with the Ministry for Sciences and Culture of the Lower Saxony. The general students' number is actually calculated by dividing the total teaching capacity by the so-called Curriculum Norm Value (CNW). The number of admitted vet students for 2023/2024 (261) is obtained by dividing the VEE teaching load and another normalisation factor by the CMW.

Due to the current shortage of veterinarians, the German VEEs have agreed on an overbooking and the VEE admitted 280 students last year.

To adapt equipment and facilities to the number of students, when necessary, the VEE increases the number of repeated teaching hours.

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

The number of students admitted is consistent with all the resources available at the VEE.

#### **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**

In Germany, all issues related to students' admission are regulated by a specific contract ("Staatsvertrag") between the federal states and the federal government.

In accordance with the State Contract on University Admission, applications for places on the nationally restricted degree courses in human medicine, dentistry, veterinary medicine (only in the winter semester) and pharmacy are handled by the Foundation for University Admission (SfH).

Students from all EU and associated countries apply to a central Foundation for University Admission whereas students from non-EU countries have to send their application to Uni Assist, an association providing processing and evaluation for international students' application.

From the second semester on, vet students apply directly to the VEE.

Prospective students must register for the so-called dialog-oriented service procedure (DoSV) in the online information and application portal of the SfH ([www.hochschulstart.de](http://www.hochschulstart.de)). In the portal, prospective students can then select their preferred study programme and prioritise individual university locations within the programme.

Two application deadlines are important:

- 31 May of the year for applicants who have obtained their higher education entrance qualification (Abitur or equivalent qualification) by 16 January of the application year
- 15 July of the application year for applicants who obtained their higher education entrance qualification (Abitur or equivalent qualification) after 16 January until 15 July of the application year.

Study places are then allocated by the SfH in a two-stage procedure (1) coordination phase and (2) coordinated succession in accordance with Articles 8 to 10 of the state contract, in line with the Lower Saxony Higher Education Admission Act and the relevant regulations of the respective university. The selection procedure is therefore carried out entirely by the SfH in accordance with the applicable legal regulations. The universities, including VEE, have no further influence on this.

All students have to meet prerequisites (higher education entrance qualification, admission requirements of "Hochschulstart.de" or "Uni Assist I grade and VEE prerequisites) and to perform a test system. The selection process is then finalised so that the students will be distributed in two main slots: about 10% of students (advanced quota) with particular needs/status (non-EU, extreme hardship, German Armed Forces Veterinary Services, second degree) while the remaining 90% are assigned according to the grades obtained in the high school (30%), additional aptitude rating (10%), and VEE specific indications ("AdH: Auswahlverfahren der Hochschulen"). The criteria for the 60% admission quota are applied to candidates taken from a nationwide list. A list of applicants is finally created based on individual scores.

The results of the internal selection process are monitored by the members of the Committee

for Admission (elected by the Senate) and the Executive Board.

The procedure and selection criteria for applying for a place to study veterinary medicine (and the other medical degree programmes mentioned) are described in detail on the VEE website (<https://www.tiho-hannover.de/en/studies-education/for-prospective-students/veterinary-medicine/application-to-study-veterinary-medicine>).

In addition, the SfH provides extensive information on the selection procedure for all nationwide admission-restricted degree programmes on its online portal, but unfortunately only in German (<https://www.hochschulstart.de/unterstuetzung/downloads>).

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

The selection and progression criteria are clearly defined and free of discrimination or bias.

The results of the internal selection process are regularly monitored.

### **7.3.3. Suggestions for improvement**

None.

### **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**

For disabled or ill applicants, two per cent of the places are reserved. The potential students are checked and decided upon by the Foundation for University Admissions.

In addition to the application for admission, a so-called special application can be submitted to the SfH. Prospective students can use this pathway to claim special, personally stressful life circumstances, proof of which can have a favourable effect on admission. A distinction is made between two cases: 1) the application for compensation for disadvantages to improve the average grade and 2) the hardship application. The VEE does not have any direct influence on the procedures described.

#### **1) Application for compensation for disadvantages**

The average grade is an important selection criterion for the allocation of study places. Therefore, performance impairments that have prevented applicants from achieving a better average grade (high school, "Abitur") when acquiring the higher education entrance qualification should be compensated. If such circumstances and their effects are proven, the application for admission with an improved average grade can be included in the allocation procedure. These stressful circumstances include, for example, personal health impairments, family burdens due to bringing up children or caring for relatives and other reasons.

#### **2) The hardship application**

Exceptional hardship is deemed to exist if there are special social or family-related personal reasons that make it necessary to commence studies immediately, i.e. if a delay in the start of studies by even one semester is unreasonable for personal reasons. Such a situation would be, for example, an illness with a tendency to worsen, which would make completion of the degree programme impossible if the start of studies were delayed.

In both cases, evidence must be provided to the SfH, which then decides on the special application according to strict standards.

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

The VEE has in place clear policies and procedures on how applicants with disabilities or illnesses are considered and evaluated.

#### **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 progress made by students in their studies is generally good because students are highly motivated and it is regulated by the Ordinance concerning the Certification of Veterinarians (TAppV) and by specific Study Regulation of the VEE. More than 80% of the students, admitted in the first year, will eventually graduate.

Students are admitted to the examination if they show regular and successful participation in the specific teaching activities. Examinations are divided into three progressive parts. If a student fails the first or first repeat examination, there will be another possibility three weeks after the unsuccessful examination at the earliest. Second repeat examinations can only be taken for the last time after the end of the following semester.

Students with repetitively bad marks are invited to personal consultation by DSAA, Executive Board or liaison lecturers.

Students with obvious learning problems are provided with a contact to the psychological service.

Students who have failed examinations can appeal in written form or orally to the head of the DSAA, the Executive Board or the liaison lecturers.

Procedures concerning exclusion and appeal are published on billboards or e-boards. At the beginning of the programme, the students are guided by tutors for one week. When there are special individual problems, students receive help from staff in the DSAA.

Reasons for attrition or conspicuous exam results are provided by the DSAA and discussed in the examinations committee and the ZSK. The report of the Executive Board is published on the website. The average attrition rate is 1-2%.

