



VISITATION REPORT

**To the Faculty of Veterinary Medicine of the Ludwig-Maximilians University, Munich,
Germany**

On 20 – 24 June 2022

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Introduction

The Veterinary School of Munich (called the Veterinary Education Establishment (VEE) in this Report) was founded in 1790.

In 1914, it became the Faculty of Veterinary Medicine of the Ludwig-Maximilians-Universität (LMU) to be allowed to confer the title of "doctor medicinae veterinariae".

Since its foundation, the main campus has been located in the Centre of Munich.

The VEE was last evaluated and approved by EAEVE in 2012.

The main developments since the last Visitation are:

-) development of the Oberschleißheim campus with the bovine, equine and exotic pets clinic premises and a new lecture hall, the moving of the other facilities being planned during this decade;
-) merge the Clinic for Small Animal Medicine and the Clinic for Small Animal Surgery and Reproduction;
-) around 10% of the students originating from 32 foreign countries;
-) additional support staff in the clinics;
-) additional residency programmes in various species-specific specialties.

The Visitation was completed in agreement with the ESEVT SOP 2019 as amended in December 2020.

Area 1. Objectives, Organisation and QA Policy

Standard 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

In accordance with the conditions laid down by the Licensure Act for Veterinarians (Verordnung zur Approbation von Tierärztinnen und Tierärzten, TAppV), issued by the Federal Ministry of Nutrition and Agriculture (Bundesministerium für Ernährung und Landwirtschaft, BMEL), the VEE's mission on education is stated as being the training of veterinary surgeons academically and practically at the highest level possible through critical/independent thinking on One Health supported by lifelong education. The framework of the objectives of the veterinary education stated in TAppV outlines the academic-theoretical components of the compulsory and elective courses along with practical components covering the fundamental veterinary, scientific, interdisciplinary, methodological and practical skills based on ethical foundations.

The core curriculum is built on the European Directive 2005/36/EC (amended by Directive 2013/55/EU), recommendations of the EAEVE and TAppV; which is constantly being improved by the curriculum committee. The VEE's missions are governed by the values of well-being of humans, animals and the environment through excellence of research, teaching and services.

According to TAppV, a scientific-theoretical part of the study of veterinary medicine of four and a half years with 3,850 hours of compulsory courses and electives, a practical study part of 1,170 hours (70 hours on agriculture, animal breeding and animal husbandry, 150 hours in the curative practice of a veterinarian or in a veterinary clinic under the direction of a veterinarian, 75 hours in hygiene control and food surveillance and inspection, 100 hours in ante-mortem and meat inspection, 75 hours in public veterinary services, 700 hours in curative veterinary practice, in a veterinary-directed veterinary clinic, or in an elective internship. The total study time is 5 years and 6 months (11 semesters).

Two major exams are required to be completed, which are set by the state and administered by examiners approved by the government: the preliminary veterinary examination and the veterinary exam. The scientific section of the preliminary veterinary examination (pre-Physicum) covers the subjects physics, chemistry, zoology and botany. Certificates in chemistry must be presented for admission. In addition, the student must provide evidence of the minor Latinum or regular and successful participation in the veterinary terminology course. Since the winter semester 2017/2018, the physics exam, the botany exam and the zoology exam have been tested in writing after the 1st semester, while chemistry (oral) is tested after the 2nd semester. Anatomical-physiological section of the preliminary veterinary examination (Physikum) covers the subjects of anatomy, histology and embryology, physiology, biochemistry and animal husbandry and genetics. The exams should be taken by the end of the second year of study. Admission requirements are certificates in anatomy, histology, physiology, biochemistry, animal husbandry, as well as participation in a 70-hour exercise on agriculture, animal breeding and animal husbandry on a teaching farm and at least 84 hours of compulsory elective courses. The examination in animal breeding and genetics takes place orally after the 3rd semester. The veterinary examination is taken in several sections. The

exams are taken orally, in writing, as multiple choice, or in a combined form. The study regulations (as of 2017) provide for the examination procedure for various courses in each semester. The VEE publishes constantly updated timetables for courses and exams on the website. In the ninth and tenth semester, the students are taught in groups (specialist clinic). In the 9th semester, group A students complete the clinical focus training (12 weeks) and the pathology-food AVO module (7 weeks); while Group B students complete the large curative internship in the 9th semester (according to § 57(2) TAppV 700 hours in at least 16 weeks). In the 10th semester, groups are changed. Each student chooses a focus block in a clinic or institute. Clinical focus blocks are offered in the following institutions: Clinic of Small Animal Surgery and Reproduction, Clinic for Horses, Clinic for Swine, Clinic for Birds, Small Mammals, Reptiles and Ornamental Fish, Clinic for Ruminants with Ambulatory and Herd Health Services and Clinic of Small Animal Medicine. Instead of a focus block in a clinic, a science block can be completed in one of the clinics or one of the institutes of the VEE, depending on availability. During the course of study in the lecture-free period, various internships must be completed. Approval is granted upon application to the competent state authority of the federal state in which the 3rd section of the veterinary examination was completed (in Bavaria: Government of Upper Bavaria). The university has to offer compulsory elective courses in which the students have to take at least 308 hours from the first to the 9th semester, of which at least 84 hours are in subject areas of the anatomical-physiological section of the preliminary veterinary examination and at least 126 hours in the subjects of the veterinary examination.

1.1.2. Comments

The Mission statements and objectives are set broadly in agreement with EU directives and renewed approximately in every 10 years; while contribution of external stakeholders on the mission statements is limited.

1.1.3. Suggestions for improvement

None.

1.1.4. Decision

The VEE is compliant with standard 1.1.

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

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

The decision-making process, organisation and management of the VEE must allow implementation of its strategic plan and of a cohesive study programme, in compliance with the ESEVT Standards.

1.2.1. Findings

The VEE is a part of Ludwig Maximilian University of Munich, since when founded in 1790 named "Royal Thier Arzney School"; which at the moment is regulated by the federal law (TAppV).

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According to "Federal Veterinary Code (November 20, 1981; amended August 15, 2019)". Graduates are able to work as licensed veterinarians and the training is recognized formally. The Bavarian State Ministry of Sciences and Arts (Bayerisches Staatsministerium für Wissenschaft und Kunst) is the main authority overseeing the VEE. After completing the studies, students apply for approval at the responsible authority which is the Government of Upper Bavaria (Regierung von Oberbayern). The certificates are automatically sent to the government of Upper Bavaria by the examination office after the last examination has been completed. After applying to the competent registration authority, the certificate of good conduct is sent directly from the Federal Office of Justice in Bonn to the government of Upper Bavaria. The profession may only be practised after receiving the licence to practice medicine.

Structural administration includes the following bodies: Department of Veterinary Sciences (DVS), Centre for Clinical Veterinary Medicine (CCVM), Livestock Centre Oberschleißheim (LCO). DVS and CCVM are governed by Department Councils on matters in staff, financial and building resources; where the responsible authorities as director and vice-director are elected for two years and for LCO, executive board is responsible for administrative duties. The governing body of the VEE is the VEE council which comprise 27 seats in total including non-academic staff, students, non-professional academic staff, women's representatives, professors, Dean for student affairs, Vice-Dean and Dean; to represent institutes, clinics and representatives from differing professional areas. The foundation and the tasks allocated to the VEE council for academic affairs, are defined by Bavarian Higher Education Act. The Members of the Ethics Committee includes the Animal Welfare Officer, external veterinarians working in governmental institutions. The curriculum committee consists of the Vice-Dean for Students Affairs and representatives from DVS, CCVM and student representatives. The VEE is required to follow the curriculum recommended by TAppV including subjects, teaching hours and examinations which allows limited flexibility.

1.2.2. Comments

The legal act TAppV allows limited space to the VEE for a faster and flexible adaptation of the study programmes as well as managerial processes. The organisation structure of the VEE allows decentralised, and centralised management. Women's representatives, in accordance with the Bavarian Higher Education Act, are commendable, ensuring actions or decisions are supportive and not detrimental to female scientists. The strategic plan is expected to define criteria to develop indicators for monitoring and evaluating the Plan's implementation and results along with functions, mandates, responsibilities and resources to ensure effective whole-of-VEEs coordination. Meanwhile, monitoring of the strategic plan and implementation of the goals do not have a specific published mechanism. The recent strategic concept was published in 2008; and the monitoring, supervision and reporting towards the achieving of the set goals, has not been published since then. Prior to the end of the former strategic plan in 2018, a new strategic plan for the upcoming period was not published. A new strategic plan has now been prepared in draft form for the period 2019-2026. Monitoring mechanisms of the successful implementation of the previous strategic plan was found to be suboptimal as evident from the delay of four years of the new draft strategic plan.

1.2.3. Suggestions for improvement

The strategic plan is expected to comprise the basic objectives of the VEE, which are teaching, research and services. For the strategic plan preparation and processing stages which should start before the end of the current accepted strategic plan, inclusion of all internal and external

stakeholders is expected, ensuring the priority objectives are designed along with quality assurance. Monitoring and evaluation indicators of the strategic plan are suggested to be included in the strategic plan. The activities and indicators should be ensured to be aligned with the strategic aims through the activities and mechanisms of the responsible people for those specific tasks.

1.2.4. Decision

The VEE is partially compliant with Standard 1.2 because of suboptimal monitoring of the implementation of the previous strategic plan.

Standard 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

The VEE is funded through the Excellence Initiative of the German federal and state governments in the “Institutional Strategy” funding line until 2019 and since then, the initiative is still continued in the modified form of the “Excellence Strategy of the German federal and state governments to further strengthen cutting-edge research at universities”. The Excellence Initiative run by DFG (Deutsche Forschungsgemeinschaft - German Research Foundation) together with the German Council of Science and Humanities, promotes top-level research and improves the quality of German universities, where the VEE is awarded its current status as “University of Excellence”.

The VEE has informed its current draft strategic plan through its recent SWOT analysis which is built on its strengths and aims to eliminate the weaknesses, exploit the opportunities and counter the threats. For personnel, the strengths include having the most board-certified clinical teachers, researchers being top-cited in their fields, and support for female and young researchers; while weaknesses include the limited influence of performance on permanent positions and salaries, no subsidy by teaching fees, and increase in bureaucracy. Major threats identified the concern that research is considered to be valued higher than teaching, student selection is solely based on graduation ranking, a limited number of stipends compared to the number of students, private clinics competing for patients, and that competitive salaries are not available. Large and supportive alumni, advanced e-learning tools, and the numerous and well supported skills labs are defined as strengths. The new campus, financed by the Central Administration, a new research facility at the medical campus, the fusion of small animal clinics, and the largest farm animal facility in Germany are facility-related opportunities and strengths of the VEE. An operating plan for teaching, administration, campus construction/service, and research is currently being created to fulfil its mission statement. The operating plan includes improvements for education, personnel, facility, and research along with the areas mentioned in the SWOT analysis.

1.3.2. Comments

At the current time, there is not a functioning strategic plan. The former strategic concept was developed for the upcoming ten years in 2008. The preparation for the new strategic plan is being designed for 2019-2026. Evidence from the monitoring results of this previous strategic plan is missing as the former plan also did not include milestones and indicators for all the aspects in education, research and services. In order to produce fundamental decisions and actions to shape and guide the VEE, this plan is expected to involve the input and participation of the entire VEE community including both internal (administration, staff, students, alumni) and external (private

sector, government bodies, NGOs, other employers and institutions) stakeholders; in which at the current time, the evidence of the full involvement is absent. Key performance indicators are required for successful strategy implementation. In the strategic planning process, these indicators among the milestones are suggested to be linked to the achievement of strategic objectives in a defined timeframe. Improvement criteria within the defined timeframes including relevant actors with responsibilities, for the quality of education, research and community service is not to be present in this recently prepared draft strategic plan.

1.3.3. Suggestions for improvement

A strategic plan covering the main elements of the VEE (education, research, services) is expected to be created with full participation of internal and external stakeholders, including indicators and milestones with proposed timeframes and relevant actors. These specific points of guidance would allow the VEE to be aligned with its mission.

1.3.4. Decision

The VEE is not compliant with standard 1.3. because of the 4-year delay in the elaboration, discussion with internal and external stakeholders, and adoption by the Faculty Council of the new strategic plan and operating plan.

Standard 1.4: The VEE must have a policy and associated written procedures for the assurance of the quality and standards of its programmes and awards. It must also commit itself explicitly to the development of a culture which recognises the importance of quality, and 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 foundation and framework of quality management (QM) and quality assurance (QA) of the VEE are outlined by the Bavarian Higher Education Act (BayHSchG), with respect to European standards in higher education. This law obliges the universities to develop a system to ensure quality of their work and also have external evaluations carried out at appropriate intervals (BayHSchG, Artc10, Sec 2). In the field of study and teaching, especially the bachelor's and master's degree courses, the quality assurance measures are accredited in accordance with the Interstate Study Accreditation Treaty (BayHSchG, Artc10, Sec 4). Therefore, the QA system is vital for internal moderation and auditing activities to implement targeted improvement strategies for teaching, research, and services in the VEE, which is managed both centrally and decentrally. Central management, which is in place since December 2021, involves quality managers (quality management representatives) and deputies of the Dean's Office, Office of Student Affairs, CCVM and DVS; while decentral management is governed by each institute and clinics' responsible quality manager with deputies. These quality managers all together form a QA committee. Central quality managers meet eight times per year; while the QA committee meets once a year to further discuss decisions on QA. Finalised planned measures emerging from these meetings are spread through the shared portal and are accessible to the staff involved in QA. These measures are required to be compliant with the ESG standards (Environmental, Social, Governance) and BayHSchG. Also, for each term a central event is organised for students and staff to inform and

communicate about the recent changes and relevant topics in QM; where they are able to contribute actively to be further brought to QA meetings. All the processes resulting from the QA committee meetings are complete according to Plan-Do-Check-Act (PDCA) principles.

Proposals for changes are made through a variety of channels for internal and external stakeholders. Student feedback and information from different parties are considered as key for potential teaching improvements. This feedback is received directly through weekly consultation hours or special appointments by the academic staff as well as anonymously using the letterbox located at the Dean's Office and other digital portals (webpage and mobile app). Large scale feedback is received through mandatory evaluation of teaching staff and programmes at least once per term. Students are represented in the VEE council and the QA committee meetings to contribute to the decisions of the VEE. Biannual internal retreats for doctoral candidates are surveyed for research activities. Information sharing during the meetings of QA occurs through the “Confluence” platform, which is a web-based corporate Wiki developed platform. Information is available to all staff involved in QA. Moodle is also used for quality communication, which is available to all students and staff. Overall, a sustainable quality assurance system is developed in an understanding of QM as an evolving process.

1.4.2. Comments

The QM system of the VEE was recently activated with their first meeting in January 2022 and has had four meetings since then. Several existing mechanisms SOPs and evaluation systems were planned to be gathered under the umbrella of this QM system with effective quality communication. A planning of the evaluation process is carried out before the semesters commence, annually. Online evaluation system (EvaSys) is present on a voluntary basis; where the response rates differ among the semesters. Despite the presence of the anonymous feedback mechanism through the LMU app, students' awareness on such mechanisms are not fully integrated.

1.4.3. Suggestions for improvement

None.

1.4.4. Decision

The VEE is compliant with standard 1.4.

Standard 1.5: The VEE must provide evidence that it interacts with its stakeholders and the wider society. Such public information must be clear, objective and readily accessible; the information must include up-to-date information about the study programme, 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

On behalf of the Federal Chamber of Veterinarians, statistics on the veterinary profession in the Federal Republic of Germany are compiled annually from the data in the central veterinarian database and published publicly on the website. The VEE interacts with the stakeholders from the region and nationally, as well as internationally, to compensate for the need for veterinarians with

specialist knowledge of animal protection and animal welfare, infectious medicine and animal disease control, food safety, food quality and consumer protection. The VEE supports activities involved in the scientific and economic enhancement of their area through their expertise in the regional veterinary society. An example of this is the recent project on the scientific investigation and quantification of the decline in livestock practices especially on the shortage of farm veterinarians in the Bavaria region. As part of the "Future Concept for Rural Veterinarians", the Bavarian State Office for Health and Food and the Bavarian State Ministry for the Environment and Consumer Protection, the VEE analysed the veterinary care of livestock in the region. This recent project allowed the VEE to identify the current and future needs for veterinary care of farm animals in Bavaria, in particular for acute and emergency care. The VEE provided an extra-occupational interdisciplinary training course "Animal Health Management" for licensed veterinarians, which imparts practical and in-depth knowledge in livestock management with a high degree of specialisation.

CCVM web pages designated for clinics, are also designed for stakeholders' interests including separate sections "for vets", "for pet owners", "research", "studies" and "information on diseases". Public information through web pages is clear. Clinics offer online/on site meetings with animal owners and veterinarians, which are publicised through these web pages. Annual reports including the directory of services (inpatients, field services), training (continuing education, residency programmes) and research (projects, publications, proceedings) are publicly available.

Alumni are an important stakeholder of the VEE, supporting both students and the VEE. With the founding of the association "Alumni, Friends and Sponsors of the Munich Veterinary VEE" in February 2002, a framework for a large number of activities was created. The association sees itself as a hub for contacts and the exchange of information. Such a network offers a basis for the exchange of experience, the improvement of training and the intensification of contacts between the VEE and practice, including information and the provision of professional opportunities.

Information on the wide variety of career options available to veterinarians is provided by experts invited by the VEE throughout the course "Jobs in Veterinary Medicine" under the VETprofile program. The events take place in the early evening during the week in the form of an online zoom conference in consultation with the lecturer. Speakers present their own career with all relevant stations (internships, dissertation, seminars), the current work requirements and the employer, and present the professional division to encourage the students to keep a broad perspective and possibly try out different directions.

Information for the students on the study program, admissions, recognitions, applications, advisory services, loans, mentoring, promotions are available through the web. Also, the VEE's EAEVE status, SER and visitation reports are available in the VEE web site publicly.

1.5.2 Comments

Stakeholder analysis: Stakeholder identification, prioritisation and management are important for effective decision making on identification of the problems and building strategies. Impact on income and funding availability, recruitment and satisfaction and strategy development lies with many stakeholders such as local and national business (clinics, feed, food, pharma companies etc.), national bodies, local government and communities, NGOs. Routinely updated and published stakeholder analysis reports to be implemented in the strategic plan by the QA commission is not present at the current state. On the other hand, with a user-friendly interface and detailed

information, the VEE presents up to date public information about its study programme through its web page to its stakeholders, which is found to be commendable.

1.5.3. Suggestions for improvement

None.

1.5.4. Decision

The VEE is compliant with standard 1.5.

