



VISITATION REPORT

**To the School of Veterinary Medicine and Animal Science, University of Copenhagen,
Copenhagen, Denmark**

On 13 – 17 September 2021

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Introduction

The School of Veterinary Medicine and Animal Sciences (called the Veterinary Education Establishment (VEE) in this Report) can trace its origin to 1773, making it one of the oldest Veterinary Teaching Establishments within Europe. Initially a privately run school, the Danish Government took it over in 1776. After the government built a new university at Frederiksberg, all teaching of veterinary sciences was switched to this new campus and renamed the Royal Veterinary and Agricultural University (KVL).

Today, the campus in Frederiksberg covers about 16 hectares with the Large Animal Hospital located at the Taastrup Campus, about 15 km west of Copenhagen (175 hectares). The main veterinary clinical buildings at Frederiksberg Campus were constructed from 1963 to 1976. After a completely new library was built, an extension and renovation project for the buildings on Frederiksberg Campus began in 1991.

The veterinary curriculum has undergone three major revisions within the present millennium, in 2000, 2005 and 2009. In 1987-1988, the programme was evaluated by the Advisory Committee on Veterinary Training (ACVT). In 2001, the first EAEVE Visitation took place, resulting in full approval. As one of the first Establishments in Europe the Copenhagen veterinary programme was Stage 1 and Stage 2 accredited in 2010 according to the then new EAEVE Standards, again with no major deficiencies.

The veterinary programme was evaluated by the Danish Evaluation Institute in 1998 and nationally accredited in 2016 according to the Danish Act on the Accreditation Agency for Higher Education (Accreditation Act).

In other measures of success, the VEE of the University of Copenhagen (UCPH) is ranked #3 in the Shanghai global ranking list of veterinary academic establishments and #15 in the QS-ranking list as of 2019 and #7 2021.

Main features of the VEE

The Veterinary Medicine programme at the combined Faculty of Health and Medical Sciences (SUND), is determined to be among the best veterinary study programmes in the world by

offering an international, research-based, cutting-edge education using modern educational principles and learning platforms.

In Denmark, undergraduate veterinary education is only offered under the Veterinary Medicine programme at SUND. Although postgraduate veterinary education, e.g., Master's Degree programmes and postdocs are also offered by other universities within Denmark.

SUND has 13 departments with two of them being involved in the veterinary programme:

- Department of Veterinary and Animal Sciences (D-VAS)
- Department of Veterinary Clinical Sciences (D-VCS)

Each department is headed by a Department Head who is a Doctor of Veterinary Medicine (DVM). The whole area of veterinary medicine is organised under the overarching School of Veterinary Medicine and Animal Sciences (referred to as 'VEE' in this Report), which groups the two veterinary Departments. The VEE is headed by a VEE Director who is also a DVM.

As clearly stated within the SER:

“The overall mission of the Veterinary Medicine programme at SUND is to educate highly qualified veterinarians to serve society through the continuous improvement of animal and human health. These veterinarians should have knowledge of basic animal science, disease biology and food safety from a One Health perspective, as well as knowledge of the diagnosis, treatment and prevention of animal diseases”

In order for the VEE to ensure that their graduates fully achieve the ESEVT Day One Competences, a set of competence profiles has been drawn up to ensure this outcome.

The most important goals for the Veterinary Medicine programmes are stated as:

- to develop world-class teaching and learning in line with international recommendations;
- to be a preferred research partner within the core academic fields of veterinary science;
- to communicate veterinary research and its importance for health and for the prevention, control, diagnosis and treatment of diseases in animals and humans;
- to create an attractive university environment with a view to attracting the best scientific, clinical and technical staff to the faculty, both nationally and internationally;
- to further develop the BSc and MSc curricula in line with international standards.

Main developments since the last Visitation

The Visitation report in 2010 praised the VEE as an “Exemplary European Teaching and Research Facility”. However, there were a few minor recommendations, which the VEE details under section 1.7 of the SER. All of these recommendations have been addressed, including the introduction of the overarching structure of the School of Veterinary Medicine and Animal Science with a veterinarian as School Director.

The former Department of Small Animal Clinical Sciences moved into renovated facilities at Frederiksberg Campus in 2010/2011. Further to this, in 2016 the three veterinary departments were reorganised into the present two: Department of Clinical Veterinary Science (D-VCS) and Department of Veterinary and Animal Science (D-VAS).

The 2009 curriculum has undergone minor modifications several times since 2010 following the QA-responses both internally and from external stakeholders including accrediting agencies like EAEVE and AVMA.

Major problems encountered by the VEE

- The national financial system for the universities does not fully cover the expenses for educational purposes (2% decrease every year).
- The curriculum is busy with a complex structure. A new curriculum addressing major challenges of the present curriculum is under development and will be implemented in 2023.
- Investing in the renewal of expensive infrastructure is financially challenging.
- Recruitment and retention of faculty staff for some veterinary clinical disciplines is difficult.
- Current issues with maintenance of buildings and facilities.

The ESEVT SOP 2019 as approved by the Zagreb General Assembly in May 2019 is valid for this Visitation.

Standard 1: Objectives, Organisation and QA Policy

1.1 The VEE must have as its main objective the provision, in agreement with the EU Directives and ESG recommendations, 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 all the ESEVT Standards.

1.1.1. Findings

The mission of the VEE is expressed as follows: “deliver research and research-based teaching necessary for education in veterinary medicine and animal science, including research and researched-based teaching in the challenges emanating from interaction between animals and human beings”.

Beyond this status, the VEE is part of a global strategy from SUND and UCPH to aim for scientific excellence and attractiveness.

1.1.2. Comments

- The vision and missions of the institution are clearly stated and supported. These include EU Directives and ESG recommendations.
- Learning outcomes are aligned with the ESEVT Day One Competences and the SER demonstrates that the VEE follows its mission statement taking into account all the ESEVT Standards.

1.1.3. Suggestions for improvement

None.

1.1.4. Decision

The VEE is compliant with Substandard 1.1.

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

The person responsible for the veterinary curriculum and the person(s) responsible for the professional, ethical, and academic affairs of the Veterinary Teaching Hospital (VTH) must hold a veterinary degree.

The decision-making process 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, which is itself organised in 2 departments (D-VCS and D-VAS), is part of the Faculty of Health and Medical Sciences (SUND) with five schools (Veterinary Medicine and Animal Sciences, Medical Sciences, Oral Health Sciences, Pharmaceutical Sciences, Public Health). The Faculty SUND is one of the 6 faculties of UCPH (University of Copenhagen) under the responsibility of the Ministry of Higher Education and Science.

The VEE Director, Head of Studies, Heads of Department, staff members responsible for the VTH are DVMS. The positions of VEE Director and Head of Study are currently held by the same person.

Formal decision-making process is based on a hierarchical organisation with the rector of the University (UCPH) having the overall management authority but with delegation of power from the rector to pro-rector, deans of the faculties and Department heads. The position of VEE Director is more of an advisory role, with Department heads retaining decision-making power over finances and recruitment and reporting to the Dean. However, the Director has as the chair of the VEE's Educational Board a role as an intermediary and facilitator between the Departments, particularly with regard to the curriculum.

In practice, councils, advisory committees and other collaborative bodies across UCPH are set up on a statutory or informal basis to ensure the participation of the educational community and to avoid top-down hierarchical structure.

The two departments (D-VCS and D-VAS) each have a Teaching Committee and an Occupational Health and Safety Committee. At the level of the VEE, a VEE Educational Council and a Veterinary Study Board (equivalent to a Curriculum Committee) are set up. The Study board has the decision-making power over the veterinary curriculum.

1.2.2. Comments

- A large number of councils, boards and committees where democratic decisions can be discussed reflect the capacity for dialogue and exchanges in the VEE. This large number of bodies and their split into two relatively compartmentalised departments can, however, make it difficult to have a clear and transparent view of the decision-making chain for decisions concerning the VEE as a whole.
- The hierarchical organisation from the university to the departmental level via the faculty is clear. The executive power of the VEE Director is somewhat less obvious, although his role is essential to maintain the identity of the VEE as one entity and not two separate departments.
- The visiting Team expresses concern about the way in which the two departments work together on budgetary and human resources issues.

1.2.3. Suggestions for improvement

- It is suggested that the VEE looks for any complementary or alternative organisation to avoid too strong a division into two distinct departments for which too much independence could limit the necessary interactions that are essential for integrated teaching. This is further discussed under 1.3.

1.2.4. Decision

The VEE is compliant with Substandard 1.2.

1.3 The VEE must have a strategic plan, which includes a SWOT analysis of its current activities, a list of objectives, and an operating plan with a timeframe and indicators for its implementation.

1.3.1. Findings

A SWOT analysis of the VEE was established in 2019.

The VEE is included in a wider scheme where, at the university level, a strategic plan is widely communicated and promoted.

The strategic plan of UCPH until 2023, titled “Talent and collaboration”, includes the following 4 themes:

- Attracting, developing and retaining academic talent
- Education with closer ties to research and practice
- Collaboration and societal commitment – nationally and globally
- One unified and focused university.

The strategic goals of the Faculty of Health and Medical Sciences are:

- Excellent research
- Enhancing quality of learning
- Active partnership
- An attractive working and studying environment
- Infrastructure for tomorrow’s research and education
- Developing health data science

Each department has developed its own strategy, with their own goals and indicators. However, there is no strategic plan at the level of the VEE, with indicators for its implementation.

1.3.2. Comments

- A strategic plan is developed and monitored at the level of each department. Although a development plan for the VEE exists from 2012, the two departments are quite independent of each other with a strong and structured organisation in each of them. Care should be taken that this organisation does not interfere with the necessary transversality between the so-called more fundamental disciplines (basic sciences) and the clinical disciplines.
- From a QA point of view, it would be useful to implement a SWOT analysis for each Standard of the ESEVT SOP.

1.3.3. Suggestions for improvement

- A common and shared strategic plan at the VEE level should be implemented so that such a strategy can take into account mutual departmental needs, and so analyse all the dangers and threats for the VEE as a whole.
- It is strongly suggested to use a SWOT analysis for each standard of the ESEVT SOP.

1.3.4. Decision

The VEE is not compliant with Substandard 1.3 because of the need to implement a strategic plan at the VEE level in addition to the existing plans for the two departments.

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 quality assurance, within their VEE. To achieve this, the VEE must develop and implement a strategy for the continuous enhancement of quality. 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.

1.4.1. Findings

The VEE relies on a strong culture of Quality Assurance (QA) at the level of the University with a University-wide QA system.

The faculties are responsible for study programmes under the umbrella of the University-wide QA system.

Annual Programme reports as well as Programme evaluations (at least every 6 years) are prepared according to clear guidelines and procedures.

Changes to the curricular learning outcomes involve: veterinary departments and their respective teaching committees, Board of the VEE and Employer Panel before a decision is made by the Study Board, with final approval by the Dean.

The QA system itself is evaluated periodically in order to ensure that it is continuously optimised.

Efficient communication with clear statements are made at each level (chairs of study boards, head of studies, courses organisers, exam organisers, chairs of teaching committees, VEE Director) to explain what is expected from each actor of the QA process.

The application of the quality approach in areas other than the curriculum is described in SER Appendix 1.4 and, at the level of the University, complies with the requirements of the ESG.

The UCPH was accredited by a national agency, ENQA accredited, in June 2019 following the 2015 ESG standards.

1.4.2. Comments

- The organisation of the quality process is a model at the level of the University.
- The VEE benefits from a very strong structuring of the quality approach at university level, which is then applied at the level of faculties, schools and departments with perfectly codified and formalised procedures.

1.4.3. Suggestions for improvement

None.

1.4.4. Decision

The VEE is compliant with Substandard 1.4.

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

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

1.5.1. Findings

Biannual meetings are organised with an "Employer Panel" composed of: veterinary practitioners, professional organisations, Danish Veterinary Association, agronomists. The meetings are chaired by one of the stakeholders, the VEE Director only acting as deputy.

The main topics are on study programmes' quality and relevance and matching between students' skills with the demands of the field.

An external examiner body is also involved in the examination of the relevance and quality of the programme. Their report is included in the annual study programme reports.

The VEE's ESEVT status and SER are accessible from the website.

Information about the study programme is available on the website, mainly in Danish, for further details.

1.5.2. Comments

- Interactions with stakeholders are strong and clearly institutionalised.

1.5.3. Suggestions for improvement

- A wider translation of the curriculum into English on the website could be useful to facilitate access for foreign students seeking international mobility. In general, a wider opening to international mobility (in and out) with more flexibility in the establishment of teaching agreements could be pursued.

1.5.4. Decision

The VEE is compliant with Substandard 1.5.

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.

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

1.6.1. Findings

At the University level, UCPH continuously monitors its QA activities and processes and

communicates widely on the methods through its institutional website. Graduate surveys are available on the website and evaluation reports (written by the head of studies with the study board) are available on demand.

1.6.2. Comments

- The VEE's commitment to this approach can be considered exemplary.

1.6.3. Suggestions for improvement

None.

1.6.4. Decision

The VEE is compliant with Substandard 1.6

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

1.7.1. Findings

The last ESEVT Visitation of the VEE took place in 2010 with a decision by ECOVE in January 2011. All minor suggestions listed in the report have been addressed by the VEE.

The SER also points out national accreditation by the Danish Accreditation Institution in June 2019, following the ESG-2015 standards.

1.7.2. Comments

- It is obvious that the VEE takes care to follow up on external advice and on a cyclical basis and with a continuous quality assurance process.

1.7.3. Suggestions for improvement

None.

1.7.4. Decision

The VEE is compliant with Substandard 1.7.

Standard 2. Finances

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

There are two types of government funding. The basic one which covers all basic academic and administrative activities and the one intended to fund the study programmes which are dependent on the academic progress of the students. The distribution of the two funds among the faculties takes into consideration the educational and research activities as well as the development plan approved for each department. At the department level, all courses at SUND

are financed on the basis of individual course budgets that are revised annually. The annual basic funding for the DVM programme is equivalent to similar programmes that include practical laboratory training, e.g. medicine, odontology, pharmacy and biology.

