

## VISITATION REPORT

#### To the Department of Veterinary Sciences of the University of Pisa, Pisa, Italy

On 04 – 08 April 2022

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# Introduction

The University of Pisa (UniPi) was officially established in 1343 and its first course in veterinary medicine started in 1839. In 1923 the Higher School of Veterinary Medicine was transformed into the Royal Higher Institute of Veterinary Medicine, with an autonomous and independent organisation from the University. In 1934 the Institute became the Faculty of Veterinary Medicine and returned to be part of the UniPi. It has been called the Department of Veterinary Sciences (DVS) (called the Veterinary Education Establishment (VEE) in this report) since 2012.

In 1965 the VEE moved to its current location in the Viale delle Piagge campus in Pisa. The Veterinary Teaching Hospital (VTH) was completed in 2009 in the San Piero a Grado campus where the whole VEE should be relocated by 2025.

The first ESEVT Visitation was completed in 1998 and resulted in the status of non-approval. A second Visitation took place in 2009, together with a Re-visitation in 2012, resulting in the status of approval.

The VEE was also visited and approved by ANVUR (National Agency for the Evaluation of Universities and Research Institutes) in 2019.

The main developments since the last Visitation are:

- -) development of a strategic plan;
- -) introduction of the Annual Monitoring Report;
- -) new equipment for the 24/7 VTH;

-) amended curriculum with innovative teaching methods and more focus on Day One Competences acquisition;

-) new course for staff development.

The Visitation has been completed in agreement with the ESEVT SOP 2019 as amended in 2021.

# 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, evidencebased veterinary training that enables the new graduate to perform as a veterinarian capable of entering all commonly recognised branches of the veterinary profession and to be aware of the importance of lifelong learning.

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

#### 1.1.1. Findings

The Mission Statement of the VEE is: "To study, do research, educate, collaborate and innovate in a quality setting with people and society in order to promote animal welfare, environmental sustainability and collective health".

The VEE has developed a strategic plan 2018/2022 that includes the VEE's objectives within teaching, research, and outreach/knowledge transference.

The VEE offers a single-cycle five-year degree course in veterinary medicine, preparing students for possible veterinary careers in the public and private sectors.

The curriculum is organised in 5 years (300 ECTS; 1ECTS = 25 hours) and is divided into three phases:

A) first phase - basic science knowledge

B) second phase - animal production, clinical sciences, FSQ, and VPH and

C) final third phase of Professional Practical Training (PPT) (30 ECTS, equal to 750 hours).

Periodical consultations with representatives of the veterinary profession and ex alumni were organised in the last years every six months during the licence to practice exams: questionnaires were proposed to collect professionals/ex-alumni feedback, suggestions, and information needed to improve the curriculum.

The Degree in Veterinary Medicine (DVM) Council, which also include students, is the responsible of the design and management of the programme and receives inputs from different stakeholders through a Steering Committee and the DVM-JFSC, which also includes students; PPT is monitored by the PPT committee, which includes PPT academic instructors, while annual monitoring activities and cyclic revision is the responsibility of the Review Group with student representation.

The VEE is quality oriented, and certain laboratories and services are certified by ISO 9001:2015.

#### 1.1.2. Comments

The VEE is compliant with Standard 1.1 as its main objective is 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.

Further, the VEE has developed and follows its mission statement that embraces all the ESEVT Standards.

## 1.1.3. Suggestions for improvement

None.

## 1.1.4. Decision

The VEE is compliant with Standard 1.1.

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

The person responsible for the veterinary curriculum and the person(s) responsible for the professional, ethical, and 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 University of Pisa (UniPi) officially established in 1343, is a public institution financed by the Ministry of Education and Research (MUR) in Italy. The University has twenty Departments, one of which is the Department of Veterinary Sciences (VEE).

The UniPi has its own Statute, and it defines its own regulations on educational, scientific, organisational, administrative, financial, and accounting activities.

The University bodies are the Rector, the Academic Senate, the Board of Directors, the Board of Auditors, the Evaluation Committee and the Managing Director.

The following bodies have also been established at the University level: the Student Representative Council, the Single Committee on Equal Opportunities, Wellness of Employees and Non-Discrimination (CUG), the Disciplinary Board, the Ethics Committee, and the Quality Assurance Office.

The Head of the University is the Rector who is appointed by decree of the Minister. The Rector chairs the two main governing bodies of the UniPi, i.e., the Academic Senate and the Board of Directors. Both governing bodies have employee and student representation. The UniPi also has 10 Vice Rectors, each responsible for a designated area such as teaching, national research, applied research and knowledge transfer, and construction. As per UniPi Statute Art. 12 - 2a-c:, Vice Rectors are directly appointed by the Rector from the "University's" full-time teaching staff.