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

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

1.6.1. Findings

The Bavarian Ministry of State for Science and Art provides legal and financial support for the VEE's activities in teaching and research. In accordance with the Bavarian Higher Education Act (Art. 30), courses are evaluated regularly and randomly. The VEE members are given the opportunity to review the results of the evaluations through appointments. Regarding the research, since the start of the federal and state excellence competition in 2006, LMU and departments in the VEE were successful throughout the entire duration of the Excellence Initiative. Since January 2019, the joint funding has been continued and further developed under the name of the Excellence Strategy. The funding of universities of excellence is also reviewed every seven years by a critical appraisal. The freedom of research (Art. 5 Para. 3) is the basis of a successful research policy. It is the task of the state to ensure freedom of research and to create framework conditions for the best possible development. This means, that the state does not prescribe any research content for scientists in the VEE. However, the state and politics can and may bring socially important topics to science and provide future priorities for research activities in dialogue with them in order to then support them with financial resources. These close interactions, and direct monitoring of research and teaching activities through the State Ministry, are reflected as beneficial for continuous external evaluation and feedback processes.

The VEE also sets its own profile on periodic improvements. Such an example is the existing range of elective subjects to be supplemented and expanded in order to integrate the so-called "soft skills" into the curriculum. The wishes and needs of the students, as well as the teachers, also flow into the expansion of the elective landscape. "VETProfil" has set itself the task of improving the practical experience provided within the elective courses in terms of improving professional preparation. For this purpose, the compulsory electives are to be structured by profile lines in such a way that interested students can specialise in a species or a specific subject area during their studies. In addition, students have been able to attend a profile line. The profile lines are constantly in the process of adapting and expanding through the feedback of students and employers; including anaesthesia and analgesia as well as perianesthetic intensive care and emergency therapy in small animal patients, applied ethology and behavioural therapy, avian medicine and surgery,

stock management in the bird, fundamentals of neurological diseases in animals, internal medicine in small animals, horses, reptiles and fish, experimental animals and animal experiments, ruminants along with additional offers on occupations in veterinary medicine, professional dealings with owners, zoo management and zoo planning, and business administration basics for veterinarians.

Facilities in CCVM offer publicly available information on available diagnostic and therapy-based services at the individual animal and herd level; while several courses/seminars are offered for continuing education and publicised through the web pages. Case discussions are also held in particular through the students' initiative.

1.6.2. Comments

Target values for defined indicators according to the mission statement for an indicated time frame in the comprehensive strategic plan is currently not present that would allow the PDCA cycle to be implemented efficiently. Within the excellence mechanism, the VEE reviews its activities in the research section periodically efficiently, while monitoring activities to respond to the needs of the society such as cyclical feedbacks from clients/external service providing stakeholders are missing. A commendable system named “EQUIPD- Enhancing Quality in Preclinical Research” started as an EU-IMI consortium, was developed by the VEE, for the development of tools to support high quality preclinical research and train the next generation of scientists within these defined quality mechanisms, comprising quality concept, core requirements and implementation strategies.

1.6.3. Suggestions for improvement

Cyclical feedback from clients/external service providing stakeholders are recommended to be implemented.

1.6.4. Decision

The VEE is compliant with standard 1.6.

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

1.7.1. Findings

The VEE was previously visited by ESEVT in October 2012. Within this period, the VEE has undertaken some of the recommendations and suggestions. The major challenge indicated in the report, was the two-campus arrangement system giving major disadvantages to students. Since then, efforts on building a unified campus in Oberschleißheim (OSH) and moving all the pre and paraclinical institutes were a priority for the VEE. A lecture hall (300 seats) combined with a small cafeteria was built at that time; while, the construction of further lecture halls, a large campus cafeteria, library, and a central administration building is scheduled for 2024.

Another statement by the previous evaluation team offered for improvement was organisational and functional problems related to discipline-oriented clinics, especially on small animals (ophthalmology, reproduction) to find more support to develop freely with all administrative and research-related consequences. Small Animal Clinics were exempted in OSH currently, while small animal disciplines are expected to be consolidated within a unified Small Animal Teaching Hospital in 2023 under CCVM. Previously separate equine clinics were merged for better

management within the same new building. Also, the new Clinic for Birds, Small Mammals, Reptiles, Amphibians, and Ornamental Fishes offers service, teaching, residency, and continuing education programmes.

The recommendation on the students to be exposed to the principles of research earlier on in the curriculum, was undertaken and elective courses and modular lectures were added such as “Basics of neurological disorders”; which is an interdisciplinary course series from the 2nd to the 6th semester. As an alternative to clinical rotations, students also have a chance to elect science blocks offered by paraclinical institutions during the 8th and 9th semester. Elective extracurricular projects were funded until 2021.

The VEE has put an effort on internationality as stated in the 2012 report. As of 2021-22 among a total of 1872 students 24 male (1.3%) and 146 (7.8%) are female international students. IVSA Munich chapter was founded in 2011 and has been involved in a series of group exchanges since then.

Under different divisions in CCVM, several continuing education events are organised as a follow-up of the comment by the previous visit, regarding “the continuing education is not sufficiently VEE-driven and deserves centralised and organised development”. These trainings are announced on the web page of the related departments. An example for that are the live webinars organised by the Clinic of Small Animal Medicine on practice-relevant topics from the field of small animal internal medicine with a recognition of 2 ATF hours each. Veterinarians are obliged to undergo further training which can be met by participating in courses, seminars, conferences, congresses and e-learning offers. The Academy for Veterinary Advanced Training (Die Akademie für tierärztliche Fortbildung - ATF) is the advanced training organisation of the Federal Chamber of Veterinarians and checks the quality of advanced training and advanced training types from other providers. ATF recognition ensures the suitability and quality of the offers. The number of recognized ATF hours per training course depends on its duration. Participation in the training is always documented by a certificate and, in case of doubt, it must be possible to prove it. The VEE is among the organisations in Germany to provide ATF.

1.7.2. Comments

Resources to fund elective extracurricular projects for undergraduate students through different stakeholders are limited to professors' own research resources. A special effort has been made by the VEE since the last visitation on the lecture halls and internationalisation, while for robust evaluation of the EPT, few efforts have been made to implement improvements. As indicated in the previous report, the merging requisite of the two small animal clinics, would require more attention and the team agrees that the VEE has put in a special effort on this issue, especially for the management of resources and related conflicts, even if the work is still not yet finished completely.

1.7.3. Suggestions for improvement

None.

1.7.4. Decision

The VEE is compliant with standard 1.7.

Area 2. Finances

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

2.1.1. Findings

Funding for the VEE is provided by the State of Bavaria through the University, with separate budgets provided to:

- the Department of Veterinary Sciences,
- the Centre for Clinical Veterinary Medicine,
- the Livestock Centre Oberschleißheim
- The Dean's Office

In addition, each institute retains 95% of the income generated by diagnostic and other services.

Salaries for all 'fixed positions', maintenance, cleaning and repairs are paid by the University.

The Dean's Office receives a lump sum annually to pay for the VEE's ICT.

The Centre for Clinical Veterinary Medicine can apply for annual grants towards the costs of research equipment over 5,000 Euros, and with the Livestock Centre Oberschleißheim can retain revenues generated from agricultural production and clinics to cover expenditure.

There is no income from Tuition Fees since they were abolished by the Bavarian Government in 2013, but their role in financing the VEE has been replaced by a 'study grant', paid to the University, based on student numbers. It can only be spent on improving teaching and student conditions without increasing the number of students. The dispersal of this fund is overseen by a central commission appointed by the Senate.

The income from the clinics is significant with net profit being distributed through a transparent system according to need. The annual profit can be carried forward into the following year.

Research grants play a key role in the enhancing of the budget, and decreased significantly in 2021

2.1.2. Comments

The VEE has sufficient funds to operate effectively, with flexibility to allocate funds available through the 'study grant' and the net profit from clinics to VEE priorities.

2.1.3. Suggestions for improvement

None.

2.1.4. Decision

The VEE is compliant with standard 2.1.

Standard 2.2: Clinical and field services must function as instructional resources. 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 Department of Veterinary Science is made up of institutes each of which decides how best to use its funds, which are allocated to it by the Central University Administration, on personnel, materials and equipment.

The Centre for Clinical Veterinary Medicine, through a Centre Council, decides on the allocation of its funds to individual clinics. The Council also decides on what capital requests should be approved for the purchase of research equipment.

Any profit made can be carried over to the following year.

2.2.2. Comments

The Council which oversees the dispersal of income from the clinics amongst the clinics works well with those that create income being prepared to subsidise projects and equipment in those with less opportunity to do so.

2.2.3. Suggestions for improvement

Advice from an external financial expert may assist the VEE in maximising profit from the clinics and other services.

2.2.4. Decision

The VEE is compliant with standard 2.2.

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

2.3.1. Findings

Capital resources for the construction of the new faculties buildings is being provided directly by the State of Bavaria.

The allocation of funds from both the Centre for Clinical Veterinary Medicine and the funds from the study grants are reviewed systematically by standing committees/commissions and reviewed.

Study granted funding is prioritised towards:

- comprehensive expansion and further development of the Skills Lab;
- Cooperation with other faculties
- establishment of a didactical competence centre;
- expansion of the range of elective courses
- expansion of “good practice” (e.g. One Health, live long learning, ethics);
- strengthening independent and self directing learning;
- improvement of small group tutoring.

2.3.2. Comments

As the Bavarian state is the majority funder of the VEE, there is limited autonomy on how the finance is dispersed. However, the resources are regularly reviewed to ensure that they are sufficient to meet requirements.

2.3.3. Suggestions for improvement

None.

2.3.4. Decision

The VEE is compliant with standard 2.3.

Area 3. Curriculum

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

In Germany the study of veterinary medicine is regulated by the Licensure Act for Veterinarians (Tierärztliche Approbationsverordnung, TAppV) which defines the objectives, requirements, and structure of veterinary education, teaching content, methods of teaching and practical training, regulates examination procedures including the chronology of exams.

The aim of the curriculum is to use competence-based learning strategies, to achieve, evaluate and apply expected learning outcomes compliant with Directives 2005/36/EC as amended by Directive 2013/55/EU and Day One Competences as defined in SOP. All learning outcomes concerning each course are collected in Programme Learning Outcomes Catalogue (PLOC)/(Lernzielkataloge). In the Catalogue there are also described different competency levels which are to be achieved at different courses. All these criteria were developed by the teaching staff of the respective chairs in collaboration with the Department of Veterinary Science and Centre for Clinical Veterinary Medicine and the Curriculum Committee. They are available any time via Moodle.

A clinical logbook lists all the clinical skills required by TAppV.

Assessment of the achieved competences is described in detail in the Study and Examination Rules (Prüfungs- und Studienordnung), developed by the VEE Committee of Study Affairs, discussed on the VEE/establishment level, and finally approved by the Board of University Representatives.

The standard period of study of veterinary medicine as regulated by TAppV is five years and six months. The theoretical part of the study is scheduled to last four and a half years, comprising 3.850 hours of compulsory and elective courses and one year with 1.170 hours of practical teaching. The minimum number of hours of the practical courses is precisely defined.

During the development of the current curriculum, measures have been taken by the VEE to avoid curricular overlaps, redundancies, omissions, and lack of consistency. The Curriculum Committee ensures continuous improvement of the curriculum. The members of the committee are the Dean of Student Affairs, the EAEVE Reporting Team, representatives of the Department of Veterinary Sciences and the Centre for Clinical Veterinary Medicine, as well as 2 representatives of the student

body. The Curriculum Committee meets every month. Since 2021 two days annually are organised as Central Teaching Days where, through the relevant lectures, special attention is paid to the development of teaching and research skills. Later, lectures are offered to postgraduate students, assistants, and professors on the VEE's Moodle website.

The complete curriculum, described per semesters and the detailed description of each course is summarised in the Study Guide (Studiengang Tiermedizin Studienführer) which is available to all teaching staff, students, and stakeholders in printed or electronic version on the Establishment Moodle website. The Study Guide also offers information about teaching facilities, important contacts, student deputies, alumni organisation, students office, VETskillsLAB and Erasmus program. The teaching methods and the assessment procedures are described.

Beside compulsory courses as required by Directives 2005/36/EC and 2013/55/EU, 53 voluntary/elective courses are offered for students and doctoral students. By TAppV undergraduate students must complete 22 elective courses, at least 84 hours, before the Second Preclinical Veterinary Examination and another 224 hours prior to the Final Examination. More than 100 elective courses are offered per each term/semester. Students can apply for the electives via COREMATO (Course Registration and Management Tool). This computer-based tool has been specifically programmed for the veterinary medicine curriculum to set the priorities and allocate places for each course and for each student. With the help of the framework of the project lehre@LMU, profile lines (VETProfi) were established for the improvement of the practical orientation within the elective courses. Special attention has been paid to integrate courses developing so-called soft skills, communication skills, economic skills as well as information about job profiles in veterinary medicine, into the curriculum. By offering these profile lines, students can focus on certain areas during the study. They obtain a certificate of successful completion of a profile line upon graduation.

To receive an insight into the scientific approach/research activities, students are invited to take part in journal clubs, congresses/scientific meetings, student research projects (VetResearch) during the term or as a part of an internship or doctor's study.

Promotion of self-learning is regulated in Study and Examination rules of LMU Munich. It is explicitly cited also in the Study Guide, that each course should be supplemented by self-learning. To encourage and prepare the students for self-learning, easy access to a wide range of teaching materials is available on the VEE's web site.

Beside graduate curriculum the VEE provides a wide range of opportunities for specialisation, offering internship, doctoral theses, PhD programmes, residencies, federal specialisation programmes, habilitations and externships.

3.1.1.2. Comments

The expected competences for each course are very clearly published in the Programme Learning Outcomes Catalogue and are easily available on the web page of the VEE. All requirements of the Directives and Day One Competences (D1C) are covered in this document.

3.1.1.3. Suggestions for improvement

None.

3.1.1.4. Decision

The VEE is compliant with standard 3.1.1.

3.1.2. Basic Sciences

3.1.2.1. Findings

Basic subjects like chemistry, physics, feed plant biology and toxic plants, animal biology, zoology and cell biology and biomathematics, as well as basic sciences, anatomy, histology and embryology, Physiology, Biochemistry, General and molecular genetics, Pharmacology, toxicology, pharmacy and pharmaco-therapy, Pathology, Parasitology, Microbiology, Immunology, Epidemiology, Animal Ethology, Animal Welfare, and Animal nutrition are being taught during the first four years of study. Generally, the courses are composed of lectures and laboratory practical training. At the end of each year the state examination (Staatsexamen), under the supervision of the District Government of Upper Bavaria and not the VEE, is carried out. The first preclinical Veterinary Examination, is carried out after the first semester (Botany, Physics, Zoology) and after the second semester (Chemistry), and the second preclinical Veterinary Examination after the third semester (Animal breeding) and fourth semester (Anatomy, Biochemistry, Histology & embryology, and Physiology). Both exams are orientated to ensure that they are relevant to the clinical part of the curriculum.

The Examinations are, except for the first term (Botany, Physics, Zoology, where multiple-choice form is preferred), predominantly oral. Parasitology, Pharmacology & Toxicology and animal nutrition are assessed after the 6th semester and Bacteriology & Mycology, Radiology and Virology after the 7th.

The detailed criteria for progression are regulated by the TAppV, and Study and Examination Rules and are published in the Study Guide as well.

3.1.2.2. Comments

OSCE as developed for clinical examinations represents a powerful tool for student assessment. Basic sciences courses mostly do not participate in the OSCE exam method which can give a reliable QA analysis and useful feedback for preclinical courses as well.

3.1.2.3. Suggestions for improvement

None.

3.1.2.4. Decision

The VEE is compliant with standard 3.1.2.

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

3.1.3.1. Findings

The curriculum in Clinical Sciences in companion animals is compliant with the EU Directive 2005/36/EC (as amended by directive 2013/55/EU), to include the subjects (input) that support the acquisition of the DIC.

Quality assurance of the curriculum is good, and the VEE has measures to avoid overlaps, redundancies, omissions, and lack of consistency/transversality; the presence of the student body in the committee is a good initiative, as these parameters used to be an important complaint of students.

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Preclinical teaching is from 1st to 4th semester.

Clinical teaching is implemented in organ blocks and this helps to eliminate redundancies.

In Clinical Sciences subjects, the number of theoretical training lectures is clear, but the number of practical training hours is not (SER Table 3.1.2). However, it may be included in the 42 hours of clinical work, except animal production and propaedeutics with 1 and 3 hours of supervised practical training. There is a clinical training prior to the clinical rotations, in the 4th semester the clinical propaedeutic is scheduled, and the students are rotating weekly between different units.

In Table 3.1.2, Clinical Sciences Subjects, therapy in common animal species lectures has 14 hours per week. While this seems to be a lot, it is understood that this is because therapies are discussed in depth during organ blocks, clinical case demonstrations, and in pharmacology lectures. In the clinical emphasis training, the appropriate therapeutic options are discussed for the patient and applied practically and clinically. Since there is direct integration with clinical training, the hours per week cannot be directly calculated.

According to Table 3.1.3 clinical rotations are in year 5, and every student has to choose a priority.

The Clinical and pathological rotation is well organised, and the tasks for students are clear, 12 weeks duration for each clinical rotation and 7 weeks for the pathological part is good, and the activities are very well planned.

Clinical demonstrations are in the 8th semester and in the 9th and 10th semester students have their clinical emphasis training and block in pathology, food science and the drug courses.

As part of the curriculum update, there was a change from a clinical rotation through all clinics (between 2 and 6 weeks per clinic) to a specific focus clinic. The students choose a clinic in which they are then integrated into the team and intensively supervised for 12 weeks at a time. This allows specialised knowledge and practical skills to be taught and practised much more intensively. Since students only do one species as part of this clinical focus training, compact courses for the other species are available in the Skills Lab and other compensatory initiatives to ensure a broad training.

In semesters 1 - 8, students have only clinical courses in animal husbandry and propaedeutics. It is mainly theoretical knowledge that is to be taught intensively in this study section and can already be applied in the small curative practical course (ETP). In addition, the Skills Lab courses can be attended voluntarily to gain first practical experience.

The 42 hours of Clinical Work refer to the clinical focus training in the 9th and 10th semester. The offer of electives is wide and topics in Clinical Sciences in companion animals is good and allows the student to receive a deeper understanding in different clinical topics. The fact that the elective courses must be completed before the Second Preclinical Veterinary Examination increases the preparation of the students for the clinical period; the coordination of electives is very well organised for students and their structure makes students knowledgeable in a particular species or subject.

The Curriculum Committee has the right composition, with the presence of two students' representatives and two seats for EAEVE Reporting Team.

External Practical Training (EPT) is another important opportunity for students to complete their clinical competence in Small Animal Clinical Sciences, and they have the chance to do EPT in pre-clinical and clinical periods.

The logbook should play an important role for students, it includes the whole skills the student has to acquire during his studies, and it is designed for use in clinical rotations and also during EPT.

3.1.3.2. Comments

In the case of Clinical Sciences in companion animals, the curriculum is compliant with EU and German directives, including all compulsory subjects, a very complete elective offer, good rotations, EPT and the students are present in the different committees that assess all aspects related to curriculum. The logbook has been designed to be used during all aspects of clinical training, including EPT.

The logbook is new and not yet fully implemented for the recording and assessment of D1C.