The revenues from the external research funding come from multiple sources. Overheads from research grants and services are retained by the departments. The purchase of major equipment can be done by the annual financing or by the external financing, which depends on the department.

The mission of the VEE is somewhat compromised in view of the negative balance in 2019 (Table 2.1.3), financial constraints, insufficient revenue generated by the hospitals and the difficulty in obtaining external funding for hospital infrastructure.

2.1.2. Comments

- There is an urgent need for the reallocation of the budget within SUND to maintain the sustainability and future development of the VEE to continue to deliver the curriculum.
- The Rector and the senior management group within SUND are aware of this situation and intend to correct it as soon as possible.

2.1.3. Suggestions for improvement

- Renew revenues allocation model in SUND to give a sustainable resource to the VEE.
- More clearly define the VTH finances from department finances.

2.1.4. Decision

The VEE is partially compliant with Substandard 2.1 because of the need to reallocate the budget within SUND to deliver sustainable funding for the VEE.

2.2 Clinical and field services must function as instructional resources. Instructional integrity of these resources must take priority over 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 D-VCS receives in full the income and overheads from the teaching hospitals, the clinical Master's programme, continuing education activities and overheads from external research grants. The Department decides how to spend all these income streams provided, as an educational grant since they are used in education, hospital operations and research.

The Faculty and the Departments are free to allocate funding (teaching, research, salaries, running costs or equipment).

2.2.2. Comments

- Revenues from clinical and diagnostic services should be used primarily for equipment and human resources in clinical work.

2.2.3. Suggestions for improvement

None.

2.2.4. Decision

The VEE is compliant with Substandard 2.2.

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

2.3.1. Findings

Expenditure, investments and revenue are discussed by the Head of Department at department level and with the Dean (twice a year), in this latter case the budget is also discussed. After these meetings the decisions, implementations, assessments and revisions are communicated and discussed within the department. Staff, students and stakeholders are informed of what the department intends to do. Stakeholders are informed and plans are discussed biannually during the economy/strategy meetings with the Dean' Office.

2.3.2. Comments

- There is a need for reallocation of the budget as discussed above in 2.1.

2.3.3. Suggestions for improvement

None.

2.3.4. Decision

The VEE is compliant with Substandard 2.3.

Standard 3. Curriculum

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 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), Food Safety and Quality, and Professional Knowledge.

3.1.1. General findings

3.1.1.1. Findings

The Faculty (SUND) has a 5.5 year curriculum divided into a 3 year BSc programme followed by a 2.5 year MSc -programme which fulfils the 2005/36/EC requirement for the total length of the curriculum (5 years).

This two cycle format follows the Bologna declaration. Minor tracking takes place in the MSc - programme (one semester, 26.5 ECTSs) giving students the possibility for more comprehensive knowledge in specific areas. There are six different tracks in the MSc programme. The tuition language in both programmes is Danish with a few MSc courses given in English.

The programmes are competence-based with clearly defined learning outcomes, and designed to together support and assess students in obtaining all the Day One Competences (Annex 3.3.) The aim of the BSc programme is to train undergraduates to a position for them to achieve full competences in the veterinary profession during the MSc programme. Students qualifying from the MSc programme will be awarded a license to practice within the veterinary profession without any board exams.

Students selected for the BSc programme are guaranteed admission to the MSc programme and only students obtaining this Danish BSc have automatic admission into the MSc programme. Also additional Scandinavian speaking students having BSc from other VEEs or equivalent knowledge can be admitted to the MSc programme.

All but two curriculum courses are given by either of the two veterinary Departments of the Faculty. Courses are financed at the department level whose budgets are revised annually.

The two degree concept (BSc + MSc) was designed in 2005 and developed during 2006-2008 before implementation during 2009 to 2012. Annual modifications were introduced following extensive feedback from both internal and external stakeholders.

Minor tracking is included in the elective studies utilizing six different tracks. Students are chosen for individual tracks based on their performance during their BSc studies.

Of the total of 4829 tuition hours for all students (tracking not included), 48 % (2318 h) is used for BSc programme and 52 % (2511 h) in MSc programme (SER Appendix 3.2.)

Curriculum QA procedures in SUND follow UCPH regulations. Students give feedback for each individual course. The feedback data is collected by the SUND QA-office and forwarded to the respective course organisers, who evaluate the feedback, and to the Teaching Committees and the Head of Studies. The teaching committees (with >50 % student) assess the students' feedback and the course responsible's feedback, and courses are categorised based on this feedback. The minutes of the meetings are publicly available as are the anonymised summary reports. The Head of Studies summarises the evaluations and reports to the Study Board which then reports to the Dean. Possible actions can be delivered by the Teaching committee, the organiser of the course and/or the Head of Studies, all in collaboration with the Study Board. Outcomes of the programme are assessed every third year by surveys from employers of the new graduates as well as from the graduates themselves.

Workload balance between the study years may be suboptimal as discussed within the SER.

3.1.1.2. Comments

- Curriculum is 5.5 years including the 0.5 year tracking. All students have an adequate level of experience at the time of graduation to get the license to practice within the veterinary profession.
- The curriculum is designed that within a minimum of five years, ESEVT Day One Competences are achieved by all students.
- Tracking allows students to gain more knowledge in some fields of the profession.

3.1.1.3. Suggestions for improvement

- Course leaders should give some focussed feedback to the students after the latter's own feedback on their course.
- The workload between different study years should be analysed and balanced if necessary.

3.1.1.4. Decision

The VEE is compliant with Substandard 3.1.1.

3.1.2. Basic Sciences

3.1.2.1. Findings

All EAEVE Basic Science subjects (A) are identified in the curriculum (SER Annex 3.2) with tuition volumes varying from 6 to 66 hours. To study health education subjects in Danish Universities, requires specific high school grades in mathematics, physics, chemistry and biology during their national high school education. SUND trust therefore that students have satisfactory and uniform skills and knowledge of the subjects to study Veterinary Science without having to extensively teach basic education of those subjects within the curriculum.

All ESEVT Basic Veterinary Subjects are within the programme, mainly in BSc studies and also some parts in MSc courses (142 tuition hours if MSc -thesis is not included).

3.1.2.2. Comments

- The overwhelming trust in the high school education in basic science leaves more room for the veterinary specific basic sciences and avoids unnecessary repeats.
- National needs for the veterinary profession may influence some tuition volumes (like 6 h in Feed plant biology and toxic plants).

3.1.2.3. Suggestions for improvement

- A Pathology rotation is not included in the Clinical practical work and has minimal exposure within the MSc programme (one afternoon pathological anatomy for food hygiene, and one morning with porcine necropsies on cadavers collected at pig farms during the compulsory 7,5 ECTS Herd Health rotation in Practical Herd Health management and meat inspection). The MSc programme may benefit by also including an anatomical pathology rotation in veterinary paraclinical studies. Students with some clinical experience will gain more from the subsequent tuition and better recognise the role of anatomical pathology in a multidisciplinary profession for both preventing, treating animal diseases as well as the expertise needed in Veterinary Public Health.
- Since the COVID-19 outbreak, the mink population has been eradicated and been replaced with pigs in pathology. However, the number of companion animal cadavers is rather low compared to the number of undergraduate students, and planned efforts to increase cadavers from private hospitals should be encouraged.

3.1.2.4. Decision

The VEE is compliant with Substandard 3.1.2.

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

3.1.3.1. Findings

Clinical training starts in the 3rd year of the BSc course and continues through the 1st and the 2nd year of the MSc course. Clinical teaching for companion animals and large animals (horses, ruminants and pigs) starts with basic propaedeutic lectures of large animal veterinary medicine (Large Animal Basic Clinical Theory (BCT) and companion animal medicine (Companion Animal BCT).

In the first semester of the MSc programme, the courses Medicine, Surgery and Reproduction (MSR) of companion animals and large animals are taught to provide theoretical knowledge and the core hands-on practical exercises in companion animals and ruminants, pigs and horses. The exercises comprise handling of dogs and cats, clinical examination and basic anaesthetic and surgical techniques including aseptic and biosecurity procedures, making use of skills lab

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facilities, teaching dogs, horses and pigs. The dogs used for teaching are client-owned dogs that are recruited on a voluntary basis. Surgery and anaesthesia training is done in groups of 3-5 students using skills lab training and subsequent training on purpose-bred pigs (research animals) which are euthanized after the training session.

The core clinical rotation takes place in the 2nd semester of MSc year 1 and the 1st semester of MSc year 2. Students are assigned to four groups of 45 students progressing through the following rotating courses: Veterinary Imaging; Veterinary Paraclinics; Emergency, Obstetrics, Critical Care and Clinical Anaesthesiology (including night duties at both VTHs); Practical Herd Health Management and Meat Inspection; General Clinical Practice, Large Animals; General Clinical Practice, Companion Animals. The latter two courses cover hands-on clinical training in medicine, surgery, reproduction and therapy with a focus on primary/first-opinion cases, basic surgical procedures and basic gynaecological/andrological procedures. For a number of these clinical activities, one teacher supervises 12 students and up to 4 students share a patient, although for General Clinical Practice, Companion Animals, there are 2 teachers supervising 10-12 students (one teacher per 5-6 students) and students work in groups of 2 students on a patient.

During these core rotations in the companion animal hospital, students are in contact with basic cases. They examine first opinion cases, which do not need further work-up and they do consultations for vaccinations. If a patient needs an advanced diagnostic procedure, it is rescheduled and cared for by a specialist service.

Following the same idea, students in the core rotation can participate in basic surgery such as spay and neuter procedures. The vast majority of patients are dogs and cats. During the Large Animal Core rotation, students, in groups of 2 to 4, learn how to perform basic diagnostic procedures on the teaching animals. They further participate in the clinical work of the equine hospital and the ruminant/swine clinic during a 20-day and 9-day period, respectively. The equine hospital benefits from a varied caseload of medical and surgical first opinion and referral cases (1400/year), while the ruminant/swine hospital attracts patients through a reduced price system (150 cattle, 50 small ruminants, 5 pigs) and by referred animals from local practices.

There are limited periods spent in EPT: two weeks with companion animals and 4 days with large animals during the core clinical rotations.

Elective tracks: Students will then do one of five elective tracks, including “Companion Animal Track” (60 students) or “Equine Clinic Track” (25 students). The tracks are 17-week long rotations taking place either in the 2nd semester of the 5th or the 1st semester of 6th year. Admission to the limited number of places in the more popular tracks (equine and companion animal) is decided on the basis of the examination results of the BSc subjects. The trackings include an EPT period of either 3 to 4 weeks for the companion animals and 2 to 3 weeks during the equine track. There is a designated academic staff member responsible for this EPT teaching. A teaching agreement is signed by the student and by the practitioner. The student’s performance is roughly evaluated as satisfactory or not, while the student can give an evaluation on his EPT activity. Alternatively, the student is preparing their final year thesis in either the 2nd semester of 5th year or 1st semester of 6th year.

Students attending clinics during the companion animal tracking will be exposed to advanced clinical cases seen by the institute specialists in their respective field, such as for example neurology or cardiology. These cases generally require a more complete work-up and advanced diagnostic techniques, which are attended by the students in charge of the case. The hospital

provides surgical service for soft tissue and orthopaedic surgery, however there is no ophthalmological surgeon operating in the clinic premises. During the equine tracking, students participate in all clinical activities involving patients admitted for specialist care.

Both periods, core rotations and tracking, include night-time and weekend on-call activities in the equine as well as in the companion animal hospital.

3.1.3.2. Comments

- The teaching staff should be congratulated for their commitment and devotion to clinical teaching.
- In the current curriculum, students are in contact with live animals only from the 2nd and 3rd year on, while students would appreciate having contact with live animals earlier in their curriculum. This is already being addressed by the curriculum-revision process currently underway, with the aim to allow students contact with live animals earlier in the curriculum.
- The theoretical teaching hours and the number of clinical cases of exotic pet animals are lower than what would be expected from a modern teaching programme. Regularly, appointments or exotic cases need to be postponed or referred to private clinics due to the non-availability of dedicated exotic animal staff.
- Students in the core rotation are in contact with basic cases, while the more complicated ones are reserved for the students in the companion animal track. When a first opinion case received by core rotation students requires further special examination, the score students that are handling the case may follow this to the speciality e.g. imaging, cardiology, oncology, neurology together with companion animal track students. Other referral cases are generally only seen by companion animal track students.
- Although gaining autonomy on basic consultations (e.g. vaccination) and basic surgeries (spay/neutering) is essential, giving all students the additional opportunity to explore advanced cases with complete diagnostic work-up would be desirable. Basic and advanced cases need to be provided in sufficient numbers in order to allow students to gain experience in all aspects of modern companion animal medicine and surgery.

3.1.3.3. Suggestions for improvement

- Deciding on admission to the popular tracks (equine and companion animal) solely based on a score calculated from the BSc examinations could be extended with, for example, a motivational letter from the student outlining their reasons for this preference or dividing the track up into smaller tracks, offering more students the chance to get some instead of no experience.

3.1.3.4 Decision

The VEE is partially compliant with Substandard 3.1.3 because of the low number of teaching hours in exotic animal medicine (physiology, handling, medicine and clinical skills) within the veterinary curriculum.

The VEE is partially compliant with Substandard 3.1.3 because of the limited access for students in the core companion animal rotation to more advanced medical and surgical cases.

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

3.1.4.1. Findings

Both BSc (year 1-3) and MSc (year 4-6) programmes include Animal Production subjects: Animal Nutrition, Animal Breeding, Herd Health Management, Large Animal Basic Clinical Theory (year 3), supplemented by lectures on medicine and therapy in swine; lectures and exercises on poultry, fish and mink diseases; basic preventive medicine and herd health management. Animal Production topics are expanded within the MSc programme in the core rotation course (Practical Herd Health Management and Meat inspection). 51 hours are allocated for Animal Production and Breeding, divided into 26 hrs of lectures, 20 hrs desk-based work, 2 and 3 hr are allocated for non-clinical animal work and other areas. 12 hrs are allocated for the subject Herd Health Management, 6 being lectures and 5 desk-based work.