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

Students are well aware of the basis for decisions on their academic studies progression. The VEE has in place several mechanisms to identify and provide remediation and appropriate support for students who are not performing adequately.

Although the average attrition rate is very low, the VEE regularly monitors attrition and progression rates.

#### **7.5.3. Suggestions for improvement**

None.

#### **7.5.4. Decision**

The VEE is compliant with Standard 7.5.

**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**

Deregistration from the VM studies takes place when a student applies for it or when it has passed to final examination.

Students can be excluded if they have definitively failed an examination, when the withdrawal of the notice of admission is incontestable or immediately enforceable or if a student does not re-register within the deadline. Notifications of the exclusion contain instructions about the appeal process to the Examination Board or the Administrative Court of Hannover.

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

Students' exclusion mechanisms are clear and publicly available as well as how the VEE is managing the related appealing process.

#### **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**

The VEE offers several services all of them located on the first floor of the Bünteweg Campus.



The Department of Student and Academic Affairs (DSSA) addresses all concerns regarding registration, teaching administration, and assistance in case of illness and disability. For other issues such as study problems, career development, job selection or any personal problem, students can also consult the Vice-President for Teaching or faculty members of their choice. Within the DSSA, the International Academic Office (IAO) provides information and assistance for exchange programs' outgoing and incoming students.

Through the Diversity and Equal Opportunities office, the VEE provides female students with specific information and assistance on pregnancy- and childcare-related issues.

The Student Committee (AStA) supports all students with a wide variety of questions and also mediates between administration, professors and students. AStA and Student Parliament meet regularly with the president and vice-president for teaching and the head of DSAA where they can give their feedback.

Professional guidance weekly consulting hours (Psychological Outreach Clinic, Welfare Help Desk, Legal Advice Office) free of charge are also available for students.

Students can also be supported in several other activities such as presenting research results, participating in seminars not directly related to study content or organising social events at VEE by the Society of Friends of the VEE.

At the University sports centre, easily accessible by tram, VEE's students as well as employees of VEE can use the offer of Centre for University Sports.

Two student parishes (Protestant and Roman Catholic) are also available.

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

The VEE efficiently handles a broad range of students' needs, such as learning problems, illness, disabilities, pregnancy-, childcare-, and psychological-related issues, as well as grievances.

#### **7.7.3. Suggestions for improvement**

None.

#### **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**

Anonymous whistleblowing opportunities to report information or suspicious law/regulation violations are available. In this respect, students have to first contact the relevant teaching supervisor or the responsible committees, lecturer of confidence or students' representatives.

The Equal Opportunities Officer, the Data Protection Officer, the Internal Auditor and Anti-Corruption Officer, the Waste Management and Environmental Protection staff unit, the Occupational Safety and Fire Protection staff and the animal welfare officers manage, inform and receive questions and complaints related to their specific responsibilities.

Students' complaints can also be addressed to lecturers of confidence.

The President and the Vice-President for teaching are responsible for the resolution of students' grievances as well as for including any related problem in the PDCA cycles for QA management.

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

The VEE provides several efficient mechanisms, also anonymously, by which students can convey their needs and wants to the VEE, as well as suggestions, comments and complaints.

#### **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**

Exams take place in the lecture-free period of each semester.

The VEE has Examination Regulations (PO, Appendix 1.3.1.2) that are based on the TAppV. This law regulates the state examination for all German VEEs.

According to TAppV (Section 30), there are two formal or State examinations: the Preliminary Veterinary Examination (which takes place in two parts) and the Veterinary Examination. The outline of these exams is as follows:

Preliminary Physics comprises the following examination subjects

- Physics, including the fundamentals of Health Physics,
- Chemistry,
- Zoology, and
- Botany, including Nutritional Science, Toxicology and Herbalism.

The examinations must be taken by the end of the first year of studies.

Physics comprises the following examination subjects

- Anatomy,
- Histology and Embryology,
- Physiology,
- Biochemistry, and
- Animal Breeding and Genetics including Livestock Judging.

The examinations must be taken by the end of the second year of studies.

The Veterinary Examination comprises the examination subjects

- Animal Husbandry and Animal Hygiene,
- Animal Welfare and Ethnology,

- Animal Nutrition,
- Clinical Propaedeutics,
- Virology
- Bacteriology and Mycology,
- Parasitology,
- Control of Animal Epidemics and Infection Epidemiology
- Pharmacology and Toxicology,
- Law on Pharmaceuticals and Narcotics,
- Poultry Diseases,
- Radiology,
- Pathology and Histopathology,
- Food Science including Food Hygiene,
- Meat Hygiene,
- Milk Science,
- Reproductive Medicine,
- Internal Medicine,
- Surgery and Anaesthesiology, and
- Forensic Veterinary Medicine, Law Governing Professional Matters and Professional Conduct.

The examinations in the subjects Pathology and Histopathology, Food Hygiene, Meat Hygiene, Milk Hygiene, Internal Medicine, Surgery and Anaesthesiology, Reproductive Medicine, as well as Forensic Veterinary Medicine, Law Governing Professional Matters and Professional Conduct, may not be completed before the end of the eighth semester.

The final part of the examinations can only be taken after all courses and mandatory EPT are passed. A mixture of orals and written exams are used. All examiners are from within the VEE as they have to be registered with the local authorities and need university affiliation - this is mandated by local law.

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

Students are regularly and comprehensively assessed in all areas of their studies. Both formative and summative examinations take place providing students with a clear progression path through their studies.

#### **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**

<b>Grade</b>	<b>General definition</b>	<b>Binding assessment framework</b>
"very good" (1)	an outstanding achievement	if 90% or more of all points
"good" (2)	considerably above the average requirements	if 80% to < 90% of all points
"satisfactory" (3)	fulfils the average requirements in every respect	if 70% to < 80% of all points
"sufficient" (4)	still fulfils the requirements despite defects	if 60% to < 70% of all points
"not sufficient" (5)	does not meet the requirements due to significant deficiencies	if < 60% of all points

Students may resit the examination twice in examination subjects that they have not passed (a maximum of two retakes of an examination is allowed under law, TAppV).