3.1.3.3. Suggestions for improvement

Students gain surgical skills on cadavers, models of skills lab, and sometimes they have the chance to participate in basic surgery involving clinical cases where they are involved in treatments; nevertheless, it would be advisable to increase the number of basic surgical opportunities to practice on live companion animals (castration in cats or repairing wounds...).

3.1.3.4 Decision

The VEE is partially compliant with Standard 3.1.3 because of suboptimal hands-on training in Companion Animal surgery.

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

3.1.4.1. Findings

The curriculum in Clinical Sciences in food producing animals is compliant with the EU Directive 2005/36/EC (as amended by directive 2013/55/EU), includes the subjects (input) and allows the acquisition of the D1C.

The curriculum committee together with the quality assurance process aims at avoiding overlaps, omissions and redundancies. Regular meetings occur with the student body within the curriculum committee.

Preclinical teaching is offered from the 1st to 4th semester, including propaedeutics. The medical and surgical teaching is organised in organ blocks, in order to intensify subject linkage, avoid repetition and improve the learning process.

The number of hours of lecture/seminars is important in comparison with practicals as indicated in the ESEVT Indicators (n° of hours of practical (non-clinical) training). The number of practical (non-clinical training) is 698,9 hours (-1,69 below the minimal threshold).

In addition to mandatory lectures, the VEE's offering in terms of electives is wide (n=120) and

topics in Clinical Sciences in food producing animals is good and gives the student the opportunity to go deeper in different clinical topics (internal medicine, herd health management). The fact that the elective courses must be completed before the Second Preclinical Veterinary Examination increases the preparation of the students for the clinical period; the coordination and selection of electives is very well organised for students and their structure lets students go deeper in a particular species or subject.

In the fifth year, the clinical rotation of 12 weeks allows the students to go deeply into each sector with various degrees of autonomy. A teaching farm is also available to increase the number of patients and workshops. An ambulatory clinic allows the students to see a high number and variety of cases (e.g. 11210 cases in 2021). A clinical rotation is available for ruminants and pigs (poultry are included in the avian clinic). The teaching devoted to pathology comprises mainly lectures and seminars in the main, and a limited number of practicals carried out by students.

The new curriculum is oriented towards longer and deeper clinical rotation in the fifth year to allow smaller groups. External Practical Training (EPT) is another important change and aspect for students to complete their training, and they have the opportunity to do EPT in pre-clinical but mainly in the final year. If the students can choose their EPT, some of them are mandatory in the sector of production animals. Two external practical training sessions are also included in the final year allowing contact of students with practitioner and non-academic work. A digital database is available for students to find (per species and location) locations of practices where EPT is available.

There is no formal or regular contact between the VEE or teachers and the veterinarians in place in the practice who provide EPT, except in case of problems. The evaluation of the practice by the student is mandatory while the evaluation of the student by the veterinarian/practice is not. There is no recording system of the cases seen during EPT by the students, regardless of the period for EPT. In addition, there is no training or formal agreement between EPT practices and the VEE or regular meetings between academic staff and EPT practices.

To track their competences, a logbook is available for students. However, at the moment the completion of this logbook is not mandatory for students.

3.1.4.2. Comments

- The teaching farm and the farm practice offer plenty of opportunities to build practical and clinical teaching and to address the One Health approach and sustainability of agriculture. The quality and the expertise available within the ruminant clinic is well known and recognized. During the internal medicine rotation and ambulatory clinics, students are really practising under the supervision of academic staff.
- The mobile clinic and the related organisation allow seeing a number of herds and cows and to stay in contact with stakeholders and also to face 1st line treatment cases.
- The small size of the groups allows the students to practice and improve their skills.
- Birds, fish and reptiles (usually considered as minor species) are well addressed in the curriculum and in the clinical rotation. In addition, the presence of pigs in the VTH allows the students to be familiar with restraining and examining such animals which is quite novel for a VTH.
- The facilities for the horse clinics are new and the equipment is of the highest quality.

3.1.4.3. Suggestions for improvement

- Regarding EPT, the assessment of the student by the practice should be mandatory as it is for the practice assessment by the student. This assessment can be made based on DIC to ensure for instance that every student made a neuter in cat (see Standard 8.5);
- Regarding EPT, a recording system if the cases seen by the student could help to estimate the case load the students are facing (see Standard 3.6).

3.1.4.4. Decision

The VEE is compliant with standard 3.1.4.

3.1.5. Food Safety and Quality

3.1.5.1. Findings

The theoretical teaching in the overarching subjects of Food Safety and Quality, Meat Hygiene, Veterinary Public Health and One Health Concept Subjects are taught over a series of 55 lectures of 1.5 to 2 hours in duration, between the 6th and 8th semester.

The theoretic teaching is integrated well with the teaching of, for example, the basic sciences, where microbiology is taught during the 6th semester when students are also being introduced in food safety and quality to food contamination and bacterial pathogens.

Theoretical training is now carried out largely on Zoom, to all 240 students who can interact with the lecturer through the chat function. Confirmation of teaching outcomes for each lecture is through a quiz at the end.

Practical teaching is carried out as part of the clinical rotations in groups of 60-70 divided into sub-groups, depending upon subject requirements. Food Hygiene and Meat Hygiene are taught in a seven-week block of 10 hours each week, during year 9th and 10th semester, at the Institute of Food Safety and Analytics in Oberschleißheim.

Students are challenged by self-directed homework which is submitted for marking and correction by the teaching staff.

Meat hygiene practicals are conducted to groups of 8 or 9 per teacher at the Institute of Food Safety and Analytics in Oberschleißheim, having previously, up until 2021, been conducted at the Munich slaughterhouse.

Only pig carcasses can be inspected in situ at this facility, with the other species being taught through video and detailed explanation. The German e-tool, produced with the aim of harmonisation of the disposition of conditions, is used as a teaching aid. The theoretical training provided, together with the practicals undertaken by all students and the compulsory 100 hours of External Practical Training is sufficient to ensure DIC in the subject.

Practical food hygiene encompassing meat products, fishery products, eggs, and honey are taught in the course room and the VEE's own food processing facility in similar sized groups as meat hygiene. The production of various meat products is demonstrated with the students participating in sausage manufacture.

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Milk science is taught for 2 hours per week for a period of 13 weeks in the Institute for Hygiene and Technology of milk. A course of practical training provides students with an understanding of milk quality, safety and the production of milk products, cheese.

An elective, consisting of seven lectures and a seminar on Food Safety and Quality, Public Health, is available.

3.1.5.2. Comments

The theoretical and practical training in Food Safety and Quality is comprehensive, well taught and delivered by an enthusiastic team. The philosophy and thinking behind the structuring of the course to gradually build on knowledge is good. The new food hall for the practical training is well equipped and of sufficient size for the current teaching group size.

Practical implications for animal welfare on farm, during transport and at slaughter are picked up from theoretical training elsewhere in the VEE and built upon to give the students the opportunity for a comprehensive understanding.

The integration of the Department with the regional state laboratories and State Veterinary Service is good with exchange of teaching materials and expertise.

3.1.5.3. Suggestions for improvement

None.

3.1.5.4. Decision

The VEE is compliant with standard 3.1.5.

3.1.6. Professional Knowledge

3.1.6.1. Findings

The management of clinical and pathological rotation is well spread over the whole period of university studies.

The division of the internship periods in the different areas of veterinary medicine, from small animal clinics to slaughterhouse practice, exotic animals and production animals, is also good, and for part of the course students have the opportunity to decide whether to study one of the areas more closely than others. Practical training rotation takes place over 60 weeks for a total of 432 hours. Herd health management is allocated 5 hours of lectures and 12 weeks of practical training. Some topics are covered within other courses, such as animal production and legislation.

In addition to the basic training, students have access on a voluntary basis to further 53 courses of a practical nature supervised by teachers. The content of education of these topics can be found in the SER appendices.

3.1.6.2. Comments

The training in Professional knowledge is in agreement with the Standard.

3.1.6.3. Suggestions for improvement

None.

3.1.6.4 Decision

The VEE is compliant with standard 3.1.6.

Standard 3.2: Each study programme provided by the VEE must be competency-based and designed so that it meets the objectives set for it, including the intended learning outcomes. The qualification resulting from a programme must be clearly specified and communicated and must refer to the correct level of the national qualifications framework for higher education and, consequently, to the Framework for Qualifications of the European Higher Education Area.

The VEE must provide proof of a QA system that promotes and monitors the presence of 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 strictly follows the rules of TappV, which underlines that the veterinary training ensures the knowledge and skills according to Directive 2005/36/EC and of the Council of 7 September 2005 on the recognition of professional qualifications (OJ L 255 of 30.9 .2005, p. 22) in the currently valid version. According to The European Qualifications Framework (EQF), learning outcomes are described at each individual level and in three columns (knowledge-skills-responsibility and autonomy), while for The German Qualifications Framework (DQR) four column system (knowledge – skills – social competence – autonomy) are described in order to adequately represent the intended learning outcomes in the German education system. In the learning outcomes, the level of cognitive knowledge is divided into three sections: K1 as descriptive/factual knowledge, K2 as understanding and K3 as problem solving/evaluation and analysis, which is not homogeneously described for all courses. In profile lines, contents and learning objectives, construction around these objectives and electives for each course with detailed information of the lecturers, target semesters, type of proof performance is provided. The teaching hours and the subjects in the curriculum are built on TAppV for a fairly rigid timetable overall.

The activities to promote self-learning are directed under Teaching@LMU, in which VETLearn are student tutorials, VET profile are practical orientation on courses (profile lines, new electives), VETResearch are student research projects and VETTeach are didactics training for lecturers. In VETLearn, student tutorials are offered to support the various scientific subjects: physics, chemistry, terminology, biochemistry. These tutors are didactically trained, supported and certificated. This system allows VEE's students to be involved in a learning environment and improve themselves. Students can concentrate on specific topics in which they are particularly interested during their studies by using the Profile lines. Information is readily available on the web and these courses, the elective courses (Wahlpflichtfächer) are designed to be cumulative building up over three steps with the base, special knowledge and in-depth knowledge with differing numbers of courses. The structuring of these electives is expanding with additional topics, such as occupations, professional dealings with owners, zoo management and zoo planning and business administration.

The clinical skills lab allows self-study or study with the support of the specially trained student

tutors. Learning in small groups, at the students' own pace is provided through constantly expanding exercises. The courses are designed to give particular importance to the DIC, where practice with a variety of animal species prepares the students for their internship and everyday working life. Students are also able to work with the veterinary clinical service offered on the teaching and experimental farm upon request.

A specific library for veterinary medicine is open on weekdays from 9:00 a.m. – 8:00 p.m. with a reading room. The University Library's databases for the Department of Veterinary Medicine can be found in the DBIS database information system. In addition to relevant specialist databases (for searching for articles and other literature references), reference works, dictionaries and full-text databases are also listed. Printed and electronic Munich and other German language dissertations are provided in the university library. Information on library and research media for self-learning environment is available through web supporting self-learning.

The VEE is also involved in KELDAT, which is a project-based self-learning system where the competences of the students are evaluated. This module also enables the students to practice beyond-VEE-tools through e-learning materials that are developed by the German speaking universities and make self-assessments.

3.2.2. Comments

The VEE provides competency-based teaching and training under German and European regulations and describes several options for self-learning through Profile lines. Contents developed through KELDAT and VEE's own, were transferred to IMS (Item Management System). The VEE has put an effort to be a part of UCAN (Umbrella Consortium for Assessment Networks) allowing promotion of a highly conductive self-learning environment, which is commendable.

3.2.3. Suggestions for improvement

None.

3.2.4. Decision

The VEE is compliant with standard 3.2.

Standard 3.3: Programme learning outcomes must:

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

3.3.1. Findings

Objectives and structure of veterinary training, course content and subject of study examination procedures (general provisions, examination boards, registration, admission, assessment, repetition), practical studies, EPTs are well described in the Ordinance on the Licensing of Veterinarians (TAppV). The TAppV-mandated homogeneity of the German curriculum which the

VEE abides by, eliminates the need for inter- and intra-VEE dispute about the syllabus and hours. Overall learning outcomes for each lecture is designed according to TappV, which is also adapted to DIC by the VEE. Examination and the study regulations are defined by law and regulations. The Moodle system provides detailed information on registration and information on the course content, learning outcome and registration procedure and dates for the exams. Even though TappV defines the number of hours for each subject, the distribution between lectures, seminars and practical or clinical work is evaluated by the VEE for their balance. Course content is evaluated for inconsistencies, double-ups, and possible content gaps through the Curriculum Committee. Learning outcomes are described in the beginning of the lectures. Course catalogues, registration process and assessment activities are available through the web.

The logbook provides the corresponding Day One Competence (DIC) number for each skill as provided by EAEVE. All skills are divided into core skills (C) or advanced skills (T). While core skills can usually be carried out in all relevant practices or clinics, regardless of orientation and equipment, during the internship or the focus training, advanced skills are often only carried out in specialised practices and clinics. Learning outcomes are classified into three sections: Knowledge (general medical knowledge, knowledge acquisition and assessment, legalities), Live animals (patient care, animal welfare), General Skills (ethics, communication, quality management). The scale is subdivided into “seen” and “did” sections and valued by V (occasionally), W (weekly) and T (daily). Learning outcomes in the individual unit are provided through the logbook system with the corresponding DIC. Logbooks are also designed to encourage the students to request the skills that they feel they are missing, or have not had enough practice in, to be taught.

3.3.2. Comments

Learning outcomes and assessment activities are clearly defined in the VEE, which are in complete accordance with TappV. All laws and related regulations along with course structures are communicated through the web. DIC are integrated in the logbook. Programme learning outcomes are communicated to staff and students through several platforms and mainly through the Moodle system.

3.3.3. Suggestions for improvement

None.

3.3.4. Decision

The VEE is compliant with standard 3.3.

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

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

Overview of the courses are found in the annex of the Examination and Study Regulations of the LMU Munich for the Course of Studies for Veterinary Medicine (Prüfungs- und Studienordnung der Ludwig-Maximilians-Universität München für den Studiengang Tiermedizin), consolidated version 29th September 2017, which was prepared considering the Ordinance on the Approval of Veterinarians (TAppV) of July 27, 2006 (Federal Law Gazette I p. 1827). This version was updated with the contribution of internal and external stakeholders. The kinds of courses such as theoretical lectures (Vorlesungen), compulsory optional subjects (Wahlpflichtfächer), seminars, practices (Übungen), clinical trainings (Klinische Übungen) and guided self-studies (Angeleitetes Selbststudium) along with evaluations and examinations are provided. In order to improve the core curriculum, which is mainly defined by the laws, the Curriculum Committee of the VEE aims to fine-tune with respect to the opinions of the stakeholders. This committee is composed of representatives from DVS (3), CCVM (2), EAEVE reporting team (2) and student representatives (2). The committee is coordinated by the Dean of student affairs and holds regular meetings monthly. A position for quality management has also been created.

Training opportunities for the lecturers in the VEE is supported by “VETTeach” easily accessible through the web. Information on conferences and further training opportunities in the field of didactics is provided. Among many self-improvement opportunities, PROFiL is the institution of the LMU for the personnel qualification of teachers on didactic training and further education through courses, advice and coaching. Lively exchange with other teachers from various departments offers a constructive discussion environment for improved use of methods. Teaching courses range from half a day to five days, teaching advice, teaching coaching, peer shadowing and the TutorPlus tutor trainer training course. Also, support for the teaching through mobile applications such as MobiDics is available.

All courses, counselling and training opportunities can be credited as part of the Bavarian University Teaching certificate. Lecturers can thus expand their teaching skills in order to make the learning activities of the students conducive to learning in the online context as well. Such an example is "Constructive, appreciative, digital - Counseling in university teaching", which includes free workshops, lectures and keynotes via Zoom. As a multiplier event, with basic qualification from Universitas Digitalis, the lecturers are able to expand their digital teaching abilities in their own departments. The eUniversity provides technical support for the basic services for teaching at the LMU, such as Zoom, Moodle and LMUcast, which offers both teachers and students support in the targeted and professional use of these services. Besides university governed events, the VEE endeavours to customise its training tools to the needs of specific contexts and professionals. For this purpose, the VEE spends two days every year in a retreat focusing on new teaching skills and an exchange of knowledge and experience with the goal to improve all aspects of teaching. CCVM is also assigned two additional days on an annual basis for the continuing education to focus on improving skills necessary for teaching and research. This live interaction with the VEE teaching staff allows them to improve themselves on the creation of teaching materials, which is also available on the VEE's Moodle website. Lecturers are able to check other contents and create

complementary content. These meetings and content availability allow for efficient interaction to the vertical and horizontal integration of disciplines within the curriculum.

3.4.2. Comments

LMU offers various free teacher training opportunities for its employees. The teaching events organised by the VEE strengthens the didactic teaching in a pedagogical manner. Sources on improving the teaching materials are readily available. These feedbacks governed, self and community improved teacher training opportunities, lead to high awareness of quality in teaching. The Curriculum committee fine-tunes the standards set by the law (TAppV) on curriculum, which includes the contribution of students, while curricular design options of the VEE are limited by the law.

3.4.3. Suggestions for improvement

None.

3.4.4. Decision

The VEE is compliant with standard 3.4.

Standard 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 German veterinary medical licensure law (TAppV) provides requirements for content and training places of mandatory 1170 hours of EPT (Pag. 37, chapter 1 section 1 annex).

EPT's organisation is structured and dispersed across the curriculum, with a proper division of time and veterinary areas of interest.

Students propose for approval to the VEE the structures in which they want to carry out their EPT.

3.5.2. Comments

The EPT is done in agreement with the local regulations.

3.5.3. Suggestions for improvement

None.

3.5.4. Decision

The VEE is compliant with standard 3.5.

Standard 3.6: The EPT providers must 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

There are 4 persons responsible for the supervision of EPT activities. The VEE provides logbooks to students, in order for them to be able to check the tasks that they have to perform or achieve during their EPT. These logbooks are for EPT in private veterinary practice, in the slaughterhouse or processing food-plants, and in VEE clinical services. The EPT providers confirm that a given student, personally identified, spent his/her EPT in their establishment for a given period, but expresses no judgement on the performance or quality of the student or their competence.

Students can leave their comments on their external placement experience which are available to other students.

3.6.2. Comments

There is no formal evaluation of the performance of the students made by the external providers. The choice of veterinarians to provide EPT by law (TAppV) is that they have two years' practice, a pharmacy and that there is no professional penalty within the last two years. As such, the selection method used to select a practice does little to guarantee the quality of the services offered to students, either in terms of caseload or in terms of the opportunity to pass on their professional experience and skills.

3.6.3. Suggestions for improvement

There is a need to introduce a formal system to evaluate the performance of the student during their EPT experience.

3.6.4. Decision

The VEE is partially compliant with standard 3.6 because of suboptimal evaluation of the performance of the student by the EPT provider.

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

3.7.1. Findings

Students are provided with a guide to follow during their practical training period containing the tasks to be carried out; they tick boxes in the logbook provided by the VEE.