Clinical skills in food producing animals starts in the first semester of the MSc programme (MSR-Large Animals). Within these subjects students get hands-on practical propaedeutic exercises (clinical examination and basic anaesthetic and surgical techniques including aseptic and biosecurity procedures, making use of the skills lab facilities, teaching dogs, horses and pigs, as well as selected ruminant and pig patients).

The Clinical rotation includes 6 weeks of training in food producing animals. Three weeks are spent with the General Clinical Practice, Large Animal core rotation, 2 weeks of supervised teaching at farms for the Practical Herd Health and Meat Inspection course. In addition, 2 weeks of acute medicine and clinical obstetrics (including horses at the Equine Hospital) for the Acute Medicine, Obstetrics, Intensive Therapy and Clinical Anaesthesiology core clinical course, including 3 evening/night duties.

3.1.4.2. Comments

None.

3.1.4.3. Suggestions for improvement

None.

3.1.4.4. Decision

The VEE is compliant with Substandard 3.1.4.

3.1.5. Food Safety and Quality

3.1.5.1. Findings

FSQ, VPH and the One Health Concept are crucial courses in the curricula of BSc, MSc and Track.

During the three years of the BSc, students are taught the important role of the veterinarian in safeguarding public health through the identification and control of zoonoses, the control of antibiotic resistance, basic risk assessment; risk analyses; zoonotic pathogens, their transmission and control within the food chain. They are also taught the principles of food technology, HACCP and its application in the food and retail industries, patho-anatomical basis for meat inspection, the veterinary legislation in which is taught matters like the official controls, important regulations in the exercise of the veterinary profession and certification.

During the Master's programme students learn to manage zoonotic diseases and animal welfare issues relating to the slaughter process, especially in pigs and cattle; they also learn subjects related with food hygiene control and inspection, including *ante* and *post mortem* inspection of pigs and cattle at abattoirs; at a food-processing facility they learn and practice the auditing of food producing and the related legislation.

Each student takes 332 curriculum hours in FSQ and VPH, and 37h extra-mural post-mortem teaching directly supervised by teachers at the collaborating slaughterhouses.

Students go in groups of 12-23 accompanied by two teachers.

The FSQ and VPH syllabi allow students to achieve the minimum Day One Competences which are required for probationary employment as Official Veterinarians and it is accepted by the competent veterinary authority.

3.1.5.2. Comments

- Students have the recommended hours of theoretical teaching and enough hours of EPT, which gives them sufficient skills to be able to work as a probationary Official Veterinarian.

3.1.5.3. Suggestions for improvement

None.

3.1.5.4. Decision

The VEE is compliant with Substandard 3.1.5.

3.1.6. Professional Knowledge

3.1.6.1. Findings

Professional knowledge is presented in various courses during the BSc programme: Ethics, communication, economics, practice management, philosophy, data management and interpretation. Scientific literacy skills are taught in conjunction with students writing a BSc thesis. Furthermore, the professional veterinary tasks as a Danish Herd Veterinarian and an Official Veterinarian are taught in the final year of the bachelor programme.

Client communication together with professional ethics and animal welfare are taught in the third year of the bachelor programme, in both the LA and SA clinical theory courses, and in the Veterinary Jurisdiction and Laboratory animal Science course. Moreover, Professional ethics is introduced in year 1 in the course Veterinary Ethics and Philosophy of Science.

During the MSc-programme all the professional knowledge is an integral part of the practical and clinical training. In the EPT, professional knowledge is addressed as a specific topic. Veterinary Legislation and obligations towards animal welfare are specifically addressed as a separate course. The BSc and MSc theses are used as an assessment for information literacy and critical thinking on research versus evidence data.

While alumni are in general keen to attend CPD courses to update and expand their knowledge, there is no national requirement in Denmark for annual minimal CPD to retain the license to practice.

3.1.6.2. Comments

- The limited amount of training in communication skills is partially compensated by the interactions with clients during the rotations in the clinics. Nevertheless, there is a demand out of the field and from students to get better preparation for them to deal with emotional, angry and unreasonable clients.

3.1.6.3. Suggestions for improvement

- Increase course content in communication skills and the availability to practice role play

- prior to communicating with clients.
- Constantly review the use of live animals for teaching purposes in line with the changing ethics of the general public.
- Promote CPD to students and alumni to make lifelong learning a part of the professional responsibility to keep updated. Also CPD can be a way of learning for established veterinarians who want to enhance the services provided or change scope of their work and the kind of patients they see and treat.

3.1.6.4 Decision

The VEE is compliant with Substandard 3.1.6.

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 an academic 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 self-learning and lifelong learning.

3.2.1. Findings

The VEE implements a curriculum that takes into account a competencies approach. Individual courses are supported by intended learning outcomes clearly laid out in a digital syllabus.

Competencies embrace the ESEVT D1C (Day 1 Competences) and additional competencies decided by the VEE on the basis of Danish societal needs.

A competency matrix was established to provide an overview of how courses of the curriculum supports and assesses the development of D1C.

The VEE also uses surveys for veterinary employers and new graduates in order to assess the degree of satisfaction of employers with the graduates they hire and the degree of confidence of new graduates in the acquisition of each of the expected D1C.

The QA system promotes further developing teaching and didactic competencies conducive to learning and study environment surveys enable the prioritisation of actions to be taken to improve the learning conditions of students.

The VEE reports a number of self-learning activities including case work, project work, peer-feedback session, self-reflection, etc. Students are encouraged to identify gaps in their knowledge and competencies and to plan action for overcoming these; however, the list of specific ESEVT D1C is not easily accessible for students although learning goals (knowledge, skills and competences / prof. attitudes), including D1C and the specific outcomes measured at examinations are listed and readily available for all students at the UCPH course data bank: <https://kurser.ku.dk/>. At all course pages at the CANVAS LMS (Absalon) there is a link to the specific course syllabus. In reality, the students' knowledge of the existence of these lists is rather unclear.

A curriculum-revision process is currently underway, according to the principle of the VEE's QA system. The new BSc and MSc curricula are expected to be implemented in September 2022 and September 2025, respectively. New pedagogical ideas for improvement include solving the following problems identified by the VEE in its programme:

- An inadequate vertical relationship between basic veterinary science elements within the BSc programme and the professional clinical/FSQ elements in MSc programme;
- Fragmentation of learning in the BSc programme driven by a combination of:
 1. Many summative exams, mainly evaluating students' ability to rote-learn disciplinary facts
 2. Limited self-study time,
 3. Few formative and summative assessments with emphasis on scientific analysis, reasoning and synthesis;
- An excessive study load in the first semester of the MSc programme;
- The need for a clearer focus on communication and collaboration skills;
- Inclusion of a case week at the end of each semester in order to enhance both the horizontal and vertical alignment within the programmes;
- Inclusion of progress testing in order to motivate students and as an educational QA tool;
- Earlier student contact with live animals;
- More formative assessments and fewer-but-broader summative exams allowing evaluation of students' ability to perform scientific/clinical analysis, reasoning and synthesis.

3.2.2. Comments

- The VEE is clearly putting in place an effective quality system to challenge and change its teaching practices.
- All the problems of the current programme, detected by the VEE thanks to the implementation of its quality approach and listed in the SER, are indeed limitations which the visiting team also noted and which must be addressed in a near future.

3.2.3. Suggestions for improvement

- The visiting team strongly suggests that the VEE continue to make changes to its programme in line with the recommendations that the VEE has set for itself, i.e. :
 - Increasing wherever possible the bridge between basic veterinary science elements within the BSc programme and the professional clinical/FSQ elements at MSc programme;
 - Limiting the fragmentation of learning in the BSc programme with less summative exams, mainly evaluating students' ability to rote-learn disciplinary facts, increased self-study time, emphasizing of reasoning and synthesis assessments;
 - Reducing study load in the first semester of the MSc programme;
 - Increasing focus on communication and collaboration skills;
 - Bringing students into contact with live animals at an earlier stage;
 - Increasing the number of formative assessments and reducing the number of summative exams by making them more integrative.

3.2.4. Decision

The VEE is compliant with Substandard 3.2.

3.3 Programme learning outcomes must:

- ensure the effective alignment of all content, teaching, learning and assessment activities of the degree programme to form a cohesive framework
- include a description of Day One Competences
- form the basis for explicit statements of the objectives and learning outcomes of individual units of study
- be communicated to staff and students
- be regularly reviewed, managed and updated to ensure they remain relevant, adequate and are effectively achieved.

3.3.1. Findings

The learning outcomes of the 2009 BSc and MSc programmes have been recognised aligned with Day One Competences during the 2010 ESEVT Visitation. The alignment was rechecked on 12 March 2018 during a workshop at meetings within the departments, the Board of the VEE and the Employer Panel.

The VEE uses PDCA (Plan-Do-Check-Act) cycles to ensure a cohesive veterinary programme and to establish that learning goals are up-to-date and aligned with course content.

3.3.2. Comments

- The description of D1C should be emphasised more to students.

3.3.3. Suggestions for improvement

- The competency framework (ESEVT D1C) should be made readily available on the teaching platform.
- Ideally, each student should benefit from a dashboard allowing him/her to follow the evolution of the acquisition of his/her own competences throughout the curriculum.

3.3.4. Decision

The VEE is compliant with Substandard 3.3.

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 on going and periodic review of the curriculum at least every seven years by involving staff, students and stakeholders; these reviews must lead to continuous improvement. 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, under the umbrella of the University QA system, has put in place highly structured decision-making bodies and procedures to oversee QA of the curriculum, perform periodic review and take action for continuous improvement using PDCA.

Course organiser, teaching committees, the veterinary study board, heads of Departments, head of Studies, study and Employer panel have a clear description of their functions, duty and responsibilities and to whom they should report. Students are associated with the decision-making process.

3.4.2. Comments

- The organisation of the quality process to oversee and manage the curriculum and its delivery is sophisticated and highly structured.

3.4.3. Suggestions for improvement

None.

3.4.4. Decision

The VEE is compliant with Substandard 3.4.

3.5 External Practical Training (EPT) is compulsory training activities organised outside the VEE, the student being under the direct supervision of a non-academic person (e.g. a practitioner). EPT cannot replace the core intramural training nor the extramural training under the close supervision of academic staff (e.g. ambulatory clinics, herd health management, practical training in FSQ and VPH).

Since the veterinary degree is a professional qualification with Day One Competences, EPT must complement and strengthen the academic education inter alia by enhancing student's professional knowledge.

3.5.1. Findings

The mandatory EPT consists of a minimum of 4 days in a LA general practice and 2 weeks in a SA general practice within the 4th year of study.

For the elective courses students attend an equine clinic (2-3 weeks), a SA clinic (3-4 weeks), a LA/Herd health practice (3 weeks), or a public health institute for the One-Health track (3 weeks). Logbooks are maintained by the students and students have to reflect on their experiences.

As an alternative, tracking a 4 to 8 week EPT course in any veterinary professional field is possible when agreed and planned with an institute supervisor in order to fulfil the specific academic requirements.

3.5.2. Comments

None.

3.5.3. Suggestions for improvement

- Logbooks maintained by students should focus more on self-reflection along with case logging. Self-reflection should be based on not only what went well and what they learned but also how they could improve.
- Selection for enrolment in the popular clinical tracks should be revised (see 3.1.3.3)

3.5.4. Decision

The VEE is compliant with Substandard 3.5.

3.6 The EPT providers must have an agreement with the VEE and the student (in order to state 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 academic staff responsible for the overall supervision of the EPT, including liaison with EPT providers.

3.6.1. Findings

Agreements, learning goals and insurance are in place for EPT. Beside a general supervisor for EPT, for each field there is a specific academic contact person. Feedback is collected both from the students and from the EPT providers, as well as that students are to present and discuss a journal with cases seen during the EPT. There is a complaints procedure for students in place in case there are any issues arising during the EPT.

3.6.2. Comments

No evaluation is done from the EPT providers. While nearly all students report good experiences from their EPT, no records are kept of EPT providers where students had suboptimal experiences during their practical training.

3.6.3. Suggestions for improvement

- Student evaluation should be discussed between the general EPT supervisor and students to assure self-reflection and improvement.
- Collect evaluations on EPT providers in order to advice future students on where to go to for a good EPT experience.

3.6.4. Decision

The VEE is compliant with Substandard 3.6.

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

3.7.1. Findings

Students are responsible for keeping their own logbooks, reports, and reflection papers and the hosts of the EPT submit an evaluation of the student as well. This forms the base for the supervisor's assessment of the student's EPT performance.

A complaint process is in place for dealing both with the EPT host and the assessments given during and after the EPT.

3.7.2. Comments

Almost all students report an enjoyable and meaningful EPT, which gives them a better understanding of the requirements needed in their future career.

Students would like to have an earlier exposure to EPT in order to better understand how the bachelor theoretical training is connected to actual patients and to help them choose their future track.

3.7.3. Suggestions for improvement

- Expose students in the earlier years of the BSc programme to EPT.

3.7.4. Decision

The VEE is compliant with Substandard 3.7.

Standard 4. Facilities and equipment

4.1 All aspects of the physical facilities must provide an environment conducive to learning, including internet access. The veterinary 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 with reduced mobility, and EU animal welfare and care standards.

4.1.1. Findings

The VEE is located on two campuses: the **Frederiksberg Campus** and the Taastrup Campus. Frederiksberg Campus houses D-VAS as well as the companion animal hospital of the D-VCS. Frederiksberg Campus also includes lecture theatres, research laboratories, a university library, staff and departmental offices and the VTH-CA. The **Taastrup Campus** houses the VTH-LA, which includes a teaching unit, the mobile practice and research facilities for large animal medicine, surgery and reproduction, as well as staff and departmental offices. The distance between Frederiksberg Campus and Taastrup Campus is approximately 18 kilometres. SUND provides shuttle buses for students and staff every weekday: once in the morning, at noon and once in the afternoon. The travelling time is approximately 40 minutes.