There are both formative and summative categories of assessment. The most common type of assessment is multiple choice. These are carried out online. The VEE has used the electronic assessment system Q[kju:]/Q-Exam® Institution of a private provider (company IQuL GmbH) since 2008. There are more than 29 assessments across 26 subjects examined in this way. The company provides the laptops used by the students to take their exams.

Structured oral examinations (SOEs) are also used. Clinical practical skills are assessed (formative) as E-OSCEs in the CSL during the practical year (PY) and then assessed (summative) using Structured Oral (-practical) Examinations (SOEs). An E-OSCE is an electronic objective-structured clinical examination in which students must demonstrate various clinical skills. It is done in a practical setting and in a rotation process in front of an examiner at each station within a defined time frame. Students learn the clinical skills as part of a practical training session in the CSL before taking the E-OSCE. The examiners use a defined, content-reviewed checklist to assess whether the candidate has correctly performed a skill with all its sub-steps. Special software from the VEE's provider IQuL is used to record the completion of the steps on digital tablets. After the exam, students receive verbal feedback on their performance from the examiners as well as written feedback and the exam results. The advantage of this approach is that manual data entry after the exam is no longer necessary, errors in filling out forms are minimised, and the data is centrally archived. All E-OSCEs are currently formative in the CSL. It is hoped to introduce E-OSCEs as summative exams in 2025 in propaedeutics.

During the PY, students receive formal feedback about their soft skills and performance in the clinics. In four summative examinations clinical skills are examined in propaedeutics, internal medicine, surgery and reproduction medicine.

The results of written examinations are made available by the Examinations Office (part of DSAA) within 21 days on a password-protected platform, which can be accessed individually by each student. Examination results of oral examinations are announced to the student directly after the examination.

After written exams, students can access their examination documents and can complain/discuss them on an online platform, the electronic assessment system Q-Exam® Institution. Students can view their exams and comment on the exam questions. In addition, students can go to the Examination Office (Prüfungsamt/DSAA) where they can view their answers under supervision and can comment on exam questions using the electronic assessment system. Five days are allowed for this process. After the comments are made available to authors, they have 3 days to read, evaluate and comment on the students' comments. Finally, the exam coordinator reads the comments of the students and teaching staff and decides how to deal with the exam question or if necessary, will discuss the comments with other examiners / the author of the MCQ and then make a final decision. In some cases, decisions are made together with the Examination Office (DSAA). Feedback from teachers is documented using the same Q-Exam® platform.

In terms of formal exam appeals, a student has the right to see the complete examination documents and to file a complaint appealing the decision of the examiners. The appeal can be sent to DSAA or, in special cases, to the Vice President for Teaching or liaison officers. The appropriate Examinations Committee handles the appeal and makes a final decision. A legal appeal to the court is also possible. Students have five days to comment on exams. After the final release of exam scores (written or oral exams), students have to file an appeal within a week.

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

The structure and timing of examinations are clearly flagged to students. Students are aware of their rights regarding access to exam scripts and lodging an appeal.

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

None.

#### **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**

For written and practical examinations, item analyses, grade distributions and examination records may be analysed by the Examination Office (part of the DSAA) with the aim of improving future examinations. The exam coordinator carries out a post-review of the exam, which evaluates the commented items and, if necessary, modifies the examination, e.g. by removing ineffective items from the scores, after which the results are recalculated before the

exam results are finally released. Manipulation/modification is used to decide whether a question is scored, whether the maximum number of points is changed or whether points are given if the answer is correct. The exam coordinator can then decide whether the exam item:

- remains in the public pool;
- is deleted;
- is moved to the author's private pool for revision.

Under Examination Regulation 13, the use of an adjustment clause to adjust marks is possible: “If the average score achieved by all candidates is below 60%, the examination is also deemed to have been passed if the score achieved is at least 80% of the average score achieved in this examination. This rule does not apply if the average is below 40%. In this case, the entire examination must be declared invalid and repeated.”

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

The VEE has good structures and safeguards with regard to examination content, assessment design and review of assessment outcomes.

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

None.

### **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**

Blueprinting as well as defined rules for oral, practical and written examinations are in place to ensure that the teaching content is reflected in the examinations.

Students are actively involved in all committees, especially in the Committee for Curricular Affairs, and take part in curriculum development.

To encourage engagement by students, report writing, and interactive and self-directed learning classes are in place. In addition, students are involved as peer teachers in practicals, in the Clinical Skills Labs and during workplace learning.

The SER states that practical examinations are carried out using the following formats:

- the Objective Structured Long Examination Record (OSLER)
- the Mini-clinical Evaluation Exercise (MiniCEX)
- the Objective Structured Practical Examination (OSPE)
- the Objective Structured Clinical Examination (OSCE)

However, Table 8.1 does not mention OSCE, OSPE or MiniCEX. According to the examination regulations, the use of these formats is permitted, but at the moment, no OSCEs or MiniCEX are used for summative exams with the exception of the test OSCE in the clinic for small



mammals, reptiles and birds in propaedeutics.

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

The extensive use of OSCEs is commendable. The formative nature of these assessments helps drive learning. However, the use of a greater number of summative OSCEs could be particularly helpful in gauging student progression and confirming competence in key clinical skills.

#### **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**

The VEE has made significant efforts to give students the chance to check their competences before assessments at the end of a study year. An important tool is the Progress Test Tiermedizin (PTT), which allows students to receive individual feedback on their knowledge. The PTT has been offered to students in the VEE since 2013. This was a common initiative in all the German-speaking VEEs. Student participation is voluntary, but between 500 to 700 students take each test. In 2024 a software change for the PTT will take place. The VEE is cooperating with « Charité Universitätsmedizin Berlin », as they already have many years of experience with the implementation and further development of the «Progress Test Medizin » (<https://progress-test-medinin.charite.de/en/>). This will allow the PTT to be better adapted to the VEE's requirements.