At the moment, filling this logbook is not mandatory and there is no control nor assessment of the self-reporting of the students by the VEE or the EPT practitioner. There is no contact between the academics of the VEE and the practice to discuss goals, standards expected or assessment of the students.

It is relevant to remind the VEE of what was written in the previous EAEVE report in 2012 in the section suggestions for clinical science regarding extramural work:

“...As extramural work represents an important part of the clinical training, closer supervision and control by the VEE should be instituted. That concerns selection of practices and learning outcome during extramural rotations, in general a quality assessment of the extramural work should be made. It is very positive that an evaluation of the extramural training sites is done by the students, but this seems insufficient. The VEE should get involved in that process. The student certificate filled in by the practice offering extramural training is too generalised and should be revised.

To help the practitioners in their teaching, a list of required competences should be available to the practice, and the veterinarian in charge should ensure in writing that the required competences have been achieved. It should define what is meant by regular collaboration (“regelmässige Mitarbeit”) as stated in the certificate. To help the practising veterinarian in providing the best teaching, a detailed description of procedures the students should perform during extramural work should be in place and the clinic should be sufficiently instructed and informed in order to provide the best possible practical experience”.

3.7.2. Comments

Since the last evaluation (2012), the part devoted to EPT and its importance in the training of the students in their acquisition of DIC has increased.

The Visitation and the several meetings with both academic and students confirm that there is no robust system to monitor and to assess the EPT activities.

3.7.3. Suggestions for improvement

In addition to the core team, it would be appropriate to have a designated tutor who can follow the students through their practical training.

A digital system (an App), modelled on the current logbook, could be developed, where the students has their own interface to add a competency gained. Making this mandatory could be helpful to allow the students to follow their progression and to assess it.

Regarding EPT, the assessment of the student by the EPT provider should be mandatory as it is for the practice assessment by the student. This assessment can be made based on DIC to ensure for instance that every student has basic surgery skills for companion animals.

In addition, an EPT recording system for the cases seen by the student could help in the estimation of the caseload the students have experienced.

Regular contacts between EPT practices and the VEE could occur to discuss the student profiles, their competences before and after EPT and also to train the EPT on certain aspects.

3.7.4. Decision

The VEE is not compliant with Standard 3.7 because of the absence of a robust system to monitor and assess the EPT activities.

Area 4. Facilities and equipment

Standard 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 mainly divided into two main Campuses, namely the City Campus and Campus Oberschleißheim. The Campus Oberschleißheim is going to be the new main campus and is currently under construction and located within the north of Munich with a distance of 13 km to City Campus.

A central building office (Refer at VII.6) is responsible for basic maintenance, safety and functionality of these premises and buildings and for their essential infrastructure. Qualified internal staff control specific needs and conditions of laboratories and clinical properties and indicate specific requirements when it is necessary. There are regular controls and audits by central LMU staff to assure work safety, biosafety and environmental safety. Departments/clinics heads are responsible for the upgrade, maintenance and extension of laboratory equipment and animal shelters. Budgets for refurbishment and rebuilding are reported by the clinical and preclinical departments on a yearly basis and controlled by the LMU central administration.

The Central Administration of the University of Munich is responsible for ensuring that all physical facilities comply with all relevant legislation. The Office of Occupational Safety and Sustainability of the University of Munich plays a central role in maintaining compliance with relevant legislation, and employees of this office visit the VEE regularly for deficiencies.

4.1.2. Comments

The audits about biosafety and environmental safety occur every 3-5 years. Several different governmental officials are conducting those audits depending on the exact nature of the audits.

4.1.3. Suggestions for improvement

None.

4.1.4. Decision

The VEE is compliant with standard 4.1.

Standard 4.2: Lecture theatres, teaching laboratories, tutorial rooms, clinical facilities and other teaching spaces must be adequate in number, 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

Teaching facilities

Lecture halls

There are 7 lecture halls in the City campus, and 4 in the Oberschleißheim, all equipped with projectors, TV, and WLAN Access. Several halls have cameras to allow livestream broadcasting of lectures. This is mainly used for hybrid teaching (teaching in presence with concurrent streaming for external attendance) and for transmission to other lecture halls. New lecture halls in Oberschleißheim are also equipped with power plugs for laptops and tablets.

Group work facilities

In the Institutes of the City campus there are classrooms, seminar rooms, and seminar rooms with a library. In the Clinics of the City Campus there are exercise rooms, classrooms and seminar rooms.

In Campus Oberschleißheim there are some more rooms like the city campus, so in the institutes as clinics, some with computers.

On campus Martinsried there are three seminar rooms 1022 m² size.

Practical work facilities

SER Table 4.2.3 included different practical work facilities in institutes, campus Oberschleißheim, and campus Martinsried and in Chemistry/Biochemistry Laboratory for Students – Pettenkoferstraße (located in institutes); there are different facilities for different activities and equipment; teaching laboratories and demonstration rooms are the biggest. So, it seems there is no practical work in the city campus, but it has more lecture halls.

Skills Labs

Skills labs include 6 rooms, 302 m², offering 18 different stations (in 2-hour course blocks each with 3 stations) for propaedeutic, reproductive medicine, surgery and laboratory work. Starting from the 2nd semester, students can either practice independently or under the supervision or with the help of tutors.

This lab is very well equipped and used for elective courses.

Study and self-learning facilities

There are several study and self-learning facilities in both main campuses (39 seminar room in Institutes).

Catering and canteens

There are canteens in both main campuses, and around campus there are more catering chances (bakeries, cafés, supermarkets, etc.).

Locker rooms

All campuses have a good number of lockers (more than one thousand, distributed in 20 rooms).

Accommodation for on-call students

In the city campus there are 11 rooms, 3 in Institutes and 8 in Clinics; in the Campus Oberschleißheim 7 rooms. The rooms are equipped satisfactorily and, in case of the Campus Oberschleißheim, have computers.

Leisure

The offer for leisure is extensive and in different activities, and the Student Council of Veterinary Medicine is very active organising events.

Sanitary facilities

The number of sanitary facilities seems to be enough, but some of them are higher in the city campus.

Staff offices and research laboratories

There are many rooms for staff offices and research laboratories.

4.2.2. Comments

The teaching facilities are sufficient and well equipped. The distribution between campus and institutes is unequal in some cases, but students can use the institute facilities.

The city campus holds most of the theoretical teaching and clinical teaching in companion animals. Skills labs are very well equipped and play an important role in preclinical teaching, in some the access for handicap people should be revised.

4.2.3. Suggestions for improvement

Access for people with handicaps should be revised in some rooms.

4.2.4. Decision

The VEE is compliant with standard 4.2.

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

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

4.3.1. Findings

Premises for housing

SER Table 4.3.1 lists the premises for housing. The premises for healthy animals are in the Campus Oberschleißheim, the number is good for bovine and pigs, but there is no room for healthy horses. The small animal facilities are not constructed yet. For research animals, all campuses have rooms for any species, with an emphasis on pigs and chicken. In case of hospitalised animals, premises are located in City campus and Oberschleißheim campus including dogs, cats, horses (rooms, and paddocks), ruminants (rooms, igloos and tents), sheep and birds.

Premises for clinical activities, diagnostic services, and others

SER Table 4.3.2 lists premises for clinical activities, diagnostic services, and others.

For Clinical activities:

In the City campus there are 2 consulting rooms for Companion animals aimed at the Institute for Behaviour and Animal Welfare, and for Clinics there are consulting rooms, small procedure rooms, surgical suits and supplementary rooms and diagnostic and radiation therapy rooms; these rooms are well equipped to allow diagnostic and therapeutic procedures to be carried out on companion animals. Campus Oberschleißheim has a Diagnostic imaging and radiation therapy area in the Livestock centre Oberschleißheim, and one consulting room in the Institute for Animal nutrition; for Clinics there are consulting rooms, small procedure rooms, surgical suits and supplementary rooms and diagnostic imaging and radiation therapy area for the rest of animal species (ruminants, porcine, equine, exotic, camelids...), very well equipped to perform internal medicine, surgery, reproduction and ophthalmology in all these species.

For Diagnostic services including necropsy:

In the City Campus, including the Institutes, there are diagnostic laboratories, fully equipped to work in pathology, toxicology, bacteriology, virology and mycology procedures, and a necropsy hall with preparation rooms for work in pathology procedures; in the Institutes, work with companion, food, and wildlife animals. In the Clinics, there is a diagnostic laboratory for clinical biochemistry, haematology and coagulation tests, mainly used for companion animals as well as 8 consulting rooms.

In the Campus Oberschleißheim, there are some diagnostic laboratories in other institutes with equipment to work in food microbiology, mainly in ruminants. In the clinics, there are 57 rooms full equipped to work in internal medicine and reproduction of large animals, and 21 rooms, fully equipped, to work several subjects of clinical diagnostic laboratory in exotic species (birds, small mammals, reptiles, amphibians, ornamental fish); apart from the diagnostic laboratories there is a necropsy hall to perform necropsy in ruminants and exotic species.

In the Campus Martinsried there are 5 rooms used in Parasitology.

More facilities are described for other research activities, located in Institutes, Clinics and Moorversuchsgut, and used to do research in fish, companion animals, porcine and large animals.

Description of the equipment used for clinical services

The equipment used for clinical services is described in SER Table 4.3.2; it is very complete and one can perform any imaging diagnostic method, any clinical biochemistry analysis, any reproduction methodology one might require. Clinical nutrition support, and physiotherapy equipment is available to add supporting treatments.

Description of the premises used for the practical teaching of FSQ and VPH

In this chapter there is reference to meat products and milk products, mainly to food technology. The food processing facilities are newly constructed and well equipped with appropriately sized equipment.

Practical meat inspection training is provided through hands-on inspection of pig carcasses and offal in the meat processing room, through demonstration and video and during compulsory EPT.

4.3.2. Comments

Livestock facilities, animal housing, core clinical teaching facilities and the equipment used for teaching purposes are sufficient and meet the requirements.

In preclinical teaching, animals owned by students and staff are used, in the Equine Clinic there are horses kept for these purposes.

4.3.3. Suggestions for improvement

None.

4.3.4. Decision

The VEE is compliant with standard 4.3.

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

Organisation and management of the veterinary teaching hospitals and ambulatory clinics

The Clinics of the VEE provides services for all animal species (Small animal internal medicine, surgery and reproduction; equine, ruminants, poultry, fish, reptiles, amphibians and small mammals, swine), and the range of services include general and specialised consultations. Appointments are offered 5 days per week (Monday to Friday), while emergency services operate constantly 24/7 all year round.

Hands-on training for students plays a central role in all activities in all clinics of the VEE. During the 9th term, students spend 12 weeks during their clinical rotations, which are organised to ensure that the number of students is kept at a maximum of 20 per clinic. This allows for a maximum of up to 2 students per patient. The students rotate within a clinic, which allows them to gain experience in different services.

The students are assigned to a clinical supervisor that follows the clinical cases. The student carries a logbook where they can document procedures they have performed, including procedures on cadavers. Students can work as student assistants within the clinics and in the emergency service from first term onwards, which is in addition to the compulsory training.

Student necropsy courses (i.e., full necropsies) are primarily performed on small animal species, such as dogs and cats. If submitted carcasses of large animals (horses, bovine) or exotic species are available at the time of the student necropsy-course, these are given preference.

For student organ-pathology courses (i.e., pathological examinations of single organs) organs of

all available species are used, including fresh tissues obtained from the local slaughterhouse in Munich (456 bovine and 779 pig organs since January 2022) and organs derived from current necropsy cases of other species kept aside for demonstration to students, as well as stored organs from past necropsy cases of different species (full spectrum of mammal species), which had been frozen and stored until demonstration to the students. The activity is compulsory for students to complete the obligatory pathological practical training during the curriculum. The students are also invited to visit the daily necropsy rounds, where all necropsy cases of the present day are presented and discussed, neuropathology macro and histology rounds as announced in the course catalogue (Vorlesungsverzeichnis). This offer is an optional course. There is an agreement with the small animal clinics to submit donated cadavers for students' teaching. Regular pathological investigations of material of animal origin or carcasses externally submitted are also regularly used for students' education (see above). Animal owners at the clinics are informed about the possibility to donate their deceased animals for veterinary training and teaching in conjunction with diagnostic procedures. There also is a cooperation with local cremation services, so that the carcasses can undergo individual cremation after necropsy.

Many of the local shelter animals are presented in the small animal clinics. When euthanasia is elected, necropsies are performed in a regular manner. Currently new advertisement programmes for local practices in the small and large animal area have been launched in order to increase the numbers of necropsies.

For pathological examination, horses are submitted to the Institute of Veterinary Pathology by the LMU Clinic for Horses on a regular basis, as well as by local private veterinary clinics around Munich. Furthermore, Munich holds several collaborations with national and international zoological gardens and can therefore provide a high number of exotic species (including large ruminant species) necropsies.

Ruminants are submitted to the pathology institute mostly when special investigations (carried out at the institute) or the expertise justify transportation towards the city campus. However, students that see cases at the ruminant clinic have the possibility to follow-up the cases by attending necropsy rounds at the federal pathology lab next door to the clinic. The VEE expects to take over most of the necropsies of cases from the farm animal clinics after relocation of the institute to the OSH campus in 2026.

A new advertisement programme for local practices for companion and farm animals has recently been launched in order to increase the numbers of necropsies.

4.4.2. Comments

The clinical teaching facilities meet the standard required and students have a lot of opportunity to be in clinics and emergency service, and to perform procedures on cadavers. The work for the VEE to get cadaver in different animal species is to be commended.

The new equine hospital is very good, with high standards in facilities as premises, but maybe the staff should have to increase to meet the whole clinical activities.

In the Small Animal Hospital, surgery and internal medicine have different reception and hospitalisation areas, it should be advisable in the near future that they share the facilities and so optimise the resources. This merging is already decided upon and will take place in 9 months' time on April 1, 2023

4.4.3. Suggestions for improvement

Surgery and Internal Medicine should in the near future share some facilities and so optimise the resources. Again, the merger is decided and preparations for the merger are ongoing and currently accompanied by the Central University Administration and external fusion specialists.

4.4.4. Decision

The VEE is partially compliant with Standard 4.4 because of suboptimal collaboration between internal medicine and surgery departments in CA.

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

4.5.1. Findings

During their clinical education, students have access to all parts of the clinics under supervision, including the laboratory, pharmacy and procedure rooms. Students can enlist in additional rotations in clinics; so, if a student wants to do more of any clinical activity she/he desires, she/he can. The Clinic for Horses and the Clinic for Small Animal Surgery and Reproduction offer the possibility of clinical traineeship.

During rotation and practical training, students have the chance to access the Institutes that offer students to be introduced to different methodologies and procedures.

The accessibility to the teaching facilities is very well organised, with some exceptions in the old buildings due to structure. An induction loop in the floor for students with hearing aids or cochlear implants, and offering of changing tables for students in the clinics for Ruminants and the Institute for Food Safety are some examples.

Students can request an externship in the clinics in addition to the rotation and in general that is approved, but if for the time period they request to spend in a specific service several other students have already been accepted, their request may be denied and they have to choose a different time period. For example, in the small animal medicine clinic last year the VEE had 16 students choosing this option, on average they each spent 6 additional weeks in the clinic. A coordinator for the compulsory rotations, who is also responsible for administering requests for externships, can provide the overview over the number of students in each given service at each week of the year.

4.5.2. Comments

There is good accessibility to the teaching facilities, and well organised clinical rotations providing the students with good opportunities to learn.

4.5.3. Suggestions for improvement

The pharmacies should share the database to better control the material stocks.

4.5.4. Decision

The VEE is compliant with standard 4.5.

Standard 4.6: Appropriate isolation facilities must be provided to meet the need for the isolation and containment of animals with communicable diseases. Such isolation facilities must be properly constructed, ventilated, maintained and operated to provide for 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 city campus and Campus Oberschleißheim have isolation facilities for companion animals, production animals, equine and exotics. The number of places, the size and locations are good. The access to the isolation facilities is regulated by the clinician on duty, who determines the persons responsible for diagnostic procedures and treatment of the animals hospitalised in those wards as well as the details of the access frequency, treatments and any other areas of concern.

The general biosecurity rules are discussed by the VEE with the people needing access, copies are hung up on the wall in the entrance of those wards.

Wards are disinfected daily and details of the cleaning and disinfection procedures are hung up on the wall of the entrance room. A calendar is hung up on the inside aspect of the access door to allow cleaning personnel to mark their tasks.

4.6.2. Comments

Good number, good size and locations for isolation facilities, and for all animal species. The general biosecurity rules are hung up on the wall in the entrance of the isolation ward.

4.6.3. Suggestions for improvement

The rules are written in German but considering there is a great movement of non-German students and teachers, it is suggested that an English version is provided.

4.6.4. Decision

The VEE is compliant with standard 4.6.

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

4.7.1. Findings

Herd health management is taught in the semesters 5 to 7, there are clinical demonstrations during semester 8. In clinical rotations (semester 9 and 10), students are trained in herd health management and practical skills and the use of herd data analysis collected in their farm-visits.

The Mobile Clinic provides individual animal care and herd health services for about 60 dairy farms, and in addition, there is a cooperation with another veterinary practice. The 3 ambulance vans are fully equipped. All visits of the mobile clinic are charged according to the national fee schedule for veterinarians.

The students in semester 8 are prepared for the clinical practical training by case demonstrations in all clinics. Moreover, before and after the lecture term, the students can already perform part of their EPT. The skills lab offers specialty courses preparing students for the first night shift and intensive care.

Approximately 80 students per year go out with the ambulance, 20 per block (3-month blocks). In general, 6 students are going out with the ambulance every day. In general students spend 2-3 weeks in the ambulance service going out for herd health and ambulatory practice, and 9-10 weeks in the 3 areas of the clinic. They meet and receive a short introduction, then leave at 8:30 for a whole day. Students assist in the ambulatory service, have their own patients, prepare the presentation about those patients in group lessons. Discussions about the patients also occur at the farms and in the van while driving to and from the various farms.

4.7.2. Comments

The Mobile Clinic is well performed, three ambulance vans, well-equipped, and good herd health management, with students actively involved in all services and activities.

4.7.3. Suggestions for improvement

None.

4.7.4. Decision

The VEE is compliant with standard 4.7.

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

4.8.1. Findings

12 vans are used for the transportation of students, with different numbers of seats, and are fully equipped.

One car, 1 van and 7 trailers are used for the transportation of live animals.

For the transportation of cadavers/organs 3 vans and 2 cars are used, with rear cargo space and boxes, and 3-5 seats.

All veterinarians employed by the respective clinics can drive vans. Theoretically the VEE could also for selective drives permit students as drivers. To drive vehicles, the type of driving licence is "Führerschein Klasse B" for vans, "BE" for trailers.

In the bovine ambulance, most farms have their own protective clothing that visiting veterinarians have to wear. In addition, students and staff have their own protective clothing that is cleaned (washed and disinfected) by the clinic after the working day, if it was used. In addition, handwashing and -disinfection is standard.