University or faculty in-house personnel or external services are hired to maintain facilities and equipment on a regular basis. Where available and desired, relevant equipment is serviced by the supplier of the equipment through an agreement. A priority list is established for the upgrading and replacing of the facilities and the equipment. Construction of new buildings and renovation of existing buildings is under the purview of the Campus Service and typically the Government's Building and Property Agency.

The Occupational Health and Safety Organisation assures that physical facilities comply with relevant national and international legislation by performing regular inspections and occupational health and safety audits. Comprehensive laboratory security and biosecurity guidelines are published. Staff and students receive dedicated training on biosecurity rules. Two private companies are in charge of disposing of the animal cadavers.

4.1.2. Comments

- The toxic mould infestation that occurred in the companion animal hospital a couple of years ago has been resolved. There are projects for further renovations and curing of the building ongoing.

4.1.3. Suggestions for improvement

None.

4.1.4. Decision

The VEE is compliant with Substandard 4.1.

4.2 Lecture theatres, teaching laboratories, tutorial rooms, clinical facilities and other teaching spaces must be adequate in number, size and equipped for the instructional purposes and must be 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 academic and support staff.

4.2.1. Findings

Lecturing, group work and practical work

All **lecture halls** are equipped with projectors and blackboards. Three lecture halls at Thorvaldsensvej, Frederiksberg can accommodate 293, 208 and 200, respectively, and 4 lecture halls have places for 144, 144, 136 and 143 individuals, respectively. Four rooms for seminars and group work with places for 143, 96, 96 and 144 people respectively are available, as well as eight smaller rooms for a minimum of 45 students. Both campuses have dedicated premises for laboratory work. The vast majority of the **teaching laboratory spaces** belong to the D-VSA and are therefore located at the Frederiksberg campus, while there are also clinical lab rooms for student work at the Taastrup campus. The Frederiksberg campus provides laboratory rooms for students for the teaching of chemistry, biochemistry, physiology, immunological techniques, microbiology as well as several rooms equipped with light microscopes.

Skill labs are located on both campuses. The large animal hospital has further access to an equine locomotor unit in the riding arena. An annex to the equine hospital contains stable facilities for an additional 31 horses and a room for treadmill examinations.

The Frederiksberg Campus houses a **dissection hall** fully equipped for 180 students. The hall is equipped with an A/V-system allowing the teacher to demonstrate organs in detail. This A/V system can be streamed to the VTH-LA in Taastrup in order for the students there to follow deceased patients transferred to the pathology service. Adjacent to the dissection hall, four small rooms for presentation and discussion of dissected specimens are located. A dedicated building is provided for preparation of dissection material and for teaching topographic anatomy on e.g. full standing euthanized cows and horses (Anubis).

The VEE has agreements with three different commercial slaughterhouses where students are trained in rectal palpation of cows, *ante mortem* examination and meat and food inspection. Further agreements exist with a range of commercial farms (cattle, swine, mink, chinchilla, etc.) located in a large area over the country for organised student visits.

Study and self-learning, catering, locker rooms, accommodation for on call students and leisure

There are several service and recreational areas at Frederiksberg Campus including two student cafeterias, one student café (self-managed), one student bar (self-managed), the botanical garden, a library with several study areas and a bookstore. Wireless internet is also available in the outside areas at Frederiksberg. At the companion animal hospital, there is a lunchroom and a separate room equipped with a refrigerator and coffee machine available in the basement for all students. Service areas at Taastrup Campus include a cafeteria for staff and students, two recreational rooms at the hospital for students during night shift, one lounge area at the hospital with coffee and snack machines provided by the hospital; an outdoor sitting area. Students who are on call can also use the facilities in the hospital kitchen for preparing food or coffee during their shift. Appropriate sanitary rooms and locker rooms are available at both campuses, but insufficient number of lockers at Taastrup Campus.

Staff offices

Offices are in proximity to clinics and labs, most are one-person offices, but some provide space for more employees in one room.

4.2.2. Comments

- Overall, facilities are functional and well-maintained.

4.2.3. Suggestions for improvement

- The dissection halls for anatomy and pathology should be equipped with lab eye washers.
- The dissecting room should be more clearly separated into a student area and a technical area so that the ethanol storage tanks cannot be accessed by students.

4.2.4. Decision

The VEE is compliant with Substandard 4.2.

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 and biocontainment**
- **be designed to enhance learning.**

4.3.1. Findings

Housing for healthy, hospitalised and isolated animals

In the companion animal hospital, 73 dogs and 12 cats in separate cages can be housed in six dog wards and one cat ward. The isolation unit has two wards, each with capacity for three to five patients. The dog ICU can hold 18 patients and the cat ICU can hold seven cats. There is a dedicated ward that can hold two patients on chemotherapy.

The VTH-LA has the potential to hold 46 equine patients. The patients are stabled in eight sections in two non-adjacent buildings. There is an ICU for approximately 15 horses including four large boxes for a mare and foal, also an opportunity to handle horses in slings. A further ten boxes for the (healthy) teaching horses and 16 multi-purpose boxes are present in the Teaching Unit. Each of these multi-purpose boxes can also provide the space for one cow or four sheep. Some of the healthy teaching horses are also used for non-invasive reference purposes (research purposes).

Teaching rats and mice are housed in a facility with one ventilated cabinet (12 cages) for mice and a similar cabinet for rats in conjunction with the laboratory animal science exercise rooms.

4.3.2. Comments

- The VEE informed the Visitation Team that the unit for housing teaching rodents needs to be refurbished.

4.3.3. Suggestions for improvement

None.

4.3.4. Decision

The VEE is compliant with Substandard 4.3.

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 standard of education and clinical research are compliant with all ESEVT Standards, e.g. research-based and evidence-based clinical training supervised by academic 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 exceeding the best available in the private sector.

The VTH and any hospitals, practices and facilities (including EPT) which are involved with the curriculum must meet the relevant national Practice Standards.

4.4.1. Findings

Both hospitals are open 24/7/365 and provide out-of-hours care for hospitalised patients, research animals and emergency cases (first opinion, referrals and the mobile practice). For the large animal hospital, a senior clinician (surgery and medicine) is on call and can be called to return to the hospital within 45 minutes. The equine hospital provides advanced clinical emergency services such as, for example, surgery for colics and septic arthritis.

In the companion animal hospital, a senior clinician is on call for giving advice on the phone outside of regular business hours at VTH-CA. In case, that a patient requires care that cannot be provided by the staff on site, the patient is referred to a private clinic.

The patient flow is scheduled to optimise a constant workload. At the VTH-A, it may happen that appointments need to be postponed or patients need to be redirected to private clinics, if there is a shortage of personnel. Working hours are in accordance with national law. The teaching is based on national legislation and is governed by the responsible departmental safety officer. Furthermore, annual control visits are made by the governmental control institution. Practice standards have been established with the help of the VEE. Radiation safety is enforced by the use of dosimeters and regular controls. The use of dosimeters by students is not required according to Danish National Radiation Institute regulation.

4.4.2. Comments

- The mobile practice runs 24/7/365 and provides first-opinion routine and emergency care. It provides students with a 'field approach' to large animal cases. Sometimes these cases are referred to the hospital for further care. The two vehicles are very well equipped. The experienced staff is further enhancing the teaching value of the mobile clinic.

4.4.3. Suggestions for improvement

- The VEE should be encouraged to provide advanced medical and surgical care to companion animals 24/7 in order not to need to refer critical cases to private clinics.

4.4.4. Decision

The VEE is partially compliant with Substandard 4.4 because the high level of expertise that is

provided in the equine and farm animal services at a 24/7 standard is not always provided at the same level of expertise in the small animal hospital.

The VEE is partially compliant with Substandard 4.4 because the out-of-hour service of the companion animal hospital is not always functioning at the 'standard of care' level that would be expected from a modern university teaching hospital and senior clinicians are only available for advice on the phone and clients are occasionally redirected to a private animal clinic.

4.5 The VEE must ensure that students have access to a broad range of diagnostic and therapeutic facilities, including but not limited to: diagnostic imaging, anaesthesia, clinical pathology, intensive/critical care, surgeries and treatment facilities, ambulatory services, pharmacy and necropsy facilities.

4.5.1. Findings

The VTH-CA has 12 clinical examination rooms for general or specialised clinical examinations. This is completed by a hospital treatment room (ten tables) and rooms equipped for advanced diagnostic and therapeutic techniques (ultrasound, chemotherapy treatment, neurology, ophthalmology). There is a surgery preparation room in connection with five separate fully equipped surgical theatres and one room specifically equipped for dentistry. The VTH-CA also has a blood banking unit and a physiotherapy service equipped with a HYDRO PHYSIO treadmill, as well as an exercise treadmill.

The diagnostic imaging unit is integrated within the VTH-CA and includes digital radiography, C-arm fluoroscopy, advanced ultrasound, CT, MRI, SPECT scanning and Dexa scanning. Images are processed through PACS and can be retrieved on viewing stations and on screens in the teaching hospitals. The diagnostic imaging unit also provides iodine-131 treatment of feline hyperthyroidism. The veterinary diagnostic laboratory, located in the same building, is a fully equipped state-of-the-art ECVCP-approved clinical pathology research laboratory.

The Equine Hospital has 6 examination rooms equipped with stocks and equipment for their primary use (emergency examination, X-ray, scanning, endoscopic examination and reproduction). Two operation theatres offering anaesthesia monitoring and with two recovery rooms per theatre. The diagnostic imaging of the large animal hospital includes digital radiography, C-arm fluoroscopy, advanced ultrasound and scintigraphy; machines are connected through PACS and managed by the imaging service of the companion animal hospital. Furthermore, there is a dedicated space for the storage of drugs and an emergency laboratory for blood gas analysis and standard clinical chemistry.

The Equine Locomotion Unit (KUSTOS-Hallen) has a riding arena, large trot-up area and a heated teaching room. The outdoor area includes paddocks, two lounging areas and a roofed trotting-up area adjacent to the hospital in Taastrup.

There is no on-campus pharmacy at Frederiksberg or Taastrup Campus. Contractual agreements exist with two suppliers to meet the needs of both hospitals. Drugs are dispensed and prescribed by veterinarians as required by Danish law. Additionally, narcotics and controlled substances are kept in a narcotic vault. All dispensations and discarded drugs are logged by certified technicians responsible for filing, auditing and monitoring any discrepancies. Pharmaceutical product shelf life is monitored and out-of-date products are removed from the inventory. All chemicals and pharmaceutical products are stored, labelled, dispensed or disposed of according to Danish law.

The main necropsy halls, used for anatomy and pathology training are located at Frederiksberg Campus. The bigger of the two rooms offers space for 120 students. A/V equipment allows transmission to the Taastrup Campus. There are smaller rooms for group work on dissection material. Two histology classrooms are each fully equipped for 90 students. The classrooms are connected through an A/V-equipment with the teacher's bright field microscope attached to it. Practical microscopy demonstrations can be given through interactive and virtual microscopy (virtual microscopy platform). The VTH-CA also contains a cold storage room for cadavers that are utilised for teaching purposes or saved for necropsy. Cold storage rooms for cadavers (for necropsies at Frederiksberg and for destruction) and for testing materials (bovine and equine legs), respectively, are available at the large animal hospital.

4.5.2. Comments

- The equine hospital comprises state-of-the-art diagnostic facilities that are used for diagnostic work-up, clinical research and teaching. This is also reflected by the high number of diagnostic scintigraphy procedures for orthopaedic patients. However, there is currently no possibility to perform cross sectional imaging. Patients requiring CT-imaging are referred to private practices. This also implies that some potential patients for lameness examination will book an appointment in a veterinary centre that offers CT-imaging and like this further reducing the caseload in the Equine Clinic.

4.5.3. Suggestions for improvement

- The VEE is encouraged to purchase a CT-imaging device.

4.5.4. Decision

The VEE is compliant with Substandard 4.5.

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 animal care and for prevention of spread of infectious agents. They must be adapted to all animal species commonly handled in the VTH.

4.6.1. Findings

The isolation unit of the Companion Animal Hospital was built in 2019. It has two wards, each with capacity for three to five patients. There are changing rooms and one examination room within the unit. There is a separate entrance to the isolation unit for patients. The airflow is controlled and separate from the rest of the clinic. The large animal isolation unit consists of one unit with three separate boxes and is separated from the main hospitalisation with a separate entrance. Both units display instructions for use at their entrance.

Animals are examined before entering the hospitalisation unit and based on history and results of the clinical examination they are admitted to the isolation units.

Microbiological surveillance is conducted three times per year at the VTH-CA by a swab taken from five or six different places. The swabs are analysed for the presence of MRSA, methicillin-resistant *S. pseudintermedius*, extended-spectrum beta-lactamase producing bacteria and enterococci. At present, these agents have not been detected. At both hospitals, patients suspected of having a zoonotic disease are sampled and analysed for the agent in question. Authorities are informed when required.

4.6.2. Comments

- The Large Animal Isolation Unit has four separate stalls which share a common entrance and changing room. The four stalls share a common airspace. SOPs are displayed at the entrance. Staff entering the site need to put on personal protective equipment (PPE) which is changed between contacts with individual patients. The technical staff is well aware of the procedures and teaches students to comply with the rules.

4.6.3. Suggestions for improvement

- Divide the Large Animal Isolation unit into separate units to decrease the risk of transmitting infectious agents amongst patients.

4.6.4. Decision

The VEE is compliant with Substandard 4.6.

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 academic supervision.

4.7.1. Findings

The mobile practice, run by 3 senior clinicians, primarily serves equine clients and hobby farms and is situated in a separate building at the Taastrup campus. Rooms for morning rounds, offices, storage rooms, and a garage for two cars is available. The practice cars (with 5 places for students) have equipment for handling first-opinion cases, minor surgeries, equine dentistry, dehorning and a dart gun, etc. Additional equipment is provided by the hospital as required. The practice does not provide radiology as such patients will be referred to the hospital. A third car is available when required for transportation of multiple students for dentistry. The clinicians from the hospital participate in the mobile practice service in order to guarantee the 24/7 service.