Regular and successful participation in formative exams (oral and written) forms a prerequisite for admission to the state examinations. After oral exams, students receive immediate feedback from examiners.

The training and assessment of D1C is outlined in Table 1.3 in the Appendices. A large number of disciplines / subject areas contribute to this process. D1Cs are assessed in all species in propaedeutics (after the 5th semester) and in the written exam before the PY (after the 8<sup>th</sup> semester). Regular checks are conducted by members of ZELDA to ensure that all D1C are taught and assessed for every student.

A range of logbooks are used to follow student progress and the carrying out of key tasks. The logbooks cover the main species, surgical skills and patient tracking.

Students receive a clinical logbook for each of the main species (horses, cattle, small animals, small mammals/reptiles/birds, pigs/small ruminants, poultry and fishes) with a syllabus of required procedures to ensure that each student on clinical rotation performs a minimum number of clinical procedures. These procedures are signed off by the clinician on duty after the student has performed each task. The logbooks have to be handed in at the middle and at the end of each rotation. They are reviewed by the rotation coordinator who decides whether the student will pass/fail the rotation.

Every student has to keep a Logbook of Patients (“patient tracking documentation”) and upload the completed Excel spreadsheet via a Moodle course. This is to ensure each student has had access to a variety of patients. It is monitored by the different clinics. Students are assigned in groups from Semester 6 to 8 for clinical training to ensure that every student gains the necessary experience in all species. Each student has to examine at least one patient per semester and per clinic and write a report. Students receive individual feedback on a written, structured report guiding them through the clinical reasoning process. In the logbook, students have to include as a minimum one to two patients with different diseases per clinical training session (2 hours).

Individual student assessment outcomes and confirmations of progression are recorded in the student management system (HIS-in-One).

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

The VEE is to be commended for its well-developed Student Progress Test (PTT). This is a very valuable and progressive tool, permitting timely individualised feedback to students.

#### **8.5.3. Suggestions for improvement**

None.

#### **8.5.4. Decision**

The VEE is compliant with Standard 8.5.

### **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**

The teaching staff is composed of permanent full-time employees (FTE) and temporary FTE for a total of 560 people in 2023, plus PhD students, interns, residents and practitioners (SER table 9.2.1. and Appendix table 9.1.). The percentage of veterinarians in academic staff is 68% in 2023 (SER table 9.2.2.).

All staff must be contracted by the VEE and have received training to teach and assess undergraduate students.

Staff selection follows a formal procedure. The appointment procedure of professors follows the Guideline for Appointment and is discussed in the University Developmental Committee. The requested competences in research, teaching and other requested areas of competence are published. The Search Committee, the Senate and the Executive Board select the most suitable person for the vacancy. The final and formal decision on appointment is taken by the Board of Trustees. The appointment procedure for non-professorial staff is the task of the heads of institutes or clinics. After selection, the Department of Human Resources is responsible for the employment contracts.

The VEE offers different courses for the teaching staff, including a “Professional Teaching Course”, which comprises 200 hours. This course is mandatory for new teachers who do not have enough teaching training, and it is mandatory for the Habilitation process to achieve a Lecturer or Full Professor position. After finishing the course, the participants meet four times per year (16 h) in so-called “Expert Groups” to refresh and exchange their experiences with the newly acquired didactic skills.

There are multiple continuous educational courses for teaching staff, including a highly recommended course on expertise in teaching. All of these courses are financed by the VEE. The E-Learning-Service of the VEE also offers a self-service of various workshops (SER table 9.2.5.).

There are no budget posts solely for research, about 1/3 of tasks of academic staff are devoted to research.

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

VEE ensures that all staff are appropriately qualified in agreement with national, regional and EU regulations. All staff categories receive appropriate training at their entry into the VEE and during their professional career.

### **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**

The allocation of staff reflects the teaching load. The Executive Board can decide on additional posts in emergency cases such as illness or pregnancy. At all steps of decision and implementation in personnel matters, the Employee Committee and the Equal Opportunity Committee are involved. The student/teacher ratio follows legal guidelines and is calculated by the Teaching Capacity of Lower Saxony KapVO onto which VEE cannot exert influence.

The appointment procedure of professors is based on Lower Saxony University Law (NHG) and follows the VEE Guideline for Appointment. The selection and recruiting of academic staff is described too in a guideline of the Department of Human Resources. The selection and recruiting of support staff is similar to that of scientific staff. The heads of clinics/institutes formulate the necessary qualifications for the planned positions. If missing skills are recognised, VEE offers special training sessions. Staff in laboratories and animal care are instructed at regular intervals on important topics of biosecurity and animal handling. General seminars are offered by the central administration, such as training in standard computer software, or English language classes. VEE is also a member of a consortium for training and seminars, specially designed for university employees. A week of “biosecurity” is offered. Support staff involved in teaching needs to complete a basic didactic course of 4 hours, support staff involved in animal experiments is required to document continuing education.

The general procedure of appraisal, development, support and mentoring of both academic and support staff is carried out on an individual basis within institutes and clinics. In individual meetings, the current and future needs of each individual are defined and a course of action is agreed upon. Academic staff are especially encouraged and supported to obtain residency training from European Colleges or training for national board-certified veterinary specialists. Interns are supported by a tutor system.

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

The numerous and qualified teaching and support staff are commendable. All staff categories display competence and effective teaching skills in all relevant aspects of the curriculum, and they are given opportunities to develop and extend their teaching and assessment knowledge and are encouraged to improve their skills.

### **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**

All the academic staff are required to spend their working time on teaching and research. The

Teaching Obligation Regulation of Lower Saxony (LVVO) orders a teaching load of 9 hours per semester per week for professors, 10 hours for permanent scientific staff and 4 hours for temporary scientific staff. For academic staff, the distribution of tasks is 35% teaching, 35% clinical, 35% research but these figures are highly variable depending on the clinics and institutes. There are different continuous educational courses for teaching and support staff (see 9.1. and 9.2.).