Regarding the biosecurity of transportation, the Clinic for Swine complies with the legal requirements (Schweinehaltungshygieneverordnung: Pig-Keeping Hygiene Order) and the Minimum Requirements for Biosecurity for Veterinarians visiting Swine and Poultry Farms from the Bundestierärztekammer (German Federal Chamber of Veterinarians). Furthermore, the Clinic for Swine has its own "SOP Klinikfahrzeuge" ("SOP cars").

For transportation of pathologically altered (slaughterhouse) organs that are intended for student education, the Institute for Veterinary Pathology owns a suitable VW-transporting vehicle, exclusively used for this purpose. The transportation of these organs is legally authorised by the local Veterinary authorities and Government agencies and performed by specially trained staff.

The vehicle is appropriately cleaned and disinfected using approved cleaning and disinfection agents after each use, and the cleaning/disinfection is documented.

4.8.2. Comments

The number of vehicles is good, and also the capacity and practical equipment. The biosecurity is good, and the German rules about cleaning and disinfection of vehicles used for animal transportation are fine.

4.8.3. Suggestions for improvement

None.

4.8.4. Decision

The VEE is compliant with standard 4.8.

Standard 4.9: Operational policies and procedures (including 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

Directors of the individual institutes and clinics, assisted by authorised officers appointed by those directors so LMU central administration are the arbiters of the processes concerning changes in facilities, equipment, biosecurity procedures, good laboratory practices and good clinical practices. A quality assessment manager was appointed by the centre for clinical veterinary medicine, who gathered the procedural information in all processes quoted above. The team around the quality assessment manager evaluates the processes and formulates recommendations. The recommendations are communicated to stakeholders, members of the VEE, and alumni. Clients are also informed via posters.

The VEE has a Biosafety Manual. The Head of the Office of Occupational Safety and Sustainability reviewed the different sections of the manual.

4.9.2. Comments

All aspects about Operational policies and procedures are accurate and appropriate.

Bird and horse clinics have outstanding facilities. In the coming years a new small animal clinic will be built. Attention could be paid for the Clinics for Ruminants to avoid discrepancies in terms of investment and keep the high level of expertise.

Regarding courses or a continuing education system for teaching staff, support staff and students. The Centre for Clinical Veterinary Medicine provides an electronic system "management for electronic administration of instructions and examinations" (MUP) with compulsory biosafety courses to be accomplished normally once per year together with mandatory oral instructions held by biosafety staff. Periodically biosafety instruction meetings are also held in the Department for Veterinary Sciences according to German regulations by law.

If a student wishes to complain about any biosecurity problem, the first person they must contact their problem is the course instructor. Either this person is the biosafety officer directly, or they can contact the respective officer. Depending on what the problem is, it may be fixed or improved immediately, or it may need to be discussed with the institute or clinic management. If necessary, there is always support and expertise from the LMU Office of Occupational Safety. The biosecurity manual is reviewed every six months.

4.9.3. Suggestions for improvement

It would be advisable to elaborate a survey for owners to monitor the feedback from clients.

4.9.4. Decision

The VEE is compliant with standard 4.9.

Area 5. Animal resources and teaching material of animal origin

Standard 5.1: The number and variety of healthy and diseased animals, 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

All experiment procedures are conducted and controlled in accordance both with EU Directive 2010/63 and the German Animal Welfare Act.

By admission to the LMU veterinary teaching hospitals, the owners formally consent to the involvement of undergraduate and postgraduate students.

The 3R approach is advanced to reduce the number of animals and several awards are in place to support such initiatives. However, the number of live animals used for teaching is not monitored to demonstrate the effectiveness of this strategy.

The students can follow their progression using a logbook, but it is not mandatory for them to fill in.

A medical record system is in place in every clinic allowing to describe precisely the number of cases and their diversity. However, no recording system is in place to record the number and diversity of cases seen extra-murally during EPT.

Regarding the ESVET Indicators, the following ones are slightly below the threshold:

- n° of companion animal necropsies / n° of students graduating annually
- n° of ruminant and pig necropsies / n° of students graduating annually

For anatomy, in comparison with other species, the number of cattle seen/used for anatomy

purposes is low (from 0 to 2 in the last years). However, students had the opportunity to dissect cattle parts, for example cattle feet. The Institute of Pathology also offers a large collection of pathological exhibition specimens (610), displayed in the showcases of the Institute along with descriptions of the specimen. Moreover, a digital collection (“PATHICON”) of more than 2400 gross and histological images of diverse pathological conditions/cases (including necropsy cases as well as organ pathology cases) with descriptions are provided, accessible to students via the LMU-learning platform Moodle as well as via the Institutes homepage (<http://www.pathicon.de/>). Additionally, a collection of explanatory videos is constantly being expanded, demonstrating necropsies as well as organ-examinations in different species, organs and pathological conditions. The videos also contain links to other educational material and students can access the videos via the LMU-learning platform Moodle.

To develop some preclinical skills several skills labs are in place with different activities:

- 7 optional courses (2 hours each)
 - o propaedeutics 1:
 - § endotracheal intubation (dog, cat)
 - § blood sampling and placement of a peripheral venous catheter (dog, rabbit)
 - § handling and neurological examination in small animals
 - o propaedeutics 2:
 - § pig (general examination, application, and injection methods)
 - § small mammals (handling, husbandry)
 - § bird (handling, application, and injection methods)
 - o propaedeutics 3:
 - § orthopaedic examination in small animals
 - § horse (general examination, injection methods, nasogastric tube)
 - § ophthalmological examination in small animals
 - o laboratory tests:
 - § urine test bovine (refractometry, test strips)
 - § milk test bovine (extraction, CMT)
 - § blood tests (blood smear, haematocrit, ...)
 - § faecal examination (flotation, ...)
 - o reproductive medicine:
 - § bovine (rectal palpation, insemination)
 - § horse (rectal palpation, swab sampling and biopsy sampling)
 - § small animal (cycle diagnostics)
 - o surgery:
 - § instrumentation
 - § bandage techniques in small animals
 - § basic life support in small animals
- 6 obligatory courses for students of the 9th / 10th semester (2 hours each)
 - o course of the small animal medical clinic
 - o course of the clinic for reproductive medicine and surgery of small animals
 - o course of the clinic for ruminants
 - o course of the clinic for birds, small mammals, reptiles, and fishes
 - o course of the clinic for horses
 - o course of the clinic for pigs

Elective courses at VETSkillsLab:

- suturing and knotting techniques in the Skills Lab
- fit for the first night duty in small animal practice part 1 "Basics": managing emergencies correctly - practical exercises in the Skills Lab.
- fit for the first night duty in small animal practice part 1 "Advanced": managing emergencies correctly - practical exercises in the Skills Lab.
- VETSkillsLab Challenge.
- professional interaction with patient owners.
- fit for laboratory diagnostic examinations in small animal practice: performance and reporting - practical exercises in the Skills Lab.

Models at VETSkillsLab:

- Silicone pads:
 - o silicone pads for suture and knot techniques
 - o silicone pads for wound care
 - o vulva pads for „Bühner-suture“
 - o teat pads for the teat suture
 - o silicone pads for fine needle aspiration
- Small animal:
 - o 2 x gynaecological model (dog)
 - o 2 x orthopaedic model with limbs (dog)
 - o 4 x intubation model (dog and cat)
 - o 3 x venipuncture model (dog)
 - o hind leg venotomy model (dog)
 - o 4 x first aid model (dog and cat)
 - o 2 x bandage model (dog)
 - o CVC model (dog)
 - o urinary catheter model (dog)
 - o general examination model (dog)
 - o 2 x thoracocentesis model
 - o caesarean section model (dog)
 - o castration model (dog)
 - o puppy model (dog)
- Ruminant:
 - o gynaecological model (bovine)
 - o dystocia model (bovine)
 - o dystocia model (sheep)
 - o general examination model (cattle)
 - o calf model
- Horse:
 - o palpation/colic model
 - o 2 x vein and intramuscular injection model
 - o gynaecological examination model
 - o nasogastric tube model
 - o limb model for hoof bandage
- Birds, small mammals, reptiles and fish:
 - o 4 x application and injection model (bird)

- o 2 x ear vein model (rabbit)
- o reptile model
- o snake model
- o mouse models
- o rat models
- Pig:
 - o 2 x pig model & piglet model

Despite 2 sectors affected by COVID-19, the number of cases are remarkably stable over time. An ambulatory clinic allows also to provide a huge number of cases seen extramurally.

EPT also provides opportunities for students to increase their caseload, but no assessing/monitoring system is in place (see 3.7 and 8.5)

Due to the move of the equine clinic, no equine was seen intramurally in 2021, this being resolved with the new facility.

5.1.2. Comments

The VEE must be commended for several items:

- The limited size of students per group (2 to 8) allows every student to practise.
- The close proximity and friendly atmosphere between faculty members and students in clinical settings is worthy of praise.
- The farm and ambulatory clinic provide a high number (and probably variety) of cases for ruminants.
- The skills labs offer a wide diversity of practical and the team in place creates several new activities

5.1.3. Suggestions for improvement

It is suggested to implement a strategy to slightly increase the number of companion animal and ruminant cadavers for necropsy to reach the minimum value of the ESEVT Indicators.

5.1.4. Decision

The VEE is compliant with standard 5.1.

Standard 5.2: In addition to the training provided in the VEE, experience can include practical training at external sites, provided this training is organised under direct academic supervision and following the same standards as those applied in the VEE.

5.2.1. Findings

Ambulatory ruminant clinics allow the student to face a huge variety of cases. Every morning, the clients call the clinics for ruminants. Then 3 vans are available to run the visits and the students can choose which van/tour they will follow. During the visit the students are really in charge of making clinical examinations, taking history details and doing some technical interventions. They are always under the supervision of an academic staff.

The teaching farm is also available to provide a comprehensive view of agriculture and food producing animals.

5.2.2. Comments

Extramural activities supervised by the VEE staff are important (ambulatory clinics and teaching farms). The diversity and quantity of ruminant cases seen during the ambulatory clinics is to be commended.

5.2.3. Suggestions for improvement

None.

5.2.4. Decision

The VEE is compliant with standard 5.2.

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

5.3.1. Findings

The students receive nursing care skills in the first semesters. The skills lab contributes also to this. The diversity of skills lab activities allows the students to be well prepared for nursing care.

The instructions and duties are delivered to the students the first day of each rotation.

The task devoted to the students in each clinical rotation is well defined and stipulated in the report and appendix. The first 3 days of each rotation are devoted to such explanations.

The duration of 12 weeks of each rotation allows the student also to gain autonomy, especially regarding the limited number of students in the clinical rotation (maximum 20 leading to 2 students per case usually).

The only concern regarding ESEVT Indicators is about the number of academic staff/students (slightly below the threshold: 0,11, -0,01).

5.3.2. Comments

Nursing care skills are taught to the students in the VTH and in addition several activities are available in the different skills labs.

The first 3 days of each rotation allow the staff to remind the students of related aspects to nurse care.

5.3.3. Suggestions for improvement

None.

5.3.4. Decision

The VEE is compliant with standard 5.3.

Standard 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

The medical records are maintained in an electronic system and updated regularly.

This system supports teaching and clinical research.

Most of the clinics use the same system facilitating the work for staff and students. The clinics for ruminants have their own system due to legal constraints (link with national data base). All the medical record systems in place allow the VEE to obtain easily the number and nature of clinical cases seen intramurally.

The first 3 days of each rotation is in particular devoted to the explanation of the medical recording system to the students.

5.4.2. Comments

The medical records in place in the different clinics allow the VEE and the VTH to monitor the number and variety of cases. The systems in place can also be useful for research purposes.

5.4.3. Suggestions for improvement

None.

5.4.4. Decision

The VEE is compliant with standard 5.4.

Area 6. Learning resources

Standard 6.1: State-of-the-art learning resources must be adequate and available to support veterinary education, research, services and continuing education. 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 resources made available are very extensive and give students maximum opportunity to find all the information resources they need, classical through books and new technologies. An extensive Wi-Fi network is available everywhere in the campus. Students also have access to a VPN which allows them to work at home with all documents available in the library. Students can connect to the library from their own laptop, but also through many computers available in the central library, the branch library, the veterinary campus in different departments.

6.1.2. Comments

The learning resources are excellent and meet the requirements of students and staff.

The VEE must be commended for an efficient development of hybrid and online teaching and learning.

6.1.3. Suggestions for improvement

None.

6.1.4. Decision

The VEE is compliant with standard 6.1.

Standard 6.2: Staff and students must have full access on site to an academic library administered by a qualified librarian, an Information Technology (IT) unit managed by 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

The facilities available and the budget are very substantial, which means that there is a wide choice of new texts and a number of interesting teaching platforms that are available to students and are a great help in their training. In the central library qualified staff account for two thirds of the workforce. The central library is also open on Sundays.

6.2.2. Comments

All the relevant information is available both intramurally and extramurally.

6.2.3. Suggestions for improvement

None.

6.2.4. Decision

The VEE is compliant with standard 6.2.

Standard 6.3: The VEE must provide students with unimpeded access to learning resources, internet and internal study resources, 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

The facilities available as well as the budget are very large, which means a wide choice of new multimedia learning methods. The different sites, both central and peripheral, have a dedicated IT department capable of supporting both the different institutes and the students' requests. Teaching platforms have been continuously implemented, both for students and VEE, and are accessible from within the VEE as well as externally. Interesting is the internal production of videos

6.3.2. Comments

The VEE must be commended for their numerous and well-equipped skills labs.

6.3.3. Suggestions for improvement

None.

6.3.4. Decision

The VEE is compliant with standard 6.3.

Area 7. Student admission, progression and welfare

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

In relation to enrolment, the VEE must provide accurate and complete information regarding 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.

7.1.1. Findings

Student admission information is available for German and international students for undergraduate, graduate (doctoral degree and PhD). Enrolment certificates are accessed through self-service functions (bilingual enrolment certificates available in German and English).

Admission processes are run through “Hochschulstart”, which is a service platform of the Foundation for University Admissions. With the help of the dialogue-oriented service procedure (DoSV), it coordinates the applications for undergraduate courses and is responsible for the implementation of the central allocation procedure for nationwide admission restricted study places in the subjects human medicine, veterinary medicine, dentistry and pharmacy. Information about the procedural details, registration and coordination processes are run through this system.

According to the Bavarian State Parliament, tuition fees are abolished, where the education is covered from the household budget of the state. Also in Germany, a state fund has been designated under the Federal Training Assistance Act (BAföG) to help the students with the financial burden. Recognition of study achievements and lateral entry are done according to lateral entry TAppV (§ 65 Ordinance on the Licensing of Veterinarians - TAppV).

Study progress certificate contains information on the degree programme (type of degree, subject/subjects, subject semester) and, in the case of a leave of absence, the reason for it which is also in self-service function. Meanwhile, the certificate of course of study does not contain any information on coursework and examinations. This can only be certified by the responsible examination office for the degree program. For both documents, in case an authentic version with an official seal is requested, students are able to obtain it through the student office with a request. In order to develop the same probative value abroad, public documents usually require legalisation by the responsible consular representation of the foreign state in the Federal Republic of Germany or the apostille.

Information for prospective students is readily available on the web page with informative videos. With the online self-assessment (OSA), detailed information about studying veterinary medicine at the VEE (information about the course, the process, timetables, internships, etc) and the diversity of the job profile is described. The OSA is structured into different areas that enable the students to gain a comprehensive insight into the subject of veterinary medicine at the LMU Munich. Through OSA, in addition to information on the structure of the courses, everyday study life and the professional prospects of a veterinarian about application and admission are also provided, enabling a comprehensive insight. The VEE is also included in Virtual Campus Days which offers information for prospective students on all Bachelor’s and Master’s degree programmes at LMU

Munich.

7.1.2. Comments

The VEE provides updated and student friendly information for the current and prospective students from the web through various sources including OSA system and videos. Information on student admission, progression and certification, courses, processes, timetables, internships are readily available.

7.1.3. Suggestions for improvement

None.

7.1.4. Decision

The VEE is compliant with standard 7.1.

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

7.2.1. Findings

The VEE has an average number of 308 for new veterinary students' admission and 228 for average graduation annually, which gives a dropout rate of 26.92%. Yearly numbers are evenly distributed on average among a total number of 1,577 students; where 19,78% are first year, 17,44% second, 16,61% third, 15,85% fourth, 15,41 fifth and 14,90 sixth year students.

The determination of capacity is based on the Kapazitätsverordnung (Capacity Ordinance - KapVO) and has since been revised several times, which aims to make full use of the training capacity of all universities and to achieve comparable utilisation of the universities. The KapVO regulates the calculation of the number of admissions based on the personnel training capacity. The balance between the courses offered and the demand for courses - measured in course hours - are expected to be balanced per teaching unit. KapVO therefore takes into account the personal, spatial, factual and subject-specific conditions for the maximum use of the existing training capacity. The range of courses is calculated from the hours of work specified in the Teaching Obligation Ordinance (Lehrverpflichtungsverordnung-LUFV) for positions in the scientific service, minus the export of services. The curricular standard value (Curricular Normwerte-CNW) is used to determine the demand for teaching. The determined number of places for first-year students (admission capacities before attrition) is corrected by the attrition rate calculated from the student data and, if necessary, converted into study place equivalents which is calculated in February to set the admission numbers in September. This is a standardised procedure, limiting the VEE's effort to bring the numbers down.

At the current state, the number of fulltime employed academic staff involved in veterinary training according to the number of undergraduate students (ESEVT Indicator 1) is slightly below, which is compensated by the veterinarians involved in veterinary training (Indicator 2) and FTE support staff involved in veterinary training (Indicator 3). ESEVT Indicators 8, 9, 10,11,13,15,16 exceed the minimum value; while 12 (companion animal patients seen extramurally),14 (equine patients seen extramurally),17 (companion animal necropsy),18 (ruminant and pig necropsy) are below the minimum value. The number of ruminant necropsy cases is expected to be resolved as soon as the

Institute of Veterinary Pathology moves to Oberschleißheim. This is also expected to allow easier transportation to clinics, in terms of wider roads and closer connection to highways for further private owners. More efforts are planned to be put for practitioners on the transfer of necropsy cases through web and personal advertisements.

7.2.2. Comments

The VEE puts an effort to increase the healthy and diseased animals, along with the materials of animal origin through transferring the campus into Oberschleißheim, through the web and personal advertisements, while protocols with local practitioners and companies would guarantee the transfer of necropsy cases which are slightly below the ESEVT Standards. The standards regulated by German Law (KapVO calculation), restrict the change (possible decrease) in the number of admission seats. As the number of staff members increase, there is an automatic increase in the student number, limiting the use of available animals and other teaching resources.

7.2.3. Suggestions for improvement

None.

7.2.4. Decision

The VEE is compliant with standard 7.2.

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

The VEE must regularly review and reflect on the selection processes to ensure they are appropriate for students to complete the programme successfully. If the selection processes are decided by another authority, the latter must regularly receive feedback from the VEE. Adequate training (including periodic refresher training) must be provided for those involved in the selection process to ensure applicants are evaluated fairly and consistently.