Production animal field veterinary medicine and Herd Health Management are taught under academic supervision through farm visits in different farms (cattle, pig, poultry, etc.).

4.7.2. Comments

- The mobile clinic provides first-opinion care to equine and farm animal patients 24/7. Students from the equine track participate in this activity. The well equipped vehicles and the experienced staff make the mobile clinic an excellent teaching tool.

4.7.3. Suggestions for improvement

- Students from core rotation should be allowed to participate in the mobile clinic activity.

4.7.4. Decision

The VEE is compliant with Substandard 4.7.

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 to prevent the spread of infectious agents.

4.8.1. Findings

Students and staff are transported from Frederiksberg to the Taastrup Campus by a bus provided by SUND. The daily number of seats required is based on information provided by VTH-LA twice per year. Students are furthermore transported for extramural activities by privately hired buses or by public transportation. This is organised and paid for by the university, except for transport to the ZBC abattoir in Roskilde (37 km from Frederiksberg campus), which students need to pay themselves.

The mobile clinic has two fully equipped cars, which each have places for five students. A third car is available, when needed for mobile clinic activity. There is an agreement with two companies to guarantee the transport of animal cadavers.

4.8.2. Comments

None.

4.8.3. Suggestions for improvement

None.

4.8.4. Decision

The VEE is compliant with Substandard 4.8.

4.9 Operational policies and procedures (including e.g. biosecurity, good laboratory practice and good clinical practice) must be taught and posted for students, staff and visitors and a Biosafety manual must be available. The VEE must demonstrate a clear commitment for the delivery of biosafety and 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 a regular monitoring of the feedback from students, staff and clients.

4.9.1. Findings

An Occupational Health and Safety Policy has been written to ensure the safety of staff and students and to ensure a systematic and coordinated approach to a good work environment. Students receive oral, written or online instructions on Good Laboratory Practice, biological and chemical safety and handling of chemical waste, laboratory animal science, including safe handling and occupational health issues (if relevant), Microbiology, Fume cupboards, Local exhaust ventilation, Accidents, Evacuation, Risk assessment. Students pass an online exam or sign to approve that they have received the relevant instruction before being allowed to access the areas in question. Auditing procedures are scheduled on a regular basis.

4.9.2. Comments

- Well described procedures that are implemented on a regular basis.

4.9.3. Suggestions for improvement

None.

4.9.4. Decision

The VEE is compliant with Substandard 4.9.

Standard 5. Animal resources and teaching material of animal origin

5.1 The number and variety of healthy and diseased animals, cadavers, and material of animal origin must be adequate for providing the practical and safe hands-on training (in the areas of Basic Sciences, Clinical Sciences, Pathology, Animal Production, Food Safety and Quality) 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

In the area of Basic Sciences

Large variety of cadavers are used for anatomy from different sources (abattoirs/slaughtered in the campus slaughter facility/D-VCS/private farms). Cadavers are kept frozen or refrigerated until used. Cadavers of companion animals/horses are donated by the owners through local veterinary clinics or by animal shelters. Dogs used for dissection exercises are fixated in an ethanol/glycerol mixture and stored in 24% ethanol and then destroyed by the companion animal cremation service. Healthy horses are slaughtered at the Campus slaughter facility. Organs from cattle, small ruminants and pigs are obtained from abattoirs.

An average of 42 cattle, 78 small ruminants, 92 pigs, 201 companion animals, 40.5 equine and 49 mink are used in practical anatomical training (although the latter ended in 2020 due to the COVID-19 pandemic). A variety of healthy live animals are used for preclinical training like animal handling, physiology, animal production and propaedeutics (309 cattle, 4 small ruminants, 252 pigs, 27 companion animals, 10 equine and 25 exotic pets).

In the area of Clinical Sciences

An adequate number of food-producing animals are seen intramurally (128 cattle, 37 small ruminants, 9 pigs, 173 poultry/rabbits) and mostly extramurally (1885 cattle, 75 small ruminants, 1097 pigs and 28 poultry/rabbits). In companion animals and equine an average of 18409 and 1323 cases are seen intramurally and 85/1403 cases are seen extramurally. Exotic pets are seen only extramurally at the zoological garden averages 80 cases.

In Pathology

Cadavers and organs are stored at 5°C until being necropsied. Large animals are delivered from the VTH-LA, and pets are delivered mostly from the VTH-CA/ private veterinary clinics /veterinarians in practice. Organs are obtained from abattoirs on a weekly basis. Dead poultry are submitted from producers once or twice a week during periods when practicals are performed with the students. After necropsy, all materials cadavers are destroyed by a specialised company. An average of 52 cattle, 22 small ruminants, 132 pigs, 86 companion animals, 120 equine, 782 poultry/rabbits and 333 mink are used for necropsy. In the animal production area, an average number of 55 visits in cattle units, 34 in pigs, one in poultry, 10 in equine stables and 2 in mink are made.

Food Safety and Quality

In the area of food safety/quality, 19 visits are organised in ruminant abattoirs, 24 in pigs abattoirs and 16 in related premises of production, processing, distribution or consumption of products of animal origin. Data are regularly recorded using electronic system/pater reports.

5.1.2. Comments

- All areas of basic/clinical sciences, FSQ and animal production are well covered with an adequate number of animals. Exotic pets represent a small minority of the companion

animal VTH caseload.

- The number of pet animals seen in the necropsy is on the low side. Mink cadavers have been used to increase companion animal necropsies due to their similarity to ferrets. After stamping out mink in Denmark due to COVID-19, pigs have been used to replace mink cadavers in pathology teaching. To help overcome this material deficiency, private clinics have recently been asked to provide euthanized companion animals for pathology necropsy training.
- An unequal distribution in the number of surgical companion animal patients in the SA VTH, results in some students having a suboptimal caseload for training in clinical rotations.

5.1.3. Suggestions for improvement

- Developing an Exotic pet unit within the VTH small animals clinic would be beneficial for students.
- Increase the number of SA VTH surgical cases to provide more training for rotating students.

5.1.4. Decision

The VEE is partially compliant with Substandard 5.1 because of the need to both increase the number/distribution of small animal surgical cases as well as to provide an increased teaching for exotic animals.

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 direct academic supervision and following the same standards as those applied in the VEE.

5.2.1. Findings

The VEE does not manage a teaching farm/slaughter facilities for teaching purposes.

Practical training at external sites is organised in collaboration with commercial farms (poultry farm, pig farm and dairy production farms), abattoirs and food-processing facilities for both, BSc and MSc programmes. Commercial farms are used for hands-on clinical training and herd health management in bovine and porcine. Groups of up to 22/23 students participate in the herd health farm rotation modules with small groups of 2-4 students spending 2 days at 2 pig farms and 3 days at 4 dairy farms. Poultry herd health management and hands-on training occurs at 3 commercial poultry farms, one non caged egg-layer farm, one organic egg-layer farm and a commercial broiler production farm.

Students are collecting data, performing clinical observation, examination of the herd and production environment, collecting data from caretakers, focusing on production management, internal/external biosecurity, health management and animal welfare. Students are preparing reports based on collected information. Biosafety and biosecurity rules are thought of and respected.

5.2.2. Comments

- The intensive rectal palpation course in Jutland is given by technicians of a commercial cattle breeding firm. Recently an academic has been added to the course to ensure direct academic supervision.

5.2.3. Suggestions for improvement

- On courses provided by outside organisations (e.g. cattle breeding organisations) an

academic of the institute should always be present to ensure the standard of teaching and/or in communication with those individuals delivering the teaching.

5.2.4. Decision

The VEE is compliant with Substandard 5.2.

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

Nursing care skills and procedures start during the preclinical courses, and continue during clinical rotation in both teaching hospitals. Students have primary patient responsibilities and are involved mostly during the foaling season at the VTH/LA. Nursing skills are taught both in theory and practice within different courses (Large Animal Basic Clinical Theory, Medicine Surgery and Reproduction, companion and large animal). Students have personal responsibilities, during clinical rotations, in both hospitals, including feeding regimen and pet care.

During the foaling season, students participate in nursing and caretaking of immature and diseased foals supervised by nurses and technicians.

5.3.2. Comments

None.

5.3.3. Suggestions for improvement

None.

5.3.4. Decision

The VEE is compliant with Substandard 5.3.

5.4 Medical records must be comprehensive and maintained in an effective retrieval system (preferably an electronic patient record system) to efficiently support the teaching, research, and service programmes of the VEE.

5.4.1. Findings

An electronic patient record system has been in use since May 2014 (VetNetManagement). The electronic system is capable of storing patient records. Students/staff have continuous access to the information on campus. The diagnostic laboratory (Vet-Lab) maintains its own records.

5.4.2. Comments

- Currently due to confidentiality reasons, patient data is only available to students on-site at the campus. In exceptional circumstances a university laptop with full access is given on loan to, for instance, an MSc student preparing a thesis. Occasional periods of malfunction of the record system were reported.

5.4.3. Suggestions for improvement

None.

5.4.4. Decision

The VEE is compliant with Substandard 5.4.

Standard 6. Learning resources

6.1 State-of-the-art learning resources must be adequate and available to support veterinary education, research, services and continuing education. 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.

6.1.1. Findings

The library at Frederiksberg campus is part of the Copenhagen University Library and part of the Royal Library. It has full digital availability of journals and textbooks for both staff and students of the faculty, and the electronic format is replacing all the printed copies. After the merger with Nørre campus library, the focus on health and science at UCPH library has been developed. For bachelor students sessions and workshops on information literacy are given integrated within the ECTS courses or on demand. Specific guidance for MSc students is available within the subject of their thesis.

Also, for educators, the SUND Centre for Online and Blended Learning (COBL) offers study programmes, courses and training to promote better learning. COBL also supports “Absalon”, an online course platform, where learning materials are shared and teachers and students communicate in the online course room.

6.1.2. Comments

None.

6.1.3. Suggestions for improvement

None.

6.1.4. Decision

The VEE is compliant with Substandard 6.1.

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 an IT expert, an e-learning platform, and all 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

Staff and students have full access to the onsite library at Frederiksberg campus which is administered by both a faculty librarian and a deputy librarian. The Information Technology

unit is managed by an IT expert and is open from 08:00-16:00 providing helpdesk support.

There is a common Learning Management System “Absalon” (Canvas), which is used by all students and teachers in all courses. This is where all course materials are uploaded including quizzes, peer-review tasks and the platform, links to online lectures, video, interactive class rooms etc. Teachers communicate (in writing) with students (individuals, groups or whole class), and students can communicate with teachers through this platform.

There are also excellent facilities for students to work on their own or in small groups

6.2.2. Comments

On all levels within the department there are several complaints about the IT system, despite the presence of an IT technician in the library. These complaints cover file retrieval, patient data and the learning platform; in addition, the academic schedule for students is hampered by IT-problems.

6.2.3. Suggestions for improvement

- Improve the IT system on the departmental level and between the two departments involved in veterinary education, with local IT support rather than an overreliance on central University support.
- Make sure there is a unified system to be used by all teachers where students can easily access their course material.

6.2.4. Decision

The VEE is partially compliant with Substandard 6.2 because of the need to provide a more focused IT support for the two veterinary departments

6.3 The VEE must provide students with unimpeded access to learning resources, internet and internal study resources, and equipment for the development of procedural skills (e.g. models). 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

With regards to learning resources students have unlimited access to databases, e-books and electronic journals online. Hard copies of books (veterinary and animal handling) number 13,039 and are available at the library at the Frederiksberg campus. Most journals are online and the library contains 29 hard copies.

With regards to the internet students can access a wireless connection in all teaching facilities via individual eduroam logins.

With regards to models for procedural skills students have access to the small animal clinical skills lab for 8h in their surgical rotation. This consists of two morning sessions of 4h each. Large animal models are available at the Taastrup campus with unlimited access. Both labs have models for basic procedural skills such as suturing and blood drawing.

Changes in learning resources are evaluated along with course evaluation where used via the teaching committee. The Library provides surveys to evaluate change of resources on this level. Occasional surveys are produced for research purposes when new resources are implemented.

6.3.2. Comments

- Currently due to confidentiality reasons, patient data is only available to students on-site at the campus. In exceptional circumstances a university laptop with full access is given on loan to, for instance, an MSc student preparing a thesis.

6.3.3. Suggestions for improvement

- Improvements should be made to access and range of models available to students to practise clinical skills for example improved access to small animal clinical skills lab, rectal palpation models prior to practicing on live animals.
- Improve access to SA skills lab out of the regular hours to give students more chances to practice their skills. The use of support staff to help maintain and run both skills labs should be encouraged.

6.3.4. Decision

The VEE is compliant with Substandard 6.3.

Standard 7. Student admission, progression and welfare

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 all aspects of the educational programme in all advertisements for prospective national and international students.

Formal cooperations with other VEEs must also be clearly advertised.

7.1.1. Findings

All the information concerning the admission procedures, the curriculum and the final certification are available on the UCPH website, together with the BSc and MSc courses of the university. Detailed information for the veterinary programme is only in Danish.

Due to the rather rigid course regulations concerning the need to participate in and then be assessed, it makes it difficult for students to fully participate in schemes such as Erasmus without missing the compulsory teaching/assessment in courses at Copenhagen.

7.1.2. Comments

- The fact that the information available on the website is mixed in with all of the university's courses makes the veterinary curriculum less obvious.
- The detailed programme in English could be useful for European students seeking international mobility (Erasmus).

7.1.3. Suggestions for improvement

- A formal cooperation agreement with other VEEs and the mutual recognition of individual courses would facilitate schemes such as Erasmus.

7.1.4. Decision

The VEE is compliant with Substandard 7.1.