Since 2022, VEE has awarded annually a teaching prize, elected by the students, as VEE recognises the performance of lecturers for their outstanding commitment to teaching veterinary medicine. The prize money is invested in the design of new teaching programmes at the institute or clinic. Furthermore, two VEE professors were awarded the teacher of the year prize from UNICUM (a German society, where students from the whole country propose their preferred lecturer, specialists select the winner).

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

All staff are given opportunities to develop and extend their teaching and assessment knowledge and are encouraged to improve their skills. VEE sets up systems of reward for teaching excellence.

### **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) equal emphasis on all aspects of teaching (including clinical teaching), research, service and other scholarly activities.**

### **9.4.1. Findings**

The teaching staff has to fulfil the requirements for didactic education and receive the necessary VEE-specific information, which prepares and accompanies staff. Programmes for professional development are proposed and strongly encouraged (SER table 9.2.5.). VEE provides an annual budget to the Equal Opportunities Office and also follows the political goals of the "Dialog Initiative for Equal Opportunities and Quality Management" of the Government of Lower Saxony with all its constituent universities. The support of female scientists is important. For female academic staff pursuing a career as professors, VEE offers possibilities for special training, e.g., mentoring, coaching or financial support to visit scientific meetings.

All staff have the opportunity to contribute to the VEE's direction and decision-making processes through various Committees (see areas 1 and 3, and Appendices). The Employee Committee also represents the employees and monitors laws, staff recruitment, collective agreements, service agreements and other provisions that grant employees' rights.

The general procedure of development, support and mentoring of both academic and support staff is carried out on an individual basis within institutes and clinics. In individual meetings, the current and future needs of each individual are defined and a course of action is agreed upon.

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

The VEE promotes lifelong learning. The staff has the opportunity to participate in decision-making processes and to contribute to the VEE's direction through direct participation in the various decisional bodies. The specific process for professional promotions could be more detailed (for example, the steps between a young graduate beginning an academic career and his accession to a professorship).

#### **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**

The assessment of teaching quality by students follows the internal Regulation of Evaluation (see Appendix 1.3.1.4 pages 62-64) according to the requirements given in the Lower Saxony University Law. In the VEE, two questionnaires are distributed to students via the intranet: one concerning the general teaching environment and the other concerning individual teachers and subjects. The questionnaires were designed by the Committee for Curricular Affairs. The questionnaires are discussed and confirmed by the Senate and Executive Board. In order to enforce the process, the students are required to evaluate at least 5 courses before they can register for electives.

The teachers are informed personally about their individual results. After the Vice President for Teaching gets the individual and overall comments, correction measures are derived. The results and the measures and improvements concerning the general teaching climate are published in the Report of the Executive Board and in the Teaching Report.

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

Teaching evaluation by the students is a fully integrated tool for continuous improvement of the VEE. Results are communicated and lead to permanent improvement.

#### **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**

Staff from all the institutes and clinics are involved in research. According to the University government law of Lower Saxony, approximately one-third of working time should be dedicated to research, although exceptions exist. Staff undergoing residencies are granted off-clinic time to do research. The VEE has provided a 278-page list of all the staff publications in the last three years. In 2023 the VEE had 604 publications and included publications from all the institutes and clinics. The VEE has scored highly in the Academic Ranking of World Universities (Shanghai Ranking) 2021: rank 3, 2022: rank 3, 2023: rank 7.

Newly hired permanent staff must have a higher degree (either PhD, European Diploma or equivalent). Despite certain staff being more focused on teaching or research, all staff are expected to split their time between teaching and research, with a minimum teaching workload established depending on their position.

The VEE has extended the Centre for E-learning, Didactics and Educational Research (ZELDA) and provides opportunities for undergraduate, postgraduate and staff to get involved in research. As an example the VEE has used the feedback data to fund a thesis student on educational research and its findings have been used to improve teaching.

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

The VEE is to be commended for the extension of ZELDA. Involvement in research is evidenced by the number of peer-reviewed publications generated in the last three years. There is also a list of 145 major funded research projects and an online database with these project details (Table 10.1.1). Research grants revenue was approximately 20 million euros/year in the last three years.

### **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**

The VEE provides all undergraduate students with research skills, starting in the first semester with an introduction to evidence-based veterinary medicine during the “Professional Studies lecture”. “Searching for literature” is the title of introductory, facultative seminars for

undergraduates and graduates. They are followed by the seminar “Information Acquisition and Utilisation” during the PY, where they are also offered journal clubs. Scientific methods are taught in person, online and through self-directing units.

There is no formal research project/master or thesis to be completed by the VEE Students, but this is compensated by the fact that research techniques are taught throughout the curriculum and students have the opportunity to complete a small research project in their practical year for 10-14 weeks. This small project can be part of a postgraduate thesis (either a PhD, Dr.med.vet or both) which over 75% of the students complete after graduation. Those students who do not complete any of the above will still understand EBVM techniques as they are embedded in a number of subjects in the intramural and extramural activities in the curriculum. The higher-than-average postgraduate studies are explained by the traditional national expectation that veterinarians should complete a thesis after graduation.

The VEE hires research student assistants and has an international research exchange student programme where those students with a special appetite for research are selected.

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

EBVM is embedded in the curriculum from the first to the last semester. The students at the VEE have enough opportunities to learn research skills and to engage in research projects, although a project as such is not a compulsory requirement for undergraduates. Most of the students will complete a research project and over 75% a thesis after graduation.

#### **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**

The VEE offers 5 different options for postgraduate research training. These can be summarised as Dr med. vet, Dr rer. nat and 3 independent PhD programmes (Veterinary Research and Animal Biology, Systems Neuroscience, Animal and Zoonotic infections), most of the students pursue further training after graduation. Moreover, since 2020, the VEE has offered a fully accredited part-time postgraduate training course in veterinary medicine (BEST-VET). Students can obtain individual certificates or graduate with an MSc degree in "Veterinary Public Health" or "Laboratory Animal Science". The VEE offers a Dr. med.vet. and Dr rer. nat. postgraduate programmes. The VEE has also active involvement in preparing the next generation and is approved by the EBVS to train European diplomats for 24 (out of 27) different disciplines. The VEE offers National Specialist training in 25 disciplines (Table 10.3.1).