7.3.1. Findings

The dialog-oriented service procedure (DoSV) is a Germany-wide admissions procedure that is coordinated by the Foundation for University Admissions and is intended to prevent study places remaining vacant. Participating universities announce their courses on the application portal at Hochschulstart. Upon application, through the DoSV portal, students have the opportunity to indicate the order (priorities) of the desired courses and to track the processing status of their applications. The legal basis for the activities of the Foundation for University Admissions are the laws and regulations of the federal states. The latest version of the ordinance on university admissions at state universities in Bavaria is published as of November 2021.

Hochschulstart is a service platform of the Foundation for University Admissions (SfH); which coordinates the applications for undergraduate courses and is responsible for the implementation of the central allocation procedure (ZV) for German-wide admission for veterinary medicine, but also for human medicine, pharmacy and dentistry. According to the application processes, 30% of the study places are allocated based on the Abitur best quota. Abitur is the qualification granted at the end of secondary education in Germany. It is conferred on students who pass their final exams, usually after twelve or thirteen years of schooling. The allocation for veterinary medicine following Abitur takes place in three steps: First, 16 state lists are created on which only applicants compete with each other who have acquired their university entrance qualification (usually the Abitur;

however, there are also other forms of university entrance qualification) in the same federal state. Only one state list is created for each federal state, on which the applicants for the veterinary program are listed together. The first sorting criterion for the state lists is the Abitur result, whereby not the average grade but the point value achieved is taken into account. Scores between states are neutralised as only applicants who graduated under the same conditions. Later the state lists will be transferred to a joint federal list. In addition to the number of points, the decisive factor here is ultimately the size of the individual federal states, since a densely populated state (i.e. in which a larger group acquires a higher education entrance qualification or applies for a university place) has a higher proportion of university places than a smaller federal state. One third of the total number of applicants from the respective federal state including veterinary medicine is used in the calculation of these so-called state quotas or state shares, and two thirds the share of the respective federal state in the total number of eighteen to under twenty-one-year-olds. This complex procedure is necessary because applicants from different federal states can only be included on a single list if the differences in the average Abitur grades are offset by a balancing mechanism. Finally, a specific ranking list is drawn up for each course, according to which the places are allocated. 10% of the study places are awarded via the additional aptitude quota, in which only grade-independent criteria are evaluated. For veterinary medicine studies in Munich, these are related completed vocational training and the test for medical degree programmes. 60% of the study places are awarded via the university's own selection procedure. The university itself determines the selection criteria. In Munich, these are the Abitur grade, the test for medical degree programmes and a completed related vocational training. For the Abitur grade, applicants from all federal states now compete with each other on an equal footing. A maximum of 60 points can be achieved for an Abitur grade, the result of the test for medical courses of study gives a maximum of 30 points and vocational training 10. The LMU then allocates places on the basis of the sum of the points achieved.

The phrase “subject-specific academic aptitude test” for these courses covers tests whose results can affect the application process for degree programmes with nationwide admission restrictions. Applicants without an Abitur who have completed a related vocational training and have worked in the profession full-time for at least 2 years can apply for this. The corresponding examination takes place at the faculty and with the grade obtained they can apply at Hochschulstart. Disadvantage and extraordinary hardship quotas are present in case the student has special social or family reasons.

7.3.2. Comments

The selection criteria are clearly defined, consistent and free of discrimination as governed by German authorities. Overall admission procedures for the VEE are transparent, require several steps and are published on the respective websites, which are governed at the national level.

7.3.3. Suggestions for improvement

None.

7.3.4. Decision

The VEE is compliant with standard 7.3.

Standard 7.4: There must be clear policies and procedures on how applicants with disabilities or illnesses are considered and, if appropriate, accommodated in the programme, taking into

account the requirement that all students must be capable of meeting the ESEVT Day One Competences by the time they graduate.

7.4.1. Findings

Disabilities or chronic illnesses can lead to study difficulties that make it necessary to compensate for disadvantages. The VEE provides a clear application process for compensation for these disadvantages. These students are able to make a special application process called special considerations. This refers to procedures that counteract the individual disadvantage in the course of study caused by an impairment. The students are able to discuss with the examination board, or the employees of the examination office, which compensation for disadvantages makes sense for the illness or disability. If anything is unclear, there is also the option of an individual consultation with the staff at the advice centre or the representative for students with disabilities and chronic illnesses, which does not result in an advantage over non-disabled and non-chronically ill students. If compensation for disadvantages has been approved, this has no effect on the assessment of the examination performance and is not included in the transcript of grades or certificates. For application, students apply for compensation on their own or in a personal meeting with the counselling centre or the disability officer. The need for compensation for disadvantages is requested to be proven with a medical certificate and a copy of a severely disabled person's pass. The application for compensation for disadvantages is then submitted to the responsible examination office or Dean of studies. For some state examinations, the application for compensation for disadvantages is expected to be submitted to the responsible ministry. Some possible forms for compensations are time allowances for time-dependent examinations (up to 25% or up to 50%) or breaks, extension of deadlines for homework and seminar papers, writing exams using technical aids (laptop, PC) or personal assistance, modification of examination performances, separate exam room, substitute performances for practical examination performances. There is also the possibility of compensating for disadvantages during the school years that led to the university entrance qualification by adjusting the average grade. Student Information Service (SIS) of the Central Student Advisory Service serves as the advice centre for students with disabilities.

7.4.2. Comments

Compensation for disadvantages is generally used to adjust the examination conditions, which are governed by state and national regulations, while these adjustments do not restrict the student to achieve the required competences. Information regarding the disadvantages and illnesses compensations are readily available through the web page and communicated with the students.

7.4.3. Suggestions for improvement

None.

7.4.4. Decision

The VEE is compliant with standard 7.4.

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

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

7.5.1. Findings

The decisions on admission, application and progression are legally regulated by the Federal Council and all are readily available on web pages with the latest versions. Students are oriented and kept in the track through student organisations. Every year from Wednesday to Friday before the actual start of the semester in mid-October, the student council (made up of veterinary medicine students from different semesters, where 8 representatives are elected every year by the students of the VEE to fill official offices such as the board, VEE council and convention) offers new students the opportunity to get to know their new fellow students and the VEE premises in an entertaining manner called the organisation "Open Day". Initial contacts are made with students in higher semesters, the so-called tutors. This support is on hand throughout the organisation phase and beyond, with advice and assistance and help to greatly reduce the initial confusion every year. Information videos on veterinary studies and orientation are also available on the web.

Information on obtaining the progression papers, so called official certificates (including the enrolment certificate, study progress certificate, exmatriculation certificate and other certificates for submission abroad) are readily available to the students to be further obtained through University Student Office. In principle, students have the option of taking a leave of absence for one or a maximum of two semesters under certain conditions such as, illness or maternity (according to Maternity Protection Act and the Federal Parental Allowance and Parental Leave Act). Despite the leave of absence from their studies, students can complete coursework and examinations due to the extraordinary burden of caring for close relatives as well (according to Art. 48 Para. 4 BayHSchG). A leave of absence due to studying abroad can only be granted if the student can prove that he/she is studying at a university abroad, he/she is improving his/her foreign language skills as part of a linguistics course at an educational institution abroad, or he/she is taking part in an intercultural study project supervised by an institute of the university

During the COVID-19 period, "WeCare@LMU" initiative supported students by providing information and creating online counselling services mainly for psychotherapeutic help. For acute mental crisis situations, students are directed to the emergency room of a psychiatric clinic directly.

The VEE offers students to monitor their progress alternatively through the KELDAT system. KELDAT (The Competence centre for E-Learning, Didactics and Training Research in Veterinary Medicine) serves as a merger of all German-speaking universities in Germany, Austria and Switzerland (DA-CH) to improve teaching and learning through a project funded by the Volkswagen Foundation and the Mercator Foundation as part of the "Bologna - Future of Teaching". This system was later transferred to UCAN (Umbrella Consortium for Assessment Networks). During their studies, veterinary students often focus on simply acquiring knowledge and are less aware of what they have already achieved. The progress test for veterinary medicine (PTT) is used to show the learning progress from the start of studies to obtaining the professional qualification as a veterinarian. The Progress Test Veterinary Medicine (PTT) is an interdisciplinary specialist knowledge test that is to be carried out annually across all semesters of the participating universities in order to objectively record and measure the status and growth of specialist knowledge during the study of veterinary medicine. This is not graded but serves as a feedback

instrument to support the autonomy and self-control of the student learning process (active learning). The basis for the standardised test composition for the selection of the questions, are the competences (day-one skills) and the standards of EAEVE. This multiple-choice Blueprint test is not obligatory for passing, and it is just designed for self-evaluation of the students. The dropout rates related to failed examinations is less than two percent. Compared to the last EAEVE Visitation, 2% increase in due-time finish (5.5 years) is achieved.

7.5.2. Comments

The criteria for the academic progression and termination are explicit and communicated to the students. Monitoring mechanisms of the exams using "Examinator" allows assessment of the question using discriminatory index and difficulty according to the success of the student. This system integrates lecturers to be more aware of the students who did not perform adequately and initiates remediation mechanisms. Students were found to have a good level of awareness of the VEE's criteria on academic progression and professional fitness to practise throughout different preclinical and clinical topics. Remediation and appropriate support for the student with low grades are done through student mentors and related courses' academic mentors.

7.5.3. Suggestions for improvement

None.

7.5.4. Decision

The VEE is compliant with standard 7.5.

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

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

7.6.1. Findings

Students can apply for exmatriculation themselves at any time through application to the student office (Studentenkanzlei). The student can apply for de-registration with immediate effect or with effect from the end of the current semester. If there are certain reasons, de-registration also occurs by operation of law or must be carried out by the university ex officio. Exmatriculated through ex officio occurs, if they have finally failed a preliminary, intermediate or final examination required by the examination regulations or if, for reasons for which they are responsible, they can no longer meet the requirements for registering for one of these examinations (this deregistration is only omitted if the person concerned has re-registered for the following semester and transferred to another degree programme in a timely manner as part of a change of subject), if they do not apply for re-registration in due form and time, if they do not have submitted an insurance certificate within the re-registration period due to their own fault, if an obstacle to enrolment occurs later, if it is certain on the basis of facts that the enrolment or re-registration was made improperly. Mechanisms and criteria involved in exclusion are explicit and governed by law and regulations.

7.6.2. Comments

The policies for managing appeals against decisions, including admissions, academic and progression decisions and exclusion, are transparent and publicly available through the web and students are equipped with this information through their initial orientation meetings and

throughout their university lifecycle.

7.6.3. Suggestions for improvement

None.

7.6.4. Decision

The VEE is compliant with standard 7.6.

Standard 7.7: Provisions must be made by the VEE to support the physical, emotional and welfare needs of students. This includes, but is not limited to, learning support and counselling services, career advice, and fair and transparent mechanisms for dealing with student illness, impairment and disability during the programme. This shall include provision 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

Student affairs (Studentenwerke) as the central student contact, the VEE's Student Council (Fachschaft) as the member of the Federal Association of Veterinary Medicine Students in Germany and the International Veterinary Students' Association (IVSA) Munich as a part of IVSA Germany supports the students of the VEE for the economic, social, health and cultural levels through various routes and resources. University support for student welfare is well established at many levels. Students with disabilities and other long-term impairments such as chronic physical/mental diseases, can have personal meetings with the counselling centre or the disability officer. The application for compensation for disadvantages is submitted to the responsible examination office or Dean of studies; or for state examinations to the responsible ministry which are always adapted to the individual situation. Inclusion tutors, in close contact with the counselling centre for students with disabilities, provide additional support and increase the welfare of the students.

The VEE's diversity management focuses on the dimensions of conflict counselling and anti-discrimination, family friendliness, gender, inclusion and participation, cultural diversity and a healthy being. These are taken into account in a network of consulting and service offers. The diversity guide on the webpage guides through the offers and contacts. For the promotion of well-being and a health-oriented lifestyle, students are supported through several resources, which is one of the central values for the LMU. In order to support the health of the LMU community, the VEE has created offers that strengthen the resources of each individual.

Advice on health is available through the web such as psychotherapeutic and psychosocial counselling for students through the Munich student union, stress and burnout at work for effectively increasing performance and quality of life through psychosocial counselling, conflict counselling and mediation, crisis intervention, social counselling. Central university sports through facilities of the university and e-coaches through multi-week, time- and location-independent online coaching programmes strengthen the physical and mental fitness of veterinary students.

The awareness of the VEE's community for the issues of accessibility and educational justice is promoted through advice on inclusion and participation, promotion of accessibility, barrier-free

teaching and learning web pages.

Counselling centres for employees and students provided by the university for sexual harassment exist. University Women's Representative, Women's representatives of the VEE, conflict officer, Psychosocial Counselling centre of the LMU (only for the employees of the VEE), Staff Council (for employees), Equal Opportunities Officer (for employees), Psychotherapeutic and psychosocial counselling centre of the Studentenwerk (for students) are representative bodies providing support along with Self-defence courses at the Central University Sports Munich. External advice centres are Federal Anti-Discrimination Agency, which is the first anonymous and digitally managed professional advice that can be found on the website of the Federal Anti-Discrimination Agency, "Violence against women" helpline and others are also provided in Gender&Diversity section of LMU web page. Once a month, the women's emergency hotline in Munich, in cooperation with the women's representative of the LMU, offers an anonymous consultation hour for female scientists, employees and students at the LMU. The open consultation hours are confidential and anonymous if desired. Gender-appropriate language, gender training for students, gender diversity in teaching are all available in webpage format. For the promotion of gender and sexual diversity and counteract discrimination, queer department of the student representation (StuVe) is founded in the university, which the VEE promotes on its webpage. This department helps VEE's students and lecturers as an open, accepting and respecting institution that offers a place for all students, regardless of their gender or sexual-romantic identity. Some ongoing projects of the department include gender-appropriate language, establishment of gender-neutral toilets, queer guide through Munich, surveys on diversity and discrimination. The VEE's effort in promotion of gender-neutral teaching and learning environment is commendable.

"VetDocs Munich eV" is an association in VEE, representing the interests of doctoral candidates and students, support events that are interesting from a technical and/or social point of view for doctoral students, inform students about doctoral offers and the advantages and disadvantages of doctoral studies and promote contact and information exchange between doctoral students and third parties (LMU, external institutes, other institutions, private individuals etc). Vet Docs organise doctoral mountain tours, seminars and other events to support graduate students and improve their welfare.

For the appreciation of the diversity of the cultures, the VEE aims to strengthen intercultural networking and intercultural exchange through university coordinated events. The workshops, series of talks and get-togethers of the intercultural advice centre as well as the events of the tutoring programme TutoRIA make it easier for the international students to settle into the new cultural environment, which is also reflected for international researchers at graduate levels in the VEE. Regular events for newly arrived students make it easier to settle in and support their networking. Information on cultural diversity is readily available through the web as well.

7.7.2. Comments

Through both university and self-resources, the VEE puts an effort to improve all student welfare needs, to promote an environment where all students are able contribute their talents at maximum level in the veterinary profession through focusing several dimensions on inclusion and participation, cultural diversity, equal participation of all genders and physical/mental health. WeCare LMU initiative which aims to help students and employees cope with the diverse psychosocial and human challenges associated with the COVID-19 pandemic intends to support students and employees by providing information and creating online counselling services. This

initiative, diversity web page and interpersonal conflict resolving mechanisms related were found to be commendable.

7.7.3. Suggestions for improvement

None.

7.7.4. Decision

The VEE is compliant with standard 7.7.

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

7.8.1. Findings

Representatives from the student council, made up of VEE's students from different semesters are elected every year to participate on official contributions such as the board, VEE council and convention. The student council meetings are held once a week. This is where information is collected and exchanged, current events are planned, and university policy events are discussed. All motivated students who want to change something in the veterinary studies, who are missing something or have an idea but do not know how to implement or who like to get involved with their fellow students participate in these meetings. The sessions are organised both in person and in parallel as a Zoom meeting in order to also offer students who are doing internships or similar the opportunity to participate. The student council service 'consultation hours' where the students can personally come to the student council rooms if they have private concerns that they would prefer to clarify in a normal conversation than by email. The student council regularly organises the so-called "Kabu parties" or veterinary parties, share weekly vacancies, events and other information with all students via their email newsletter along with organisation of the orientation events of the new coming students.

The Federal Association of Veterinary Medicine Students (BVVD) is a registered, non-profit association for the central point of contact in veterinary medicine students in Germany as well as German speaking countries Austria and Switzerland. BVVD is the umbrella organisation recognized by the student council which determines and represents the common opinions on a nationwide level in close contact with the international organisation IVSA Germany. The president is currently a student from the VEE, as well as the members from the local representatives from the VEE exist.

Student council is the main body where the students are able to contribute directly to administrative and educational affairs through the VEE council and the Dean of Student Affairs. For more, students are also able to contact the related professors on the appointment hours or contact via email for further meetups regarding their studies. Students can also get in touch with professors through ombudspersons elected by the students as well as the women's representatives of the VEE.

7.8.2. Comments

Active student council representation in the VEE's official bodies such as board and councils, provides a convenient media for delivering students opinions on various levels. Anonymous

feedback opportunities are also offered through letterboxes, and students are able to reach the teachers through various routes. Meanwhile, recently developed online anonymous feedback mechanisms (LMU app) is not still effectively communicated and internalised by the students.

7.8.3. Suggestions for improvement

None.

7.8.4. Decision

The VEE is compliant with standard 7.8.

Area 8. Student assessment

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

8.1.1. Findings

The assessment of students is legally regulated in detail in Chapter 2 of the TAppV.

The examinations in veterinary medicine are state examinations (Staatsexamen) and thus they are under the supervision of the District Government of Upper Bavaria and not of the University or the VEE itself.

The examinations are carried out by members of the two Boards of Examiners: i) Two preclinical Veterinary Examinations (Vorphysikum und Physikum) and one Veterinary Examinations (Tierärztliche Prüfung), distributed over three years of study. The members of these boards are professors or experienced staff members. They are chosen by the University and then confirmed by the Faculty Council. The examinations are organised and planned by the chairmen of the Board of Examiners with support of the VEE's Examination Office. The examinations take place during the lecture-free time between semesters. The final exams are scheduled during the 11th semester.

The VEE defines the type of the examination, the timetable of taking the examination at different courses, the prerequisites for admittance of the students to the examinations, and the maximum time to pass the examination in the Study and Examination Rules. Currently, different types of examinations are used: written, single or multiple choice, oral, Objective Structured Clinical Examinations (OSCE), or a combination of these.

According to §17 of the TAppV, three attempts are allowed for each examination. An additional member of the Board of Examiners must be present as a witness at the third attempt.

Students must pass all examinations of a period (Preclinical Veterinary Examination and Veterinary Examination) including retakes within one year after admittance to the first attempt. This duration may only be extended in case of illness documented by a medical certificate. In case of composite exams, each component of the exam must be passed.

8.1.2. Comments

The strategy of student assessment is in principle determined by the state documents. Nevertheless, the VEE can select the methodologies for assessing the acquired knowledge and practical skills.