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

7.2.1. Findings

The number of veterinary undergraduate students registered at the VEE in 2018/2019 was respectively 261, 158 and 190 for the 1st, 2nd and 3rd year of the BSc programme and 196, 199 and 103 for the 1st, 2nd and 3rd year of the MSc programme; although students may continue from year 1 to 2 and year 2 to 3 without having passed all previous courses. The number of new veterinary students admitted by the VEE in the BSc programme was 181 in 2018/2019 and the number has been stable since 2016 (mean = 182), regulated by a numerus clausus.

ESEVT Indicators 1, 2, 3, 8, 9, 10, 11, 12, 13, 14, 15, 17, 18, 19, 20 exceed the minimum value and are often close to or above the median value. The only Indicator that is below the minimum value is II6 (n° of visits poultry and farm rabbit units). The VEE justifies this discrepancy by the difficulty of entering poultry farms and the absence of commercial rabbit production in Denmark.

The average duration of studies increased between 2017 and 2019 due to repeating students, not acquired ECTS and/or sabbatical years.

7.2.2. Comments

- If the number of students admitted remains stable in the coming years, it seems consistent with the resources available.

7.2.3. Suggestions for improvement

- It is suggested to improve the supervision and support of students in difficulty to avoid prolonging the duration of their studies.

7.2.4. Decision

The VEE is compliant with Substandard 7.2.

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

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

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

7.3.1. Findings

The selection criteria for admission to BSc and MSc programmes are described and set out on the UCPH website. As a numerus clausus is imposed at the BSc entrance, a selection procedure is set up taking into account general criteria such as Danish or foreign high school diplomas and specific criteria based on a minimum level in some useful disciplines.

Two routes are possible: 50% of students are admitted through Quota 1 on the basis of High School Grade-point average. 50% of students are admitted through quota 2 on the basis of a

UCPH-managed multiple choice examination and a subsequent interview with a jury composed of an academic staff member, a veterinarian and a vet student to explore in more detail the motivations and study preparedness of the candidates and their knowledge about the education and veterinary field. The members of this jury receive training in a seminar before the interviews are held.

7.3.2. Comments

- Selection criteria are clear and fair.
- Students admitted though quota 1 are substantially younger than students admitted though quota 2. This age difference is accompanied by a greater diversity of profiles. Although the risk of splits between two groups of students (young and older) within the classes needs to be monitored and prevented, this does not seem to be a major problem within the student community at the moment.

7.3.3. Suggestions for improvement

None.

7.3.4. Decision

The VEE is compliant with Substandard 7.3.

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

7.4.1. Findings

The VEE treats applicants with disabilities on a par with all other applicants. Adjustments can be made (e.g. in the form of examinations) but only on condition that these remain compatible with the acquisition of the necessary competences.

7.4.2. Comments

None.

7.4.3. Suggestions for improvement

None.

7.4.4. Decision

The VEE is compliant with Substandard 7.4.

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

Rules on how students must validate in order to progress are established at a national level.

These include compulsory completion of the first year of the BSc in a maximum of 2 years, a maximum of three attempts for the same exam, a minimum of 45 ECTS validated per year, a maximum duration for completing the BSc and MSc (4 years and 3.5 years respectively).

A student who does not comply with these rules is notified in March or October and can appeal to the study board for an exemption.

The VEE currently observes a drop-out rate of between 4 to 8% at the end of the first year of the BSc programme.

The average duration of veterinary studies (BSc and MSc) increased between 2017 and 2019 with an increasing number of students graduating in excess of one year above the minimum number of years of the BSc or MSc programmes.

7.5.2. Comments

- Decisions on progression are explicit.

7.5.3. Suggestions for improvement

- A more active and compulsory tutoring system by academic staff could be set up to provide more personalised support for students, particularly those in difficulty.

7.5.4. Decision

The VEE is compliant with Substandard 7.5.

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

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

7.6.1. Findings

Students may be excluded for academic or disciplinary reasons.

For academic exclusions, these occur when:

- The student deviates from the rules set out (completion of the first year of the BSc in a maximum of 2 years, a maximum of three attempts for the same exam, a minimum of 45 ECTS validated per year, a maximum duration for completing the BSc and MSc (4 years and 3.5 years respectively);
- The student's request for exemption sent to the Study Board has been rejected.

In all cases, a national agency at Rectorate level may be called upon as a last resort.

7.6.2. Comments

None.

7.6.3. Suggestions for improvement

None.

7.6.4. Decision

The VEE is compliant with Substandard 7.6

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 of reasonable adjustments for disabled students, consistent with all relevant equality and/or human rights legislation.

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

7.7.1. Findings

The welfare of students and their needs can be taken into account and heard at several levels:

- At the VEE level through the Study Board, through a mentoring system and through an elected student of the VET Student Union;
- At the faculty level with dedicated full-time student counsellors;
- At the university level with a dedicated Educational Support Office.

Students can address their grievances or problems with grading, course content or various incidents concerning student life.

The channels of dialogue are different depending on the subject:

- A body called “exam administration” regulated by national law for exam results;
- The academic staff responsible for the course, the departmental teaching committee, the head of studies, the study board through student delegates for grievances about courses;
- The Head of Studies, the Dean and the Rector for issues involving students’ behaviour, interpersonal conflict or harassment.

7.7.2. Comments

None.

7.7.3. Suggestions for improvement

None.

7.7.4. Decision

The VEE is compliant with Substandard 7.7.

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 compliance of the VEE with national and international legislation and the ESEVT standards.

7.8.1. Findings

Strong mechanisms are put in place to gather student feedback on the programme.

Three levels can be identified:

- At the VEE level, the Study Board acts on the content and running of the programme. It includes an equal number of students and academic staff;
- At departmental level, the Departmental Teaching Committee, where students are also equally represented, discuss issues relating to the teaching programme;
- Finally, anonymous online questionnaires which are answered by students and analysed by course leaders, Departmental Teaching Committee and Study Board.

Based on these questionnaires, decisions are made on whether some courses need special

attention and follow-up for improvement or development.

7.8.2. Comments

None.

7.8.3. Suggestions for improvement

None.

7.8.4. Decision

The VEE is compliant with Substandard 7.8.

Standard 8. Student assessment

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

SUND follows UCPH student assessment regulations, which are well in line with Standard 8. The ordinary examinations are normally held at the end of each teaching block. The study board may modify in specific cases the UCPH exams schedules in the final semesters of bachelor and master's programmes. Formative and summative assessments are used utilising various formats.

Lines of responsibility are described in "General Programme Regulations" referred to in the SER: students registered for a course are automatically registered for the appropriate exam or exams or if taken later or retaken must register by himself or herself. The Study board may give students 25% additional exam time if appropriate e.g. dyslexia.

Internal or external examiners assess exams.

Although students' communication skills are not formally examined, they are integrated within the evaluation of student performance in the core rotation in General clinical practice – CA, where the students' skills for both oral and written communication with clients and colleagues are assessed and commented, as well in the Herd Health and Companion animal trackings. Furthermore, oral and written skills in scientific communication is formally examined in the BSc- and MSc theses (report, + oral presentation).

8.1.2. Comments

None

8.1.3. Suggestions for improvement

None

8.1.4. Decision

The VEE is compliant with Substandard 8.1.

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

Assessment tasks, grading criteria and appeals process are published in a document named 'General program regulations document' via the SUND curricular web pages. This information is also accessible via the UCPH intranet. The specific schedules are decided biannually by the Study board.

Summative written exams are graded blind by examiners (e.g. student details are hidden). Results are documented via the National Digital Exam System (DE) within 2 weeks of the exam date. Oral examination results are awarded directly after the exam and submitted to the DE. Grade points submitted to the DE will be automatically transferred to the central academic record system (STADS) - which students can access through the UCPH intranet.

Grades are based on one of two systems - a passed/not passed system or a 7 step scale stated by Danish law (Grading scale Order).

Formative assessments results are discussed with course teachers and grade points are submitted to the Exams office and subsequently also entered into STADS. Requirements for formative assessment are posted on Absalon (student intranet).

There is no formal feedback for summative exams unless students wish to have personal feedback; if so, they must request this and reveal their anonymous exam number. Students are able to self-evaluate based on model answers that are published after the exam.

Formative assessments receive feedback in a multitude of ways including individual or group oral feedback and automated feedback (if using online MCQ assessment).

The appeal process is laid out clearly on the intranet and a response is given within 5-8 weeks from report to decision. A student has three attempts to pass an exam. In extenuating circumstances, the study board may allow further attempts.

Written sit-in exams are taken using computers provided by the Faculty.

Externally assessed exams must cover the major areas of the programme concerned, including the bachelor's project and master's thesis. General Programme Regulations state that at least 1/3 of the total ECTS credits for a programme must be documented by externally assessed examinations.

8.2.2. Comments

- UCPH is compliant with regards to publication, application and availability to students of assessment tasks and grading criteria. Results are properly documented and students receive timely feedback where necessary. Mechanisms to appeal results are clear and explicit.
- Grading criteria are not always applied consistently as pass marks may change when repeat exams are taken.

8.2.3. Suggestions for improvement

- Exam pass marks are advised to remain consistent with regards to re-examinations of students sitting the same unit.

8.2.4. Decision

The VEE is compliant with Substandard 8.2.

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

Every third year a survey is sent out to external stakeholders, as well as to newly graduated students, in order to obtain their views on the assessment processes.

Students are consulted each year on the quality of the assessments through QA surveys. However, students report that these surveys are sometimes closed before exams are held, which is not compatible with an effective approach, although the VEE believes that these Course assessments by HEALTH- QA-regulations are always closed before the exams, in order to avoid students' exam performance confounding with their course assessment.

Exam statistics are evaluated by Head of Studies and course leaders.

8.3.2. Comments

- Exam quality surveys should be conducted systematically after all exams have been taken and marks returned to the students.

8.3.3. Suggestions for improvement

- The timing of exams' evaluations by the students should be reviewed to allow for effective feedback.

8.3.4. Decision

The VEE is compliant with Substandard 8.3.

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

At the University level, Strategy 2023 insists on the development of models for student's involvement in research activities for credit bearing. This Strategy also promotes case-based and problem-oriented teaching methods. The VEE's aim is to encourage students in lifelong learning and to take responsibility for their education.

8.4.2. Comments

None.

8.4.3. Suggestions for improvement

None.

8.4.4. Decision

The VEE is compliant with Substandard 8.4.

8.5 Methods of formative and summative assessment must be valid and reliable and comprise a variety of approaches. Direct assessment 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 quality control of the student logbooks in order to ensure that all clinical procedures, practical and hands-on training planned in the study programme have been fully completed by each individual student.

8.5.1. Findings

SUND utilises several exam methods for both formative and summative assessment. The current aim is to reduce the number of summative course exams testing pure knowledge but have fewer with higher Bloom taxonomy levels of assessing learning outcomes.

8.5.2. Comments

None.

8.5.3. Suggestions for improvement

None.

8.5.4. Decision

The VEE is compliant with Substandard 8.5.

Standard 9. Academic and support staff

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 training (including good teaching and evaluation practices, learning and e-learning resources, biosecurity and QA procedures) must be in place for all staff involved with teaching.

Most academic staff (calculated as FTE) involved in 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 VEE's policy regarding the quality assurance of education is based on personal responsibilities of staff and students. Specific QA responsibilities assigned to the individual members of the staff including the course organisers are detailed in the job description. Students are encouraged to play an active role in the QA policy. Newly appointed teaching staff members enrol in mandatory pedagogical courses and are evaluated on their teaching experience. The recruitment process is very clear and comprehensive as stipulated in the personal policy

handbook (guidelines of recruitment and appointment). All academic staff have teaching and research obligations. Pedagogical instruction and training is offered to all non-academic staff before and during participation in teaching/instruction. Academic teaching activities are performed by staff employed in positions stipulated in the “Job Structure for Academic Staff” and the balance between research and teaching lies within the responsibility of the University Management. The academic staff are free to conduct research within the university's strategic research framework.

Among the permanent academic staff, 59% are veterinarians and 91% of the temporary academic staff are veterinarians. In total, 68 % of the academic staff are veterinarians.

9.1.2. Comments

- The majority of academic staff involved in the Bachelor's programme are not veterinarians.

9.1.3. Suggestions for improvement

None.

9.1.4. Decision

The VEE is compliant with Substandard 9.1.

9.2 The total number, qualifications and skills of all staff involved with the programme, including teaching staff, ‘adjunct’ staff, technical, administrative and support staff, must be sufficient and appropriate to deliver the educational 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, residents, interns or other postgraduate students, adjuncts or off-campus contracted teachers.

9.2.1. Findings

The total number of academic and support staff averages 167 and 198 full-time equivalent, respectively. These numbers are sufficient to deliver a quality educational programme. In addition, 39 of the academic staff are diplomates of either European or American speciality colleges. All courses are regularly evaluated by SUND and by students. The results are published on the web page for Educational Quality and are confidential for the respective course organiser, teaching committee, Head of Department, Head of Studies and Study Board which are responsible for addressing any issues related to the didactic or academic competencies of named teachers.

9.2.2. Comments

- Number and qualifications of teaching and support staff is sufficient to deliver an appropriate educational programme.

9.2.3. Suggestions for improvement

None.

9.2.4. Decision

The VEE is compliant with Substandard 9.2.

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 any systems of reward for teaching excellence in operation.

Academic positions must offer the security and benefits necessary to maintain stability, continuity, and competence of the academic staff. They 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

Staff have several opportunities to develop teaching and assessment knowledge through study programmes in philosophy of science, didactics, presentation skills, communications and science education. Also, the VEE offers courses for academic staff such as project management, intercultural communications, and other specific topics. All employees participate in a performance and development review with their closest supervisor, focused on results, goals related to teaching and research, general job satisfaction, wishes for professional development and continuing education. The reward system is not well defined and only consists of offering the title “the best teacher” every year by the students. Although the material benefits are lower than those of private practitioners, the academic staff finds an excellent environment within different groups e.g. small/large animal clinics. Staff involved in teaching and clinical activities must conduct their research activities out of working hours.

9.3.2. Comments

- The relatively low number of academic staff involved in teaching and clinical activities reduced the time allocated for research activities.

9.3.3. Suggestions for improvement

None.