The recruitment of students for these postgraduate qualifications is done during open days and by professors directly addressing highly motivated students. This approach is successful as over 75% of graduates continue their education. The majority of postgraduate students opt for Dr. med. vet. vs PhD, as this is a traditional national expectation and recognition, for example

in 2023 the VEE graduated 100 Dr.med.vet students and 29 PhD students.

The VEE has a high caseload to ensure under and postgraduate clinical students get enough exposure to cases and there is no conflict in relation to case management between under and postgraduate students, and the VEE has the flexibility to buy in extra tissues/animals if they feel any of the students need further exposure to specific techniques.

The matching of the continuing education programmes with the profession's needs is ensured by VEE staff from all the institutes and clinics involved in providing continued education courses and involvement in external events. The main focus of these are clinical subjects, VPH, animal welfare, reproduction and infectious diseases. Some of the continuing training is done through cooperation with organisations such as the Chamber of Veterinarians of Lower Saxony (TÄK) or with state institutes such as the Lower Saxony State Office for Consumer Protection and Food Safety (LAVES), which training is recognised by the Academy for Veterinary Continuing Education.

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

There are currently 66 EBVS residents and 26 interns to become European diplomates, and 155 veterinarians in training to become national experts. Most students continue their studies after graduation, with currently 724 registered at one of the VEE postgraduate research training programmes (152 on PhD, 544 Dr.med.vet (75% of the graduates), 28 Dr. rer.nat.). There are additionally 43 veterinarians completing a MS degree in Veterinary Public Health or Laboratory Animal Science. Approximately 1300 attendees completed continuing education courses in 2023. These numbers are expected to be similar in the next three years. The VEE is committed to improving internationalisation and will provide stipends to encourage students to complete PhD programmes instead of Dr.med.vet.

### **10.3.3. Suggestions for improvement**

None.

### **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 VEE QA system well explained in Standard 1.4 includes QA in research. The VEE has a specific tool for QA in research called "Hochschulindex" which is used to rank all units. All the staff is trained in teaching and have access to published literature to regularly update their teaching. The PhD programmes are organised with the Hannover Graduate School for Neurosciences, Infection Medicine and Veterinary Sciences (HGNI). The programmes are three years long, and although some differences exist, in general, the students need to complete a number of oral presentations as well as one article as first author and their thesis before they can proceed to the examination. The PhD commission has the final decision on the results. The PhD committee, formed by 10 professors (incl. Vice President for Research), 1 representative of scientific staff, 1 doctoral candidate (student) for each of the programmes has the responsibilities to review, consult and decide on all areas of the PhD programmes.

Although the graduates at the VEE do not need to write a thesis as part of their degree, the

majority of them will complete their studies with either a Dr.med.vet or Dr. rer. nat. Both are assessed after the completion of a doctoral thesis and reviewed in regard to teaching, study curriculum, assessment and admissions by the Dr. med. vet. and Dr. rer. nat committees. These committees consist of 5 professors (incl. Vice President for Research), 1 representative of the scientific staff, 1 doctoral candidate (student). Dr.vet.med. studies need 2-3 years for completion on average, the Dr. rer.nat. usually takes longer and the mean time for completion is comparable to that of a PhD (approximately 3-4 years). Most postgraduate students are on campus, especially PhD and Dr.rer.nat. students. A few students perform extramural research, which has to be approved by the respective committee. All students and supervisors enter into agreements, but it is stipulated that part of the program has to be performed at the VEE.

Regarding staff promotions, these are regulated by law and are different for the different levels (staff, professorial). However, there are no fixed requirements/number of publications that are officially mandated. The research time and number of publications are agreed upon appointment individually or during employee appraisal interviews with heads of institutes and clinics and between professors and the Executive Board. Primarily, improved salary levels of staff are reached after a certain time period in the profession/at the VEE. The salary group depends on the description of tasks and responsibilities attributed to the position. Professors apply for salary increases, normally in 4-year intervals, and have to submit their research and teaching performance to the Executive Board who decide within a certain range that is given by the state ministry. Although fixed salaries exist, those holding permanent professorships can negotiate their conditions every three years.

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

The VEE has dedicated committees to review and evaluate the research programmes offered as part of their QA system. Staff promotion criteria regarding research outputs are either clearly established at some levels, and/or personally discussed with staff at other levels.

#### **10.4.3. Suggestions for improvement**

None.

#### **10.4.4. Decision**

The VEE is compliant with Standard 10.4.

## ESEVT Indicators

<b>Name of the VEE:</b>		<b>University of Veterinary Medicine Hannover, Foundation</b>			
<b>Name &amp; mail of the VEE's Head:</b>		<b>Prof. Dr. Nikolaus Osterrieder, praesident@tiho-hannover.de</b>			
<b>Date of the form filling:</b>		<b>31 July 2024</b>			
<b>No.</b>	<b>Raw data from the last 3 complete academic years</b>	<b>2023</b>	<b>2022</b>	<b>2021</b>	<b>Mean</b>
1	n° of FTE teaching staff involved in veterinary training	258	248	233	246
2	n° of undergraduate students	1 664	1 657	1 667	1 663
3	n° of FTE veterinarians involved in veterinary training	207	199	184	197
4	n° of students graduating annually	238	250	265	251
5	n° of FTE support staff involved in veterinary training	273	274	279	275
6	n° of hours of practical (non-clinical) training	1 110	1 110	1 110	1 110
7	n° of hours of Core Clinical Training (CCT)	1 466	1 466	1 466	1 466
8	n° of hours of VPH (including FSQ) training	287	287	287	287
9	n° of hours of extra-mural practical training in VPH (including FSQ)	250	250	250	250
10	n° of companion animal patients seen intra-murally (dogs and cats)	28 040	27 687	27 629	27 785
11	n° of individual ruminant and pig patients seen intra-murally	1 107	1 239	1 284	1 210
12	n° of equine patients seen intra-murally	2 914	3 432	3 631	3 326
13	n° of rabbit, rodent, bird and exotic patients seen intra-murally	11 288	10 993	10 529	10 937
14	n° of companion animal patients seen extra-murally	0	0	0	0
15	n° of individual ruminants and pig patients seen extra-murally	16 221	15 972	16 527	16 240
16	n° of equine patients seen extra-murally	34	24	53	37
17	n° of rabbit, rodent, bird and exotic patients seen extra-murally	0	0	0	0
18	n° of visits to ruminant and pig herds	1 319	1 243	1 401	1 321
19	n° of visits to poultry and farmed rabbit units	47	23	5	25
20	n° of companion animal necropsies (dogs and cats)	325	336	365	342
21	n° of ruminant and pig necropsies	1 119	1 230	1 314	1 221
22	n° of equine necropsies	104	100	106	103
23	n° of rabbit, rodent, bird and exotic pet necropsies	762	623	857	747
24	n° of FTE specialised veterinarians involved in veterinary training	92	82	81	85
25	n° of PhD graduating annually	133	151	159	148