8.1.3. Suggestions for improvement

None.

8.1.4. Decision

The VEE is compliant with standard 8.1.

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

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

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

8.2.1. Findings

The assessment tasks and grading criteria as required by TAppV, Chapter 2, are published in Study and Examination Rules and the competences to be assessed are evident from the Programme Learning Outcomes Catalogue (PLOC) (Lernzielkataloge) which are available for most of the courses also on the VEE's Moodle platform. The content summary of each course and the assessment methods are summarised also in the Study Plan.

The first preclinical examinations in botany, physics, zoology and chemistry are foreseen for the 1st and the 2nd semester.

Before being admitted to the 2nd preclinical examination (state exam, the 3rd and the 4th semester), the competences acquired during a particular course are assessed with intensive supervision (anatomy), practical oral exam (physiology, chemistry, biochemistry), written exam (histology).

Veterinary Examinations are scheduled from 6 to 11 semesters.

A written, oral and practical exam are carried out for assessment of student competences in Food hygiene. Multiple choice tests are used for Parasitology, Pharmacology & Toxicology, Milk sciences, Radiology. By an oral examination Animal nutrition, Bacteriology and mycology, Virology, Animal husbandry and hygiene, Poultry diseases, control and epidemiology of infectious diseases, Surgery & anaesthesiology, Meat hygiene, Internal medicine and Reproduction medicine are assessed. Sometimes multiple-choice tests are also combined with a written exam (animal welfare & ethology, pathology & pathohistology, forensic veterinary medicine, professional and ethical law, Food sciences and food hygiene II). Students must pass written and oral tests before being allowed to participate in surgery. At the end of the clinical rotation the assessment of the acquired knowledge and practical skills is proved by the logbook.

A special online examination tool, "Objective Structured Clinical Examinations" (OSCE) has been developed. It offers not only a big pool of relevant questions but also the evaluation of the exam, evaluation of the student feedback, release of the exam results and the appeal processes.

8.2.2. Comments

OSCE represents a really innovative, complex examination tool which can be used also for assessment of the preclinical courses in the future.

8.2.3. Suggestions for improvement

None.

8.2.4. Decision

The VEE is compliant with standard 8.2.

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

8.3.1. Findings

The Curriculum committee (re-established in April 2021) is responsible to review assessment of learning outcomes and propose the improvement of learning resources and assessment strategy. The CC meets monthly.

The assessment procedures are precisely defined by TAppV. The curriculum committee can contribute to the improvement of the learning process by suggesting changes in the teaching/learning processes, based on the assessment procedures.

Examinations are planned according to the learning outcomes (PLOC) with different predefined competence levels designed based on the Day One Competences. This ensures the acquisition of necessary competences and knowledge for further studies or graduation.

By evaluation of the results obtained, the Curriculum Committee can evaluate whether the D1C were properly addressed during the teaching/learning process and their achievement correctly assessed by the selected exam questions. It is responsible to provide lecturers with the relevant feedback information. Special attention is paid that the D1C are properly communicated to the students.

8.3.2. Comments

For the courses which are already using the OSCE as an examination tool, all learning outcomes, expected competences, skills and attributes as well as the evaluation of the assessment results are already included in the programme.

8.3.3. Suggestions for improvement

None.

8.3.4. Decision

The VEE is compliant with standard 8.3.

Standard 8.4: Assessment strategies must allow the VEE to certify student achievement of learning objectives at the level of the programme and individual units of study.

The VEE must ensure that the programmes are delivered in a way that encourages students to take an active role in creating the learning process, and that the assessment of students reflects this approach.

8.4.1. Findings

All exams and exam formats are adapted to the appropriate level of study and are continually evaluated and optimised through curriculum development by the Curriculum Committee.

The grading system for all exams is published in Study and Examination Rules and is available to the students also in the Study Guide.

All grades achieved can be viewed by students via the LSF platform.

Students are encouraged to take an active role in the learning process by different instruments offered by the VEE:

With the development of the Moodle platform students get an efficient tool for personalising their learning approach. Moodle is not only a platform where the information and learning materials can be found. In the last year, also due to the epidemic situation, Moodle has become an integral part of the study and learning process. Whole online lecture series and self-directed learning courses (with online assessment) are offered to students. Online lectures are delivered in different formats - from recordings to fully elaborated narrated (iSpring) lectures with embedded quizzes. Online lectures allow asynchronous learning suitable for students with other obligations such as for example childcare.

The skills lab represents 6 course blocks with 3 stations each, 6 compact courses for students in the clinic and 5 electives and is today (since 2018) an integrated part of the curriculum. It is covering all animal species and offering additional solutions in the student's veterinary education. Students must complete a set of several stations regarding different courses. In the skills lab students can either practise independently or under the supervision or with the help of tutors.

The logbook, created by the Logbook Committee, comprises all clinical skills which are required by TAppV and the EA EVE Day One Competences that need to be obtained by all students. Students can select and keep track of their own 'clinical profile'. A skill which is deficient can easily be identified by the logbook and therefore actively acquired while in clinical rotations.

8.4.2. Comments

The VEE put a lot of effort during the pandemic period to find new techniques and tools to keep the delivery of the study programme and assessment of the obtained learning outcomes at a properly high level. Many changes have turned out to be very good and will become a regular part of the study process.

8.4.3. Suggestions for improvement

None.

8.4.4. Decision

The VEE is compliant with standard 8.4.

Standard 8.5: Methods of formative and summative assessment must be valid and reliable and comprise a variety of approaches. Direct assessment of 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

D1C are included as learning outcomes of every course as defined in the PLOC. The achievement of this clinical knowledge and skills obtained during clinical rotation and EPT is supposed to be evident from the logbook records.

The logbook is structured in a general part (including general basic skills regardless of species) and several species-dependent parts in which skills are classified in core and advanced skills. Core skills are defined as skills which should be performed in all clinics and practices regardless of species or size. Advanced skills on the other hand are often practised only in specialised clinics or practices. For core skills the logbook also lists a recommended frequency so students get an idea how often certain skills should be performed or at least attended. At the moment the students may fill it in, but it is not mandatory. In addition, there is no assessment of the student who is at the moment the only person responsible for filling in this logbook.

Such a logbook is supposed to follow the required veterinary skills, but also encourages students to specifically request to be taught skills which they are lacking or did not yet practise sufficiently. On this basis potential areas where learning may still need to be intensified throughout the clinical rotations can be determined.

Certain procedures can be practised repeatedly on models under supervision at the Skills Lab.

8.5.2. Comments

The recently introduced logbook is not yet fully used to record, control and assess the acquisition of D1C during practical classes, clinical rotations and EPT. However, this is partly compensated by the assessment done by academic staff through written, practical and oral examinations.

8.5.3. Suggestions for improvement

Together with the other assessment methods, the logbook should be used during practical, clinical and EPT activities to record what has been done by the students and to confirm the assessment of D1C acquisition.

8.5.4. Decision

The VEE is partially compliant with Standard 8.5 because of suboptimal formal assessment of the acquisition by all students of D1C.

Area 9. Academic and support staff

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

A formal 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

Most of the staff involved are veterinarians (>95%) making sure that more than 2/3 of the veterinary

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training is given by veterinarians. The recruitment process together with the offer of continuing education and teaching day (2 days once a year) allow the staff to increase their competences.

Biosecurity procedures are available on Moodle of the VEE.

All the lecture/course are assessed by the students (mandatory) and the teachers have to discuss their solutions/arguments with students following the assessment.

For the teachers not available to follow the 2 days devoted to teaching once a year, all the presentations are on the Moodle interface.

Following the COVID-19 pandemic, a lot of e-learning resources were created and are still used. At LMU level, there is a possibility for teachers and doctoral students/residents to apply for a graduate package (writing scientific papers, grant research, e-learning procedures).

Mentoring programmes are in place for residents/doctoral students and young academic staff.

9.1.2. Comments

The mentoring programmes are a good practice and staff are appropriately qualified and prepared for their roles.

9.1.3. Suggestions for improvement

None.

9.1.4. Decision

The VEE is compliant with standard 9.1.

Standard 9.2: The total number, qualifications and skills of all staff involved with the 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 majority (>95%) of the staff involved in the veterinary training are European specialists. The number of FTE academic staff involved in veterinary training / n° of undergraduate students is below the indicators (-0,01) but the expertise of academic staff in place is very high and recognised. The lecture/seminar of academic but also PhD or postdoc are assessed. In some areas, the competition between national specialist title and European specialist title makes questionable the sustainability of some residency programmes (e.g. in livestock sectors).

The job position is well detailed and announced for advertising.

For the nurse, specific training is in place and regular updates are made.

A QA process to ensure that the staff involved is competent and effective to teach skills on all relevant aspects is in place. Mentoring programmes are in place to help young academic staff.

External secondary activities are allowed, after authorization of the VEE: secondary activities have to be approved by the superior as well as the Central University Administration and the applicant

has to sign a form stating that this activity does not interfere with the working hours of and accomplishments needed for the jobs.

Annual interviews of the staff occur to discuss all the aspects of the position (teaching, grant, research, management, etc.) making it easier to follow the competences of the staff.

9.2.2. Comments

The number and qualification of academic staff is appropriate. However, the VEE should be able to have a better control of the number of students. When increasing the academic staff, it automatically increases the number of students and this is not relevant in all situations.

9.2.3. Suggestions for improvement

The strategic plan could consider how to solve the problem of competition between national and European specialist titles.

The strategic plan could consider how the VEE can reach the ESEVT Indicators for the number of academic staff/undergraduate students together with the LMU, due to the link between academics' number and students' number.

9.2.4. Decision

The VEE is compliant with standard 9.2.

Standard 9.3: Staff must be given opportunities to develop and extend their teaching and assessment knowledge and must be encouraged to improve their skills. Opportunities for didactic and pedagogic training and specialisation must be available. The VEE must clearly define 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

All the academic staff are employed by the federal state ensuring their stability.

Residency positions are opened in many disciplines certifying the high level of expertise in these fields.

Several initiatives are in place to allow the development of teaching competences (e.g. 2 days once a year, continuing education, personal project) and support from LMU is available for young academic or doctoral students.

PROFIL is the LMU Munich's institution that does staff qualification of teachers. It offers to all teachers of LMU (and also from other Bavarian universities) training and continuing education in higher education didactic.

The increase of the salary is obtained first for 3 years and becomes definitive if obtained once again for 3 years 3 years later: we can assume that it is an incentive to keep the staff under pressure and under challenge.

Besides salary, no system to reward teaching excellence is in place. It is not allowed to compare personal evaluations for data protection reasons. Nevertheless, the Visitation Team could notice that the Dean for Students Affairs received the award for good teaching from the Bavarian State Ministry in 2018:

<https://www.vetmed.uni-muenchen.de/aktuelles/archiv/nachrichten/2018/preisverleihung-gute-lehre/index.html>

The balance between teaching and research varies highly between individuals, institutes and clinics. Service and teaching using patients is more prominent in clinics, Institutes in the Department are traditionally focussed less on service and more on research and teaching. Each professor is required to give at least 9 hours per week of teaching, with scientific co-workers such as doctoral students the teaching must be at least 5 hours per week. The maximum of one full working day (8h) per week is the legal limit for other activities.

9.3.2. Comments

The support of LMU for young academics and staff could be strengthened and plenty of opportunities do exist to extend the knowledge of teaching staff.

9.3.3. Suggestions for improvement

None.

9.3.4. Decision

The VEE is compliant with standard 9.3.

Standard 9.4: The VEE must provide evidence that it utilises a well-defined, comprehensive and publicised programme for the professional growth and development of 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 has put in place a mentoring programme and also women's representative committee to ensure the personal development of the staff and ensure fairness for female academics, teachers and student

Mentoring programmes are also in place specifically for instance in line with residency supervision, but also available for young academic positions or doctoral students.

The VEE utilises the Centre for Leadership and People Management, another institution at the Central University that offers a plethora of courses every year assisting faculty across the university to improve their soft skills such as teaching, problem solving, communication, leadership, conflict resolution etc.

PROFIL is also a good opportunity to improve higher teaching didactic skills.

LMU offers support to improve staff competences (e.g. e-learning process, grant proposal).

Assessment of the staff occurs annually, and several performances are taken into account (publication, grants, research studies, doctoral students, students' evaluation.). The list of criteria related to research is more present than teaching.

Professors can apply for salary increases: the system is quite challenging. Other staff can apply for extra-payment every year based on achievement. This is not salary increase sensu stricto.

Support staff are interviewed once a year by their boss/supervisor. Otherwise, no survey is conducted regularly to assess their needs and collect their putative complaints.

9.4.2. Comments

None.

9.4.3. Suggestions for improvement

Regular surveys could be conducted towards supporting staff to collect their complaints, ideas and suggestions.

9.4.4. Decision

The VEE is compliant with standard 9.4.

Standard 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

In accordance with the Bavarian higher education act, courses are evaluated regularly on a random basis. This evaluation is mandatory. The VEE implements an evaluation system for all intra and extramural courses. For instance, for EPT, the students have to assess the practice and this is mandatory.

When they evaluate a teaching, students have to give their opinion on different aspects: preconditions, general organisation, adjustment of teaching modalities to the aim and objectives of the lecture, communication with teachers and assessment modalities. These evaluations are both quantitative (scale) and qualitative (open comments).

The results of these evaluations are available to the concerned teachers only due to personal rights. The teachers have to discuss the results of these evaluations with the students and need to build a response to criticism and wishes. The results and answers are also communicated to the Dean for Student Affairs.

9.5.2. Comments

Assessment of teaching staff is in agreement with the Standard.

9.5.3. Suggestions for improvement

None.

9.5.4. Decision

The VEE is compliant with standard 9.5.

Area 10. Research programmes, continuing and postgraduate education

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

10.1.1. Findings

The VEE carries out a broad range of research activities focused on four key areas

- Transitional Medicine
- Infection and Immunity
- Reproductive Medicine, Biology and biotechnology
- Veterinary Integrated Health

These reflect priority programmes for the German Research Foundation (DFG).

There is close multidisciplinary cooperation across the University with faculties of human medicine, biology, physics and chemistry, and with other local institutes such as the Max-Planck Institute, Helmholtz Zentrum and others.

External funding has been awarded from the DFG, EU funding including ERC grants, the Federal Ministry for Education and Research, the Wellcome Trust, the Bavarian Research Alliance, etc

10.1.2. Comments

The VEE reflects the ethos of excellence in research evident in the achievements of the LMU Munich. Research activities are carried out across the academic discipline of the VEE and support the undergraduate education. Many academics mentioned 'freedom' to explore and carry out their research, with good support from within the VEE and the University as a reason for joining and remaining at the VEE.

10.1.3. Suggestions for improvement

None.

10.1.4. Decision

The VEE is compliant with standard 10.1.

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

10.2.1. Findings

The VEE aims to ensure that students are aware that there are options for a veterinarian after graduation beyond clinical medicine, particularly in research or public health. There is a VETResearch programme which allows students to learn about research processes in the early stages of their study and gain experience in the laboratory by working on a project on their own. This work culminates with the student presenting their work through a talk or poster, a written report, and the award of prizes to the best efforts. Although the financial support for this programme has been withdrawn, the VEE has found other means to ensure the programme could continue.

The integration of student learning and awareness of research is assisted by the teaching of good laboratory practice and basic scientific method in chemistry, physiology and biochemistry, the experience of laboratory animal medicine, the teaching of statistics, study and epidemiological study design.

Several Departments encourage and support undergraduates to attend professional conferences and events so that they can get a direct insight into current research.

10.2.2. Comments

All students receive training in the scientific method both formally and through practical exposure through the academic staff. The students of the VEE have a number of routes through which they can participate practically in research programmes.

10.2.3. Suggestions for improvement

None.

10.2.4. Decision

The VEE is compliant with standard 10.2.

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

10.3.1. Findings

The VEE has 43 postgraduate interns who work closely with undergraduates on the handling of clinical cases. This year there are also two interns in pathology.

There are approximately 40 residents across the EBVS disciplines and German specialisation programmes.

Approximately 100-140 of the undergraduate students each year go on to complete a postgraduate doctorate thesis.

The VEE awards the Dr. med. vet. habil., which requires 50 publications over 7 to 10 years, to approximately 5 researchers every year.

A small number of researchers at the VEE gain PhDs every year through collaborative studies with other institutes.

Continuous Professional Development is obligatory for veterinarians in Germany with consequently, a plethora of courses and seminars offered. The VEE concentrates on offering courses on evidence-based medicine, of which there is a comprehensive programme, in conjunction with the Bavarian Veterinary Chamber.

10.3.2. Comments

The VEE offers a comprehensive programme of post-graduate qualifications. A significant effort is being made to increase the number of European Board of Veterinary Specialists diplomas across a broad range of subjects, in addition to the specific German specialist qualifications offered.

10.3.3. Suggestions for improvement

None.

10.3.4. Decision

The VEE is compliant with standard 10.3.

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

10.4.1. Findings

Research results are incorporated into teaching materials whenever considered relevant for the purpose by the individual tutor. Formal and informal systems are in place where students are exposed to both the scientific method and the outcome of research programmes through their regular contact with clinicians who also carry out research, through seminars and attendance at conferences.

10.4.2. Comments

Relevant research approaches, methods and findings are incorporated into the veterinary teaching programme as a matter of routine through contact with academic staff and researchers.

10.4.3. Suggestions for improvement

None.

10.4.4. Decision

The VEE is compliant with standard 10.4.