9.3.4. Decision

The VEE is compliant with Substandard 9.3.

9.4 The VEE must provide evidence that it utilises a well-defined, comprehensive and publicised programme for the professional growth and development of academic 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 academic and support staff must be clear and explicit. Promotions for teaching staff must recognise excellence in, and (if permitted by the national or university law) place equal emphasis on all aspects of teaching (including clinical teaching), research, service and other scholarly activities.

9.4.1. Findings

The VEE offers different programmes for professional/career development adapted to individuals e.g. didactics, presentation skills, communication, science education, project management, as well as mentoring process, where all employees participate in a performance and development review with their closest supervisor. Promotion criteria are published on the VEE’s web page. Decisions regarding recruitment, promotion and assessment of the academic staff are taken at the department level according to the budget allocated. There are a number of

well-defined criteria which are taken into consideration for the appointment of assistant professors, associate professors and full professors: these are research, teaching and education, societal impact, organisational and administrative contribution, external fundings, leadership and veterinary clinical competency where the position veterinary work with client-owned animals. Veterinary clinical competency includes the Danish Licence to practice veterinary medicine as well as special education/training, as documented through EBVS or ABVS Diplomate degrees or other official specialist degrees are taken into consideration.

9.4.2. Comments

- The process of recruitment and progression into the academic career is well defined and accurate.

9.4.3. Suggestions for improvement

None.

9.4.4. Decision

The VEE is compliant with Substandard 9.4.

9.5 A system for assessment of teaching staff must be in operation and must include student participation. Results must be available to those undertaking external reviews and commented upon in reports.

9.5.1. Findings

All courses are regularly evaluated by SUND and by students. The results are published on the web page for Educational Quality and are confidential for the respective course organiser, teaching committee, Head of Department, Head of Studies and Study Board which are responsible for addressing any issues related to the didactic or academic competencies of named teachers.

9.5.2. Comments

None.

9.5.3. Suggestions for improvement

None.

9.5.4. Decision

The VEE is compliant with Substandard 9.5.

Standard 10. Research programmes, continuing and postgraduate education

10.1 The VEE must demonstrate significant and broad research activities of staff that integrate with and strengthen the veterinary degree programme through research-based teaching.

10.1.1. Findings

After the 2010 accreditation of the VEE, the UCPH has been among the top 20 universities on the THE-QS list and the top 5 universities on the Shanghai list; both of which demonstrate the

excellence of the research done at the university in general and at the VEE in particular. Academic staff are expected to publish the results of their research in peer-reviewed journals. The assessment of the research quality conducted by an international expert panel resulted in the commendation of the departments for the quality of their research and impact on society, as well as the excellence of PhD students and residents, and the good balance between teaching and research activity. In line with the "One Health" concept, the UCPH joined the Statens Serum Institute to form the DK-VET consortium, which provides research, consulting services, diagnosis and laboratory analysis. Its tasks are focused on the surveillance and control of livestock diseases, disease surveillance and handling emergency tasks, including disease outbreaks and risk assessment. This consortium also contributes to research-based teaching.

10.1.2. Comments

- The high classification of the UCPH on the Shanghai list, which includes the VEE, demonstrates the high quality of the research made.

10.1.3. Suggestions for improvement

None.

10.1.4. Decision

The VEE is compliant with Substandard 10.1.

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

10.2.1. Findings

At the end of the BSc year all students have to write their thesis (BSc project) in the specific format of a scientific article to be published in a peer-reviewed scientific journal; by this process they learn to both formulate research questions as well as to search and review relevant scientific literature. At the end of the MSc programme, students must submit a thesis resulting from their active participation in research work, which may be a laboratory experiment, a clinical study or an analysis of scientific data. MSc students are encouraged to publish their work in peer-reviewed journals. The presentation of both theses is oral in conjunction with the examination.

In the elective courses Biomedicine and One Health of the MSc programme, students either design or participate in research projects and are required to prepare scientific posters which are presented and discussed in plenum.

10.2.2. Comments

- Students are very motivated to do research work. Some master's thesis gave rise to articles that were published in peer-reviewed scientific journals.

10.2.3. Suggestions for improvement

None.

10.2.4. Decision

The VEE is compliant with Substandard 10.2.

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

10.3.1. Findings

The mean number of students registered in postgraduate clinical training (Interns and Residents) in the last 3 years was 21 and in postgraduate research training in the same period was 198. The number of students enrolled in continuing education courses varied according to the course. The Laboratory Animal Science EU Function ABD runs four times a year with a total of more or less 180 participants per year. The Lab Vet Europe programme runs continually and for the moment has 34 students. The courses of One-Health and safe Pig production are expected to attract 20 to 30 students per course per year. The course of Food Safety in the Dairy sector (theoretical and laboratory) is planned to receive a maximum of 25 participants.

The postgraduate programme “Master, Companion Animal Clinical Sciences” (CACS) enrolls postgraduate students with at least 2 years of experience as practising veterinarians in companion animal practice and more than 100 students have been enrolled. Several of the students have published in national or international journals.

The income generated by postgraduate training has resulted in the development of teaching materials incl. an online hygiene course (also used for undergraduate teaching), the purchase of equipment to be used by postgraduate students of Companion Animal Clinical Science, better equipment for ABD exercises. In addition, it has enabled the payment of a part-time teaching assistant professor handling teaching planning, student communication, digital learning platform course rooms and all course organisation incl. speakers, and exercises and a part-time assistant professor as a didactic coordinator supporting CACS faculty with exams and curriculum development. CACS income also supports the employment of additional staff to free up faculty resources for teaching in postgraduate clinical training and the payment of renowned international specialists.

FELASA accredited the courses “Laboratory Animal Science EU Function ABD” and “Lab Vet Europe”; the former is a prerequisite for conducting animal experiments in Denmark and the latter is recognised as part of the training of diplomats/residents.

Continuing education programmes are run by the VTH-LA on request and also to promote closer cooperation with surrounding veterinary practices. Since there is no CPE (Continuous Professional Education) requirement for veterinarians in Denmark, a formal CPD (Continuous Professional Development) programme is not set up.

10.3.2. Comments

- The VEE offers several advanced graduate programmes, where many students are enrolled.
- CPE is offered as part of the employment contract to most veterinary graduates. No formal CPE is required in Denmark, but most graduates and alumni feel they get enough opportunities to participate in CPE.

10.3.3. Suggestions for improvement

None.

10.3.4. Decision

The VEE is compliant with Substandard 10.3.

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 veterinary teaching programmes.

10.4.1. Findings

The main objective of the VEE is that teaching should be based on both basic and current research. For this to be the case, course organisers must be permanent academics with recent scientific activity so that students learn the relevant research methods and scientific theories, especially those in line with the main tasks (BSc and MSc thesis). The heads of studies ensure that teaching is based on relevant areas of research and the head of department should ensure that teachers conduct current and relevant research. The Dean's role is to ensure that teaching is research-based and that students have contact with researchers, which is systematically assessed every 6 years during the programme evaluations, based on parameters for which the Faculty has set standards.

It is up to the Head of Department to decide whether or not to allow the department's resources to be used for research projects; as well as to establish new research areas or close existing research areas after discussion with different members of the department.

Most research projects have to comply with a number of regulations, for which the university has an intranet site that is devoted to research in addition to the committees that exist at departmental level.

Various procedures are in place for the annual evaluation and review of existing research areas. At the University level, research is divided into areas included within the different faculties, the establishment and continuation of which are decided by the Board of the University. At the SUND level, research areas are organized by department: D-VCS with veterinary clinical research on individual animals and D-VAS with herd-level animal research.

There is a Ministerial Order on the PhD Programme at the Universities in Denmark that regulates the PhD education and the Rector has established a number of Graduate Schools to handle PhD education. The Dean appoints the leader of the Graduate School, at SUND "The Graduate School of Health and Medical Sciences" whose regulations are communicated on the Faculty' external website as well as within the information on evaluations.

Continuing education programmes or professional Master's education programmes are regulated by the Act on Universities and several legal regulations. The Professional Master's Programmes, such as the Master of Companion Animal Clinical Science, are implemented, assessed and revised as described for the undergraduate programmes.

Staff, students and stakeholders are informed in various ways about the decisions, activities and programmes of the VEE through websites, newsletters, emails, oral presentations or public outreach activities, as the case.

The VEE has several ways to inform staff, students and stakeholders about its decisions, activities and programmes, through websites, newsletters, e-mails, oral presentations or public outreach activities.

10.4.2. Comments

None.

10.4.3. Suggestions for improvement

None.

10.4.4. Decision

The VEE is compliant with Substandard 10.4.

11. ESEVT Indicators

Name of the Establishment:		University of Copenhagen, School of Veterinary Medicine			
Date of the form filling:		20 January 2020			
Calculated Indicators from raw data		Establishment	Median	Minimal	Balance³
		values	values¹	values²	
I1	n° of FTE academic staff involved in veterinary training / n° of undergraduate students	0,160	0,16	0,13	0,084
I2	n° of FTE veterinarians involved in veterinary training / n° of students graduating annually	0,848	0,87	0,59	0,258
I3	n° of FTE support staff involved in veterinary training / n° of students graduating annually	1,347	0,94	0,57	0,780
I4	n° of hours of practical (non-clinical) training	881,0	905,7	595,0	286,0
I5	n° of hours of clinical training	1. 916,0	932,9	670,0	246,0
I6	n° of hours of FSQ & VPH training	332,3	287,0	174,4	157,9
I7	n° of hours of extra-mural practical training in FSQ & VPH	37,3	68,0	28,8	8,5
I8	n° of companion animal patients seen intra-murally / n° of students graduating annually	131,2	70,5	42,0	89,2
I9	n° of ruminant and pig patients seen intra-murally / n° of students graduating annually	2. 1,240	2,69	0,46	0,776
I10	n° of equine patients seen intra-murally / n° of students graduating annually	9,428	5,05	1,30	8,130
I11	n° of rabbit, rodent, bird and exotic seen intra-murally / n° of students graduating annually	3. 2,570	3,35	1,55	1,025
I12	n° of companion animal patients seen extra-murally / n° of students graduating annually	0,606	6,80	0,22	0,382
I13	n° of individual ruminants and pig patients seen extra-murally / n° of students graduating annually	21,919	15,95	6,29	15,624
I14	n° of equine patients seen extra-murally / n° of students graduating annually	9,995	2,11	0,60	9,400
I15	n° of visits to ruminant and pig herds / n° of students graduating annually	4. 0,637	1,33	0,55	0,089
I16	n° of visits of poultry and farmed rabbit units / n° of students graduating annually	5. 0,010	0,12	0,04	-0,035
I17	n° of companion animal necropsies / n° of students graduating annually	6. 2,990	2,07	1,40	1,590
I18	n° of ruminant and pig necropsies / n° of students graduating annually	1,468	2,32	0,97	0,498
I19	n° of equine necropsies / n° of students graduating annually	0,853	0,30	0,09	0,760
I20	n° of rabbit, rodent, bird and exotic pet necropsies / n° of students graduating annually	5,603	2,05	0,69	4,911
I21*	n° of FTE specialised veterinarians involved in veterinary training / n° of students graduating annually	0,268	0,20	0,06	0,205
I22*	n° of PhD graduating annually / n° of students graduating annually	0,247	0,15	0,09	0,159

Comments on Indicators

1. I5 – the number of hours represent hours for all students (core students). In addition to this, students participate in clinical training in their respective tracking (see Table 3.1.4).
2. I9 – most production animal patients are seen during academically supervised, planned, extramural training. See section 5.1.
3. I11 – there is no commercial rabbit production in Denmark.
4. I15 – students visit rather few but very big herds. Danish cattle and pig herds has the largest average herd size in Europe.

5. I16 – generally visitors are not accepted in commercial poultry production facilities. In 2019 the VEE succeeded in establishing an agreement with 4 different very large commercial farms each of which consists of several flocks, thereby demonstrating all aspects of poultry production (layers, broilers etc.). The VEE intends to continue with this practice.

6. I17 – please note that necropsy of mink is included in these figures. For further details please refer to Section 5.1 - Necropsy of mink (*Neovison vison*) cadavers – a concerted effort.

Suggestions for improvement on the Indicators

None.