## ESEVT Indicators

Name of the VEE:		University of Veterinary Medicine Hannover, Foundation				
Date of the form filling:		31 July 2024				
Calculated Indicators from raw data						
			TiHo values	Median values <sup>1</sup>	Minimal values <sup>2</sup>	Balance <sup>3</sup>
11	n° of FTE teaching staff involved in veterinary training / n° of undergraduate students		0,148	0,15	0,13	0,022
12	n° of FTE veterinarians involved in veterinary training / n° of students graduating annually		0,783	0,84	0,63	0,153
13	n° of FTE support staff involved in veterinary training / n° of students graduating annually		1,097	0,88	0,54	0,557
14	n° of hours of practical (non-clinical) training		1110,000	953,50	700,59	409,4
15	n° of hours of Core Clinical Training (CCT)		1466,000	941,58	704,80	761,2
16	n° of hours of VPH (including FSQ) training		287,000	293,50	191,80	95,20
17	n° of hours of extra-mural practical training in VPH (including FSQ)		250,000	75,00	31,80	218,2
18	n° of companion animal patients seen intra-murally and extra-murally / n° of students graduating annually		110,699	67,37	44,01	66,69
19	n° of individual ruminants and pig patients seen intra-murally and extra-murally / n° of students graduating annually		69,522	18,75	9,74	59,78
110	n° of equine patients seen intra-murally and extra-murally / n° of students graduating annually		13,397	5,96	2,15	11,25
111	n° of rabbit, rodent, bird and exotic seen intra-murally and extra-murally/ n° of students graduating annually		43,572	3,11	1,16	42,41
112	n° of visits to ruminant and pig herds / n° of students graduating annually		5,263	1,29	0,54	4,723
113	n° of visits of poultry and farmed rabbit units / n° of students graduating annually		0,100	0,11	0,04	0,055
114	n° of companion animal necropsies / n° of students graduating annually		1,363	2,11	1,40	0,037
115	n° of ruminant and pig necropsies / n° of students graduating annually		4,865	1,36	0,90	3,965
116	n° of equine necropsies / n° of students graduating annually		0,412	0,18	0,10	0,312
117	n° of rabbit, rodent, bird and exotic pet necropsies / n° of students graduating annually		2,977	2,65	0,88	2,097
118	n° of FTE specialised veterinarians involved in veterinary training / n° of students graduating annually		0,339	0,27	0,06	0,279
119	n° of PhD graduating annually / n° of students graduating annually		0,588	0,15	0,07	0,518
1	Median values defined by data from VEEs with Accreditation/Approval status in May 2019					
2	Recommended minimal values calculated as the 20th percentile of data from VEEs with Accreditation/Approval status in May 2019					
3	A negative balance indicates that the Indicator is below the recommended minimal value					
*	Indicators used only for statistical purpose					

**11.1. Findings**

All Indicators are above the minimal values except I14, which is slightly below the minimal value.

**11.2. Analysis of the findings/Comments**

The relatively low number of companion animal necropsies is due to the fact that owners are more and more reluctant to donate their deceased animals to pathology. The compensations are described in Standard 5.1.

**11.3. Suggestions for improvement**

None.



**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))**

<b>Area 1. Objectives, Organisation and Quality Assurance Policy</b>	<b>C</b>	<b>PC</b>	<b>NC</b>
<b>Standard 1.1:</b> 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.	X		
<b>Standard 1.2:</b> 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.	X		
<b>Standard 1.3:</b> 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.	X		
<b>Standard 1.4:</b> 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.	X		
<b>Standard 1.5:</b> 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.	X		
<b>Standard 1.6:</b> 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		
<b>Standard 1.7:</b> 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.	X		
<b>Area 2. Finances</b>			
<b>Standard 2.1:</b> 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).	X		
<b>Standard 2.2:</b> 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.	X		
<b>Standard 2.3:</b> Resources allocation must be regularly reviewed to ensure that available resources meet the requirements.	X		
<b>Area 3. Curriculum</b>			
<b>Standard 3.1:</b> 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.	X		
<b>This concerns:</b>			

<ul style="list-style-type: none"> <li>• Basic Sciences</li> <li>• Clinical Sciences in companion animals (including equine and exotic pets)</li> <li>• Clinical Sciences in food-producing animals (including Animal Production and Herd Health Management)</li> <li>• Veterinary Public Health (including Food Safety and Quality)</li> <li>• Professional Knowledge (including soft skills, e.g. communication, team working skills, management skills).</li> </ul> <p>When part of the study programme cannot be organised because of imposed regulations or constraints, convincing compensations must be developed and implemented.</p> <p>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.</p> <p>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.</p> <p>3.1.1. General findings</p>			
3.1.2. Basic sciences	X		
3.1.3. Clinical Sciences in companion animals (including equine and exotic pets)	X		
3.1.4. Clinical Sciences in food-producing animals (including Animal Production and Herd Health Management)	X		
3.1.5. Veterinary Public Health (including Food Safety and Quality)	X		
3.1.6. Professional Knowledge (including soft skills, e.g. communication, team working skills, management skills)	X		
<p>Standard 3.2: Each study programme provided by the VEE must be competence-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.</p> <p>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.</p> <p>The VEE must also describe how it encourages and prepares students for lifelong learning.</p>	X		
<p>Standard 3.3: Programme learning outcomes must:</p> <ul style="list-style-type: none"> <li>• ensure the effective alignment of all content, teaching, learning and assessment activities of the degree programme to form a cohesive framework</li> <li>• include a description of Day One Competences</li> <li>• form the basis for explicit statements of the objectives and learning outcomes of individual units of study</li> <li>• be communicated to staff and students</li> <li>• be regularly reviewed, managed and updated to ensure they remain relevant, adequate and are effectively achieved.</li> </ul>	X		
<p>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:</p> <ul style="list-style-type: none"> <li>• determine the pedagogical basis, design, delivery methods and assessment methods of the curriculum</li> <li>• 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</li> <li>• 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</li> <li>• identify and meet training needs for all types of staff, maintaining and enhancing their competence for the ongoing curriculum development.</li> </ul>	X		
<p>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.</p> <p>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.</p>	X		