11. ESEVT Indicators



ESEVT Indicators

Name of the Establishment:		Veterinary Faculty of the Ludwig-Maximilians-University (LMU) of Munich				
Name & mail of the Head:		Prof. Dr. Reinhard K. Straubinger, PhD, dekanat08@lmu.de				
Date of the form filling:		April 11, 2022				
Raw data from the last 3 full academic years		2018/19	2019/20	2020/21	Mean	
1	n° of FTE academic staff involved in veterinary training	186,00	186,35	187,35	186,57	
2	n° of undergraduate students	1 595,00	1 636,00	1 644,00	1 625,00	
3	n° of FTE veterinarians involved in veterinary training	183,80	184,16	184,45	184,14	
4	n° of students graduating annually	223,00	252,00	209,00	228,00	
5	n° of FTE support staff involved in veterinary training	281,00	278,52	278,65	279,39	
6	n° of hours of practical (non-clinical) training	741,90	659,40	695,40	698,90	
7	n° of hours of clinical training	772,20	772,20	777,20	773,87	
8	n° of hours of FSQ & VPH training	388,00	427,00	420,00	411,67	
9	n° of hours of extra-mural practical training in FSQ & VPH	266,00	270,00	254,00	263,33	
10	n° of companion animal patients seen intra-murally	11 294,00	11 318,00	12 018,00	11 543,33	
11	n° of ruminant and pig patients seen intra-murally	1 191,00	1 192,00	1 432,00	1 271,67	
12	n° of equine patients seen intra-murally	577,00	779,00	0,00	452,00	
13	n° of rabbit, rodent, bird and exotic patients seen intra-mural	4 072,00	2 205,00	2 320,00	2 865,67	
14	n° of companion animal patients seen extra-murally	21,00	42,00	81,00	48,00	
15	n° of individual ruminants and pig patients seen extra-mural	10 987,00	11 085,00	11 920,00	11 330,67	
16	n° of equine patients seen extra-murally	4,00	5,00	10,00	6,33	
17	n° of visits to ruminant and pig herds	1 955,00	1 993,00	3 817,00	2 588,33	
18	n° of visits of poultry and farmed rabbit units	69,00	41,00	41,00	50,33	
19	n° of companion animal necropsies	324,00	325,00	243,00	297,33	
20	n° of ruminant and pig necropsies	184,00	222,00	128,00	178,00	
21	n° of equine necropsies	37,00	48,00	41,00	42,00	
22	n° of rabbit, rodent, bird and exotic pet necropsies	735,00	465,00	578,00	592,67	
23	n° of FTE specialised veterinarians involved in veterinary tr	88,30	93,33	89,01	90,21	
24	n° of PhD graduating annually	96,00	104,00	93,00	97,67	

The boxes within the red frames must be filled in by the Establishment (the other values will be automatically calculated)



ESEVT Indicators

Name of the Establishment:		Veterinary Faculty of the Ludwig-Maximilians-University (LMU) of Munich			
Date of the form filling:		April 11, 2022			
Calculated Indicators from raw data					
		Establishment values	Median values¹	Minimal values²	Balance³
I1	n° of FTE academic staff involved in veterinary training / n° of undergraduate students	0,11	0,15	0,13	-0,01
I2	n° of FTE veterinarians involved in veterinary training / n° of students graduating annually	0,81	0,84	0,63	0,18
I3	n° of FTE support staff involved in veterinary training / n° of students graduating annually	1,23	0,88	0,54	0,69
I4	n° of hours of practical (non-clinical) training	698,90	953,50	700,59	-1,69
I5	n° of hours of clinical training	773,87	941,58	704,80	69,07
I6	n° of hours of FSQ & VPH training	411,67	293,50	191,80	219,87
I7	n° of hours of extra-mural practical training in FSQ & VPH	263,33	75,00	31,80	231,53
I8	n° of companion animal patients seen intra-murally / n° of students graduating annually	50,63	62,31	43,58	7,05
I9	n° of ruminant and pig patients seen intra-murally / n° of students graduating annually	5,58	2,49	0,89	4,69
I10	n° of equine patients seen intra-murally / n° of students graduating annually	1,98	4,16	1,53	0,45
I11	n° of rabbit, rodent, bird and exotic seen intra-murally / n° of students graduating annually	12,57	3,11	1,16	11,41
I12	n° of companion animal patients seen extra-murally / n° of students graduating annually	0,21	5,06	0,43	-0,22
I13	n° of individual ruminants and pig patients seen extra-murally / n° of students graduating annually	49,70	16,26	8,85	40,85
I14	n° of equine patients seen extra-murally / n° of students graduating annually	0,03	1,80	0,62	-0,59
I15	n° of visits to ruminant and pig herds / n° of students graduating annually	11,35	1,29	0,54	10,81
I16	n° of visits of poultry and farmed rabbit units / n° of students graduating annually	0,22	0,11	0,04	0,18
I17	n° of companion animal necropsies / n° of students graduating annually	1,30	2,11	1,40	-0,10
I18	n° of ruminant and pig necropsies / n° of students graduating annually	0,78	1,36	0,90	-0,12
I19	n° of equine necropsies / n° of students graduating annually	0,18	0,18	0,10	0,08
I20	n° of rabbit, rodent, bird and exotic pet necropsies / n° of students graduating annually	2,60	2,65	0,88	1,72
I21*	n° of FTE specialised veterinarians involved in veterinary training / n° of students graduating annually	0,40	0,27	0,06	0,34
I22*	n° of PhD graduating annually / n° of students graduating annually	0,43	0,15	0,07	0,36
¹	Median values defined by data from Establishments with Accreditation/Approval status in May 2019				
²	Recommended minimal values calculated as the 20th percentile of data from Establishments with Accreditation/Approval status in May 2019				
³	A negative balance indicates that the Indicator is below the recommended minimal value				
*	Indicators used only for statistical purpose				

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

Area 1. Objectives, Organisation and QA Policy	C	PC	NC
Standard 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.	X		
Standard 1.2: The VEE must be part of a university or a higher education institution providing training recognised as being of an equivalent level and formally recognised as such in the respective country. The person responsible for the veterinary curriculum and the person(s) responsible for the professional, ethical, and academic affairs of the Veterinary Teaching Hospital (VTH) must hold a veterinary degree. The decision-making process, organisation and management of the VEE must allow implementation of its strategic plan and of a cohesive study programme, in compliance with the ESEVT Standards.		X	
Standard 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.			X
Standard 1.4: The VEE must have a policy and associated written procedures for the assurance of the quality and Standards of its programmes and awards. It must also commit itself explicitly to the development of a culture which recognises the importance of quality, and 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.	X		
Standard 1.5: The VEE must provide evidence that it interacts with its stakeholders and the wider society. Such public information must be clear, objective and readily accessible; the information must include up-to-date information about the study programme, 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.	X		
Standard 1.6: The VEE must monitor and periodically review its activities, both quantitative and qualitative, to ensure that they achieve the objectives set for them and respond to the needs of students and society. The VEE must make public how this analysis of information has been utilised in the further development of its activities and provide evidence as to the involvement of both students and staff in the provision, analysis and implementation of such data. Any action planned or taken as a result of this data analysis must be communicated to all those concerned.	X		
Standard 1.7: The VEE must undergo external review through the ESEVT on a cyclical basis. Evidence must be provided of such external evaluation with the assurance that the progress made since the last ESEVT evaluation was linked to a continuous quality assurance process.	X		
Area 2. Finances			
Standard 2.1: Finances must be demonstrably adequate to sustain the requirements for the VEE to meet its mission and to achieve its objectives for education, research and services. The description must include both expenditures (separated into personnel costs, operating costs, maintenance costs and equipment) and revenues (separated into public funding, tuition fees, services, research grants and other sources).	X		
Standard 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		
Standard 2.3: Resources allocation must be regularly reviewed to ensure that available resources meet the requirements.	X		
Area 3. Curriculum			
Standard 3.1: The curriculum must be designed, resourced and managed to ensure all graduates have achieved the graduate attributes expected to be fully compliant with the EU Directive 2005/36/EC (as amended by directive 2013/55/EU) and its Annex V.4.1. The curriculum must include the subjects (input) and must allow the acquisition of the Day One Competences (output) listed in 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		

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3.1.5. Food Safety and Quality	X		
3.1.6. Professional Knowledge	X		
<p>Standard 3.2: Each study programme provided by the VEE must be competency-based and designed so that it meets the objectives set for it, including the intended learning outcomes. The qualification resulting from a programme must be clearly specified and communicated and must refer to the correct level of the national qualifications framework for higher education and, consequently, to the Framework for Qualifications of the European Higher Education Area.</p> <p>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.</p> <p>The VEE must also describe how it encourages and prepares students for self-learning and lifelong learning.</p>	X		
<p>Standard 3.3: Programme learning outcomes must:</p> <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		
<p>Standard 3.4: The VEE must have a formally constituted committee structure (which includes effective student representation), with clear and empowered reporting lines, to oversee and manage the curriculum and its delivery. The committee(s) must:</p> <ul style="list-style-type: none"> • determine the pedagogical basis, design, delivery methods and assessment methods of the curriculum • oversee QA of the curriculum, particularly gathering, evaluating, making change and responding to feedback from stakeholders, peer reviewers and external assessors, and data from examination/assessment outcomes • perform ongoing 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. 	X		
<p>Standard 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>Standard 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>Standard 3.7: Students must take responsibility for their own learning during EPT. This includes preparing properly before each placement, keeping a proper record of their experience during EPT by using a logbook provided by the VEE and evaluating the EPT. Students must be allowed to complain officially and/or anonymously about issues occurring during EPT. The VEE must have a system of QA to monitor the implementation, progress and then feedback within the EPT activities.</p>			X
Area 4. Facilities and equipment			
<p>Standard 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>Standard 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>Standard 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		

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<p>Standard 4.4: Core clinical teaching facilities must be provided in a veterinary teaching hospital (VTH) with 24/7 emergency services at least for companion animals and equines. Within the VTH, the VEE must unequivocally demonstrate that 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. 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>		X	
<p>Standard 4.5: The VEE must ensure that students have access to a broad range of diagnostic and therapeutic facilities, including but not limited to: diagnostic imaging, anaesthesia, clinical pathology, intensive/critical care, surgeries and treatment facilities, ambulatory services, pharmacy and necropsy facilities.</p>	X		
<p>Standard 4.6: Appropriate isolation facilities must be provided to meet the need for the isolation and containment of animals with communicable diseases. Such isolation facilities must be properly constructed, ventilated, maintained and operated to provide for 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>Standard 4.7: The VEE must have an ambulatory clinic for production animals or equivalent facilities so that students can practise field veterinary medicine and Herd Health Management under academic supervision.</p>	X		
<p>Standard 4.8: The transport of students, live animals, cadavers, materials from animal origin and other teaching materials must be done in agreement with national and EU standards, to ensure the safety of students and staff and to prevent the spread of infectious agents.</p>	X		
<p>Standard 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		
Area 5. Animal resources and teaching material of animal origin			
<p>Standard 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>Standard 5.2: In addition to the training provided in the VEE, experience can include practical training at external sites, provided this training is organised under direct academic supervision and following the same standards as those applied in the VEE.</p>	X		
<p>Standard 5.3: The VTH must provide nursing care skills and instruction in nursing procedures. Under all situations students must be active participants in the clinical workup of patients, including problem-oriented diagnostic approach together with diagnostic decision-making.</p>	X		
<p>Standard 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		
Area 6. Learning resources			
<p>Standard 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>Standard 6.2: Staff and students must have full access on site to an academic library administered by a qualified librarian, an Information Technology (IT) unit managed by 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.</p> <p>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>	X		
<p>Standard 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		
Area 7. Student admission, progression and welfare			
<p>Standard 7.1: The VEE must consistently apply pre-defined and published regulations covering all phases of the student "life cycle", e.g. student admission, progression and certification.</p> <p>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.</p>	X		
<p>Standard 7.2: The number of students admitted must be consistent with the resources available at the VEE for staff, buildings, equipment, healthy and diseased animals, and materials of animal origin.</p>	X		

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<p>Standard 7.3: The selection and progression criteria must be clearly defined, consistent, and defensible, be free of discrimination or bias, and take into account the fact that students are admitted with a view to their entry to the veterinary profession in due course.</p> <p>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.</p> <p>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>Standard 7.4: There must be clear policies and procedures on how applicants with disabilities or illnesses are considered and, if appropriate, accommodated in the programme, taking into account the requirement that all students must be capable of meeting the ESEVT Day One Competences by the time they graduate.</p>	X		
<p>Standard 7.5: The basis for decisions on progression (including academic progression and professional fitness to practise) must be explicit and readily available to the students. The VEE must provide evidence that it has mechanisms in place to identify and provide remediation and appropriate support (including termination) for students who are not performing adequately.</p> <p>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>Standard 7.6: Mechanisms for the exclusion of students from the programme for any reason must be explicit. The VEE's policies for managing appeals against decisions, including admissions, academic and progression decisions and exclusion, must be transparent and publicly available.</p>	X		
<p>Standard 7.7: Provisions must be made by the VEE to support the physical, emotional and welfare needs of students. This includes, but is not limited to, learning support and counselling services, career advice, and fair and transparent mechanisms for dealing with student illness, impairment and disability during the programme. This shall include provision of reasonable adjustments for disabled students, consistent with all relevant equality and/or human rights legislation.</p> <p>There must be effective mechanisms for resolution of student grievances (e.g. interpersonal conflict or harassment).</p>	X		
<p>Standard 7.8: Mechanisms must be in place by which students can convey their needs and wants to the VEE. The VEE must provide students with a mechanism, anonymously if they wish, to offer suggestions, comments and complaints regarding compliance of the VEE with national and international legislation and the ESEVT Standards.</p>	X		
Area 8. Student assessment			
<p>Standard 8.1: The VEE must ensure that there is a clearly identified structure within the VEE showing lines of responsibility for the assessment strategy to ensure coherence of the overall assessment regime and to allow the demonstration of progressive development across the programme towards entry-level competence.</p>	X		
<p>Standard 8.2: The assessment tasks and grading criteria for each unit of study in the programme must be published, applied consistently, clearly identified and available to students in a timely manner well in advance of the assessment. Requirements to pass must be explicit.</p> <p>The VEE must properly document the results of assessment and provide the students with timely feedback on their assessments.</p> <p>Mechanisms for students to appeal against assessment outcomes must be explicit.</p>	X		
<p>Standard 8.3: The VEE must have a process in place to review assessment outcomes, to change assessment strategies and to ensure the accuracy of the procedures when required. Programme learning outcomes covering the full range of professional knowledge, skills, competences and attributes must form the basis for assessment design and underpin decisions on progression.</p>	X		
<p>Standard 8.4: Assessment strategies must allow the VEE to certify student achievement of learning objectives at the level of the programme and individual units of study.</p> <p>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.</p>	X		
<p>Standard 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.</p>		X	
Area 9. Academic and support staff			
<p>Standard 9.1: The VEE must ensure that all staff are appropriately qualified and prepared for their roles, in agreement with national and EU regulations and must apply fair and transparent processes for the recruitment and development of staff.</p> <p>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.</p> <p>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.</p>	X		
<p>Standard 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.</p> <p>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.</p>	X		

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<p>Standard 9.3: Staff must be given opportunities to develop and extend their teaching and assessment knowledge and must be encouraged to improve their skills. Opportunities for didactic and pedagogic training and specialisation must be available. The VEE must clearly define systems of reward for teaching excellence in operation.</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>	X		
<p>Standard 9.4: The VEE must provide evidence that it utilises a well-defined, comprehensive and publicised programme for the professional growth and development of 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. 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>Standard 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		
Area 10. Research programmes, continuing and postgraduate education			
<p>Standard 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>Standard 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>Standard 10.3: The VEE must provide advanced postgraduate degree programmes, e.g. PhD, internships, residencies and continuing education programmes that complement and strengthen the veterinary degree programme and are relevant to the needs of the profession and society.</p>	X		
<p>Standard 10.4: The VEE must have a system of QA to evaluate how research activities provide opportunities for student training and staff promotion, and how research approaches, methods and results are integrated into the veterinary teaching programmes.</p>	X		
<p>C: (total or substantial) compliance; PC: partial compliance (Minor Deficiency); NC: non-compliance (Major Deficiency)</p>			

Executive Summary

The Veterinary School of Munich (called the Veterinary Education Establishment (VEE) in this Report) was founded in 1790.

In 1914, it became the Faculty of Veterinary Medicine of Veterinary Medicine of the Ludwig-Maximilians-Universität (LMU).

The VEE is located either in the Munich campus and in the Oberschleißheim campus. The plan is to move all departments/units to the Oberschleißheim campus before the end of this decade.

The VEE was last evaluated and approved by EAEVE in 2012.

The SER was provided on time and written in agreement with the SOP 2019 as amended in December 2020. Replies to the pre-Visitation questions from the experts were provided before the start of the Visitation. In agreement with the Exceptional Rules, an Addendum was also provided on time for explaining how the COVID-19 outbreak has affected the VEE and what actions have been taken to alleviate the impact of the lockdown.

The Visitation was very well organised and in agreement with the ‘Exceptional Rules for ESEVT Visitations linked to the COVID-19 outbreak’ and with the ‘Minimum requirements concerning health and safety measures to protect ESEVT Experts’ health and to prevent the spread of COVID-19’, as adopted by ExCom in 2021. The Liaison Officer did an excellent job to adapt the schedule of the Visitation, to search for the requested information, to organise the relevant meetings and to ensure the health and safety of the visitors.

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

-) Highly motivated and expert teaching staff including many recognised specialists
-) Excellent interaction between students and staff
-) Presence of undergraduate students in all VEE’s committees
-) Excellent support for the physical, emotional and welfare needs of students
-) Well-integrated training in food-producing animals and in FSQ
-) Outstanding clinical facilities
-) Well-developed teaching farm with a full cycle of breeding and production in dairy cattle, beef cattle, sheep and pigs
-) Numerous and well-equipped skills labs
-) Efficient development of hybrid and online teaching and learning

Additional commendations are described in the Visitation Report.

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

-) Partial compliance with Standard 1.2 because of suboptimal monitoring of the implementation of the previous strategic plan.
-) Partial compliance with Standard 3.1.3. because of suboptimal hands-on training in Companion Animal surgery.
-) Partial compliance with Standard 3.6 because of suboptimal evaluation of the performance of the student by the EPT provider.

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-) Partial compliance with Standard 4.4 because of suboptimal collaboration between internal medicine and surgery departments in CA.
-) Partial compliance with Standard 8.5 because of suboptimal formal assessment of the acquisition by all students of DIC.

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

-) Non-compliance with Standard 1.3 because of the 4-year delay in the elaboration, discussion with internal and external stakeholders, and adoption by the Faculty Council of the new strategic plan and operating plan.
-) Non-compliance with Standard 3.7 because of the absence of a robust system to monitor and assess the EPT activities.

Additional suggestions for improvement are described in the Visitation Report.

Glossary

CCVM: Centre for Clinical Veterinary Medicine
DVS: Department of Veterinary Sciences
D1C: Day One Competences
EAEVE: European Association of Establishments for Veterinary Education
EBVS: European Board of Veterinary Specialisation
ECOVE: European Committee on Veterinary Education
EPT: External Practical Training
ESEVT: European System of Evaluation of Veterinary Training
ESG: Standards and Guidelines for Quality Assurance in the European Higher Education Area
ExCom: Executive Committee of EAEVE
FSQ: Food Safety and Quality
FTE: Full-Time Equivalent
IT: Information Technology
LCO: Livestock Centre Oberschleißheim
LMU: Ludwig-Maximilians-Universität
OSCE: Objective Structured Clinical Examination
PDCA: Plan Do Check Adjust
QA: Quality Assurance
SER: Self Evaluation Report
SOP: Standard Operating Procedure
TAppV: Verordnung zur Approbation von Tierärztinnen und Tierärzten (Ordinance on the Licensing of Veterinarians)
VEE: Veterinary Education Establishment
VPH: Veterinary Public Health
VTH: Veterinary Teaching Hospital

Decision of ECOVE

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

1. Non-compliance with Standard 1.3 because of the 4-year delay in the elaboration, discussion with internal and external stakeholders, and adoption by the Faculty Council of the new strategic plan and operating plan.
2. Non-compliance with Standard 3.7 because of the absence of a robust system to monitor and assess the EPT activities.

The Veterinary Education Establishment (VEE) of the Ludwig-Maximilians University of Munich is therefore classified as holding the status of: **NON-ACCREDITATION**.