12. ESEVT Rubrics (summary of the decision on the compliance of the VEE for each ESEVT Substandard, i.e. (total or substantial) compliance (C), partial compliance (PC) (Minor Deficiency) or non-compliance (NC) (Major Deficiency))

Standard 1: Objectives, Organisation and QA Policy	C	PC	NC
<p>1.1 The VEE must have as its main objective the provision, in agreement with the EU Directives and ESG recommendations, 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.</p> <p>The VEE must develop and follow its mission statement which must embrace all the ESEVT Standards.</p>	X		
<p>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.</p> <p>The person responsible for the veterinary curriculum and the person(s) responsible for the professional, ethical, and academic affairs of the Veterinary Teaching Hospital (VTH) must hold a veterinary degree.</p> <p>The decision-making process of the VEE must allow implementation of its strategic plan and of a cohesive study programme, in compliance with the ESEVT Standards.</p>	X		
<p>1.3 The VEE must have a strategic plan, which includes a SWOT analysis of its current activities, a list of objectives, and an operating plan with a timeframe and indicators for its implementation.</p>			X
<p>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 quality assurance, within their VEE. To achieve this, the VEE must develop and implement a strategy for the continuous enhancement of quality. 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.</p>	X		
<p>1.5 The VEE must provide evidence that it interacts with its stakeholders and the wider society. Such public information must be clear, objective and readily accessible; the information must include up-to-date information about the study programme, views and employment destinations of past students as well as the profile of the current student population.</p> <p>The VEE's website must mention the ESEVT VEE's status and its last Self Evaluation Report and Visitation Report must be easily available for the public.</p>	X		
<p>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.</p> <p>Any action planned or taken as a result of this data analysis must be communicated to all those concerned.</p>	X		
<p>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.</p>	X		
Standard 2: Finances			
<p>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</p>		X	

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costs, maintenance costs and equipment) and revenues (separated into public funding, tuition fees, services, research grants and other sources).			
2.2 Clinical and field services must function as instructional resources. Instructional integrity of these resources must take priority over 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		
2.3 Resources allocation must be regularly reviewed to ensure that available resources meet the requirements.	X		
Standard 3: Curriculum			
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 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), Food Safety and Quality, and Professional Knowledge.	X		
3.1.1. General findings			
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. Food Safety and Quality	X		
3.1.6. Professional Knowledge	X		
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 an academic 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 self-learning and lifelong learning.	X		
3.3 Programme learning outcomes must: <ul style="list-style-type: none"> 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. 	X		
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: <ul style="list-style-type: none"> 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 	X		

<ul style="list-style-type: none"> perform ongoing and periodic review of the curriculum at least every seven years by involving staff, students and stakeholders; these reviews must lead to continuous improvement. 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. 			
<p>3.5 External Practical Training (EPT) is compulsory training activities organised outside the VEE, the student being under the direct supervision of a non-academic person (e.g. a practitioner). EPT cannot replace the core intramural training nor the extramural training under the close supervision of academic staff (e.g. ambulatory clinics, herd health management, practical training in FSQ and VPH).</p> <p>Since the veterinary degree is a professional qualification with Day One Competences, EPT must complement and strengthen the academic education inter alia by enhancing student's professional knowledge.</p>	X		
<p>3.6 The EPT providers must have an agreement with the VEE and the student (in order to state 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.</p> <p>There must be a member of the academic staff responsible for the overall supervision of the EPT, including liaison with EPT providers.</p>	X		
<p>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.</p>	X		
Standard 4: Facilities and equipment			
<p>4.1 All aspects of the physical facilities must provide an environment conducive to learning, including internet access. The veterinary 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 with reduced mobility, and EU animal welfare and care standards.</p>	X		
<p>4.2 Lecture theatres, teaching laboratories, tutorial rooms, clinical facilities and other teaching spaces must be adequate in number, size and equipped for the instructional purposes and must be 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.</p> <p>Offices, teaching preparation and research laboratories must be sufficient for the needs of the academic and support staff.</p>	X		
<p>4.3 The livestock facilities, animal housing, core clinical teaching facilities and equipment used by the VEE for teaching purposes must:</p> <ul style="list-style-type: none"> 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 and bio-containment be designed to enhance learning. 	X		
<p>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 standard of education and clinical research are compliant with all ESEVT Standards, e.g. research-based and evidence-based clinical training supervised by academic staff trained to teach and to assess, availability for staff and students of facilities and patients for performing clinical research and relevant QA procedures.</p> <p>For ruminants, on-call service must be available if emergency services do not exist for those species in a VTH.</p>		X	

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<p>The VEE must ensure state-of-the-art standards of teaching clinics which remain comparable with or exceeding the best available in the private sector.</p> <p>The VTH and any hospitals, practices and facilities (including EPT) which are involved with the curriculum must meet the relevant national Practice Standards.</p>			
<p>4.5 The VEE must ensure that students have access to a broad range of diagnostic and therapeutic facilities, including but not limited to: diagnostic imaging, anaesthesia, clinical pathology, intensive/critical care, surgeries and treatment facilities, ambulatory services, pharmacy and necropsy facilities.</p>	X		
<p>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 animal care and for prevention of spread of infectious agents. They must be adapted to all animal species commonly handled in the VTH.</p>	X		
<p>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 academic supervision.</p>	X		
<p>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 to prevent the spread of infectious agents.</p>	X		
<p>4.9 Operational policies and procedures (including e.g. biosecurity, good laboratory practice and good clinical practice) must be taught and posted for students, staff and visitors and a Biosafety manual must be available. The VEE must demonstrate a clear commitment for the delivery of biosafety and 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 a regular monitoring of the feedback from students, staff and clients.</p>	X		
Standard 5: Animal resources and teaching material of animal origin			
<p>5.1 The number and variety of healthy and diseased animals, cadavers, and material of animal origin must be adequate for providing the practical and safe hands-on training (in the areas of Basic Sciences, Clinical Sciences, Pathology, Animal Production, Food Safety and Quality) and adapted to the number of students enrolled.</p> <p>Evidence must be provided that these data are regularly recorded and that procedures are in place for correcting any deficiencies.</p>		X	
<p>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 direct academic supervision and following the same standards as those applied in the VEE.</p>	X		
<p>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.</p>	X		
<p>5.4 Medical records must be comprehensive and maintained in an effective retrieval system (preferably an electronic patient record system) to efficiently support the teaching, research, and service programmes of the VEE.</p>	X		
Standard 6: Learning resources			
<p>6.1 State-of-the-art learning resources must be adequate and available to support veterinary education, research, services and continuing education. 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.</p>	X		
<p>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 an IT expert, an</p>		X	

<p>e-learning platform, and all 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).</p>			
<p>6.3 The VEE must provide students with unimpeded access to learning resources, internet and internal study resources, and equipment for the development of procedural skills (e.g. models). 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.</p>	X		
<p>Standard 7: Student admission, progression and welfare</p>			
<p>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 all aspects of the educational programme in all advertisings for prospective national and international students. Formal cooperations with other VEEs must also be clearly advertised.</p>	X		
<p>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.</p>	X		
<p>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.</p>	X		
<p>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.</p>	X		
<p>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.</p>	X		
<p>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.</p>	X		
<p>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 of reasonable adjustments for disabled students, consistent with all relevant equality and/or human rights legislation.</p>	X		

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There must be effective mechanisms for resolution of student grievances (e.g. interpersonal conflict or harassment).			
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 compliance of the VEE with national and international legislation and the ESEVT standards.	X		
Standard 8: Student assessment			
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.	X		
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.	X		
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.	X		
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.	X		
8.5 Methods of formative and summative assessment must be valid and reliable and comprise a variety of approaches. Direct assessment 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 quality control of the student logbooks in order to ensure that all clinical procedures, practical and hands-on training planned in the study programme have been fully completed by each individual student.	X		
Standard 9: Academic and support staff			
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 training (including good teaching and evaluation practices, learning and e-learning resources, biosecurity and QA procedures) must be in place for all staff involved with teaching. Most academic staff (calculated as FTE) involved in 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		
9.2 The total number, qualifications and skills of all staff involved with the programme, including teaching staff, 'adjunct' staff, technical, administrative and support staff, must be sufficient and appropriate to deliver the educational programme and fulfil the VEE's mission. A procedure must be in place to assess if they 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, residents, interns or other postgraduate students, adjuncts or off-campus contracted teachers.	X		
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	X		

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<p>and pedagogic training and specialisation must be available. The VEE must clearly define systems of reward for teaching excellence in operation.</p> <p>Academic positions must offer the security and benefits necessary to maintain stability, continuity, and competence of the academic staff. Academic 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.</p>			
<p>9.4 The VEE must provide evidence that it utilises a well-defined, comprehensive and publicised programme for the professional growth and development of academic and support staff, including formal appraisal and informal mentoring procedures.</p> <p>Staff must have the opportunity to contribute to the VEE's direction and decision-making processes.</p> <p>Promotion criteria for academic 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.</p>	X		
<p>9.5 A system for assessment of teaching staff must be in operation and must include student participation. Results must be available to those undertaking external reviews and commented upon in reports.</p>	X		
Standard 10: Research programmes, continuing and postgraduate education			
<p>10.1 The VEE must demonstrate significant and broad research activities of staff that integrate with and strengthen the veterinary degree programme through research-based teaching.</p>	X		
<p>10.2 All students must be trained in scientific method and research techniques relevant to evidence-based veterinary medicine and must have opportunities to participate in research programmes.</p>	X		
<p>10.3 The VEE must provide advanced postgraduate degree programmes, e.g. PhD, internships, residencies and continuing education programmes that complement and strengthen the veterinary degree programme and are relevant to the needs of the profession and society.</p>	X		
<p>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 veterinary teaching programmes.</p>	X		
<p><i>C: (total or substantial) compliance; PC: partial compliance (Minor Deficiency); NC: non-compliance (Major Deficiency)</i></p>			

Executive Summary

Brief history of the VEE and its previous EAEVE Visitations

It will be difficult to give a “brief history” of the Copenhagen VEE which can trace its origin to 1791, making it one of the oldest Veterinary Teaching Establishments within Europe, so there is about 230 years of history to consider!

Today, the campus in Frederiksberg covers about 16 hectares with the Large Animal Hospital located at the Taastrup Campus, covering 175 hectares, about 15 km west of Copenhagen. The main veterinary clinical buildings at Frederiksberg Campus were completed in 1976.

The veterinary curriculum has undergone three major revisions in the past 20 years, in 2000, 2005 and 2009. In 1987-1988, the programme was evaluated by the Advisory Committee on Veterinary Training (ACVT). In 2001, the first EAEVE Visitation took place, resulting in full approval. The VEE was further accredited in 2010 using the Stage 1 and Stage 2 procedure, again with no major deficiencies.

The veterinary programme was evaluated by the Danish Evaluation Institute in 1998 and nationally accredited in 2016.

Brief comment on the SER

Although the SER was very well written and very comprehensive, the Team identified several gaps in the data provided. Despite this number of questions, the requested data was provided before the visit. Additional information was provided on site. Although the Visitation was postponed twice, the ESEVT Team utilised the original SER with some late updates from the VEE.

Brief comment on the Visitation

The Visitation was well prepared, well organised and carried out in a cordial and professional atmosphere. The Liaison Officer was easily and efficiently available when requested, either in person or by email. The programme of the Visitation was easily adapted when requested by the Visitation Team who had full access to the information, facilities and individuals they asked for.

Areas worthy of praise (i.e. Commendations), e.g.:

- All academic staff are implementing student-centred teaching with a strong commitment to continuous improvement for the benefit of students;
- Impressive use of students within academic boards, valuing their input to change and improve the course;
- The VEE benefits from a very strong structuring of the QA approach at university level, which is then applied at the level of faculties, schools and departments with perfectly codified and formalised procedures;
- Enthusiastic high quality students and staff who are proud of their institute;
- Strong research profile and high international ranking;
- MSc thesis connected to research projects which often lead to a publication;
- Facilities conducive to learning (library, clinical skill labs, modern and spacious hospitals);
- Large animal Mobile clinic facilities are excellent.

Areas of concern (i.e. Minor Deficiencies):

- Partial compliance with Substandard 2.1 because of the need to reallocate the budget within SUND to deliver sustainable funding for the VEE;
- Partial compliance with Substandard 3.1.3 because of the low number of teaching hours in exotic animal medicine (physiology, handling, medicine and clinical skills) within the veterinary curriculum;
- Partial compliance with Substandard 3.1.3 because of the limited access for students in the core companion animal rotation to more advanced medical and surgical cases;
- Partial compliance with Substandard 4.4 because the high level of expertise that is provided in the equine and farm animal services at a 24/7 standard is not always provided at the same level of expertise in the small animal hospital;
- Partial compliance with Substandard 4.4 because the out-of-hour service of the companion animal hospital is not always functioning at the ‘standard of care’ level that would be expected from a modern university teaching hospital and senior clinicians are only available for advice on the phone and clients are occasionally redirected to a private animal clinic;
- Partial compliance with Substandard 5.1 because of the need to both increase the number/distribution of small animal surgical cases as well as to provide an increased teaching for exotic animals;
- Partial compliance with Substandard 6.2 because of the need to provide a more focused IT support for the two veterinary departments.

Items of non-compliance with the ESEVT Standards (i.e. Major Deficiencies):

- Non-compliance with Substandard 1.3 because of the need to implement a strategic plan on the VEE level in addition to the existing plans for the two departments.

Additional suggestions for improvement are described in the Visitation Report.

Glossary

Absalon	- The IT learning platform used for sharing teaching and other materials
AVMA	- American Veterinary Medical Association
CHR	- Central Herd Registry (http://chr.fvst.dk/)
DAKA	- international rendering company (Saria) operating in Denmark
DrVetSci	- Doctor of Veterinary Science
D-VAS	- Department of Veterinary and Animal Science
D-VCS	- Department of Veterinary Clinical Sciences
DVM	- Doctor of Veterinary Medicine
EAEVE	- European Association of Establishments of Veterinary Education
EBVS	- European Board of Veterinary Specialisation
ECLAM	- European College of Laboratory Animals
ENQA	- European Association for Quality Assurance in Higher Education
FSQ	- Food Safety and Quality
FTE	- Full Time Equivalent
KU	- Københavns Universitet/University of Copenhagen
Kvægdatabase	- The Cattle Database (hosted by the national advisory services, SEGES)
KVL	- The Royal Veterinary and Agricultural University
Landmandsportalen	- Data repository for farmers and their advisors
MSR	- Medicine, Surgery and Reproduction
MSR-LA	- Medicine, Surgery and Reproduction, Large Animals
MSR-SA	- Medicine, Surgery and Reproduction, Small Animals
OHS	- Occupational Health and Safety
PhD	- Doctor of Philosophy
POMR	- Patient-Oriented Medical Record
QA	- Quality Assurance
SOP	- Standard Operating Procedure
SPF-sus	- The Health Status Management unit at SEGES. Manages specific pathogens (and specific pathogen freedom) in pig herds
SSI	- Statens Serum Institut
STADS	- The study administration system at KU and other Danish universities
SUND	- Faculty of Health and Medical Sciences
UCPH	- University of Copenhagen
UMV	- Study Environment Surveys https://uddannelseskvalitet.ku.dk/quality-assurance-of-study-programmes/educational-environment-assessments/
Vetstat	- The national registry on prescription medicines used for veterinary purposes
VPH	- Veterinary Public Health
VTH-CA	- University Hospital, Companion Animals (Frederiksberg)
VTH-LA	- University Hospital, Large Animals (Taastrup)
ZBC	- Zealand Business College

List of Appendices - provided in a separate document

Decision of ECOVE

The Committee concluded that the following Major Deficiency had been identified:

- Non-compliance with Substandard 1.3 because of the need to implement a strategic plan on the VEE level in addition to the existing plans for the two departments.

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