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.			
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.	X		
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.	X		
<b>Area 4. Facilities and equipment</b>			
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.	X		
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.	X		
Standard 4.3: The livestock facilities, animal housing, core clinical teaching facilities and equipment used by the VEE for teaching purposes must: <ul style="list-style-type: none"> <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> <li>• be of a high standard, well maintained and fit for the purpose</li> <li>• promote best husbandry, welfare and management practices</li> <li>• ensure relevant biosecurity</li> <li>• take into account environmental sustainability</li> <li>• be designed to enhance learning</li> </ul>		X	
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.	X		
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.	X		
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.	X		
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.	X		
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.	X		
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	X		

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.			
<b>Area 5. Animal resources and teaching material of animal origin</b>			
<b>Standard 5.1:</b> 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.	X		
<b>Standard 5.2:</b> 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.	X		
<b>Standard 5.3:</b> 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.	X		
<b>Standard 5.4:</b> 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.	X		
<b>Area 6. Learning resources</b>			
<b>Standard 6.1:</b> 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.	X		
<b>Standard 6.2:</b> 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).	X		
<b>Standard 6.3:</b> 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.	X		
<b>Area 7. Student admission, progression and welfare</b>			
<b>Standard 7.1:</b> 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.	X		
<b>Standard 7.2:</b> 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.	X		
<b>Standard 7.3:</b> 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.	X		
<b>Standard 7.4:</b> 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.	X		
<b>Standard 7.5:</b> 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.	X		
<b>Standard 7.6:</b> 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.	X		
<b>Standard 7.7:</b> 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	X		



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).			
<b>Standard 7.8:</b> 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		
<b>Area 8. Student assessment</b>			
<b>Standard 8.1:</b> 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.	X		
<b>Standard 8.2:</b> 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.	X		
<b>Standard 8.3:</b> 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.	X		
<b>Standard 8.4:</b> 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.	X		
<b>Standard 8.5:</b> 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.	X		
<b>Area 9. Teaching and support staff</b>			
<b>Standard 9.1:</b> 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.	X		
<b>Standard 9.2:</b> 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.	X		
<b>Standard 9.3:</b> 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.	X		
<b>Standard 9.4:</b> 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.	X		

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<b>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.</b>	X		
<b>Area 10. Research programmes, continuing and postgraduate education</b>			
<b>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).</b>	X		
<b>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.</b>	X		
<b>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.</b>	X		
<b>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.</b>	X		
<i>C: (total or substantial) compliance; PC: partial compliance; NC: non-compliance</i>			



## **Executive Summary**

Stiftung Tierärztliche Hochschule Hannover (University of Veterinary Medicine Hannover, called the VEE in this report) has been an independent establishment since its foundation in 1778. The VEE became an endowed university in January 2003.

With its two sites in the capital city of Lower Saxony, the Campus Bischofsholer Damm and the Campus Bünteweg, the VEE occupies an area of over 175,000 square metres. The VEE also operates teaching and research activities in Ruthe, Bakum, Büsum and Quakenbrück.

The VEE offers approximately 260 places for veterinary undergraduate study. Since 2020, the VEE has offered part-time postgraduate training courses in Veterinary Public Health and Laboratory Animal Science.

The VEE has been positively evaluated by EAEVE in 2008 and 2018.

The SER was provided on time and written in agreement with the SOP 2023. 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:

- Important focus on One Welfare, including One Health
- Excellent organisation and implementation of a Quality Assurance system in all activities
- Well-structured and well-implemented study programme
- Excellent support to students, analysis of their feedback and implementation of the relevant changes
- Extensive, well-equipped and well-maintained facilities for teaching, research and services
- Outstanding companion animal and exotic animal clinics
- Creation of an Office for Sustainable Development
- Excellent teaching farm devoted to food-producing animals
- Very high clinical caseloads in most species and disciplines
- Well-equipped, well-organised and well-supervised clinical skill labs
- Well-developed Student's Progress Test
- Numerous and well-qualified teaching and support staff

Additional commendations are described in the Visitation Report.

The VEE is compliant with most ESEVT Standards.

However, one Minor Deficiency has been identified:

- The VEE is partially compliant with Standard 4.3 because of suboptimal biosecurity procedures in the bovine clinic.

No Major Deficiency was identified.

Additional suggestions for improvement are described in this Visitation Report.

## **Glossary**

CCT: Core Clinical Training  
CSL: Clinical Skill Lab  
D1C: ESEVT Day One Competences  
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  
MWK: Ministry of Science and Culture  
OSCE: Objective Structured Clinical Examination  
PDCA: Plan Do Check Adjust  
PY: Practical Year  
QA: Quality Assurance  
SER: Self Evaluation Report  
SOP: 2023 Standard Operating Procedure  
VEE: Veterinary Education Establishment (TiHo)  
VPH: Veterinary Public Health  
VTH: Veterinary Teaching Hospital  
ZELDA: Centre for E-Learning, Didactics and Educational Research

## **Decision of ECOVE**

The Committee concluded that no Major Deficiency had been identified.

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