The position as Managing Director is regulated by a fixed-term contract of duration of no longer than four years and is renewable. The Managing Director has several tasks listed in the Statute of the UniPi, e.g., supervising the implementation of strategic and operational planning.

The Student Representative Council is the body which represents the students of the University of

Pisa. It has full autonomy in the organisation and coordination of the students and the related representation and has the task of promoting student participation. The council has advisory and proactive functions with regards to e.g., the teaching regulations, the regulations regarding teaching activities, the efficiency of services, guiding and tutoring activities. At present, no veterinary students are in this council. There was a DVM student who graduated in 2020.

Since September 2012, the Faculty of Veterinary Medicine and its three original Departments merged into a single department, the Department of Veterinary Sciences (VEE) of the UniPi. The VEE is situated on two separated sites in Pisa (downtown) and at San Piero a Grado, approximately 10 km away from Pisa, where the VTH is also located.

The VEE is responsible for five courses/curricula:

1. DVM curriculum

2. Sciences and Technologies of Animal Production - Bachelor level

- 3. Sciences and Technologies of Animal Production Master level, an international degree
- 4. Animal Breeding Technology and Dog Training Bachelor level
- 5. Food Quality and Biosecurity Master level. International interdepartmental degree

In addition, the VEE is included in a vocational Master education in One Health.

According to the official website, the VEE organises first level Master courses open to three-year graduates (Dog Education and Instruction) and second level Master courses open to DVM or specialists (Small Animal Imaging Diagnostics, Food Science: Human Quality, Safety and Nutrition, Veterinary Oncology, Veterinary Ethology and Clinic, Wildlife Management, Control and Conservation, Nephrology, Gastroenterology, Anaesthesiology and Pain Therapy for Pets and Unconventional Animals). Also, the VEE organises the following courses: Preparatory course in animal-assisted intervention (AAI), Basic course for veterinarians in AAI, Basic course for dog trainer in AAI, Advanced course in AAI.

The Head of Department (Head of VEE) is elected every 4 years by the Departmental Council (VEE Council).

The Head of VEE nominates a Deputy Head and the VTH Director, and the Head of VEE can allocate specific functions/activities to delegates.

Each of the five courses has a degree course coordinator and a degree council.

Degree course coordinators are elected every three years by the members of each Degree course council. The DVM Course Coordinator, who is responsible for the veterinary curriculum, has a veterinary degree (DVM, PhD).

The VEE Council and the DVM Council (in the case of the veterinary curriculum) are the decisionmaking bodies.

The VEE Council approves the Strategic Plan; approves proposals about staff planning and related budget needs; decides about the activation of new study programmes; organises and manages the teaching and research activities.

The DVM Council adopts resolutions on all aspects related to the DVM curriculum, and receives inputs from the DVM-JFSC, the D-JFSC, the PPT Committee, the Steering Committee and the Review Groups.

According to the Statute of the UniPi, each department must have a Department Executive Committee. At the VEE, this is the Department Board with employee and student representation.

The Department Board is the executive body in support of the Head of the VEE.

The Department activity is managed by different committees chaired by the Head of VEE or by relevant delegates/referent persons. All of them report to the VEE Council for major decisions.

Similarly, the DVM course is managed by a DVM Course Coordinator and different committees (DVM Council, DVM-JFSC, Steering Committee, PPT Committee, Review Group, Year Coordinator).

The DVM Council decides on organising and managing of teaching activities but is politically and financially dependent on the VEE Council.

Services (Teaching Unit, Research Unit, Budget/Central Services Unit) are coordinated by the Administrative Manager who reports to the Head of VEE.

The VTH is headed by the VTH Director who reports to the Head of VEE.

The VTH Director is responsible for the professional, ethical, and academic affairs of the Veterinary Teaching Hospital. The VTH Director holds a veterinary degree (DVM, PhD).

The VTH Director has also the position of Deputy Director of CIRAA, the interdepartmental centre that manages the Teaching Farm.

The decision-making body of the VTH is the VTH Council, its decision authority limited to issues which do not require the discussion/approval by the VEE Council or DVM Council.

The VTH is a Departmental Centre (UniPi Statute Article 39 – Centres, "University" Consortiums and Associations) "4. Department regulations may foresee the establishment of Departmental Centres to manage specific training, research activities or services. It is also possible that the regulation of the Systems may foresee the establishment of Service Centres internally." As VTH manager the VTH director works as a VEE head delegate for all the VTH activities; as Sanitary director he/she is responsible for the professional and ethical affairs of the VTH.

VTH academic affairs are directly managed by the VEE head via the VEE Council.

The VEE has a high degree of autonomy and has also seen increasing autonomy in using its resources. The decision-making bodies of the VEE are the VEE Council, DVM Council, and the VTH Council.

There are different committees with the participation of staff members.

Students are involved in most of the committees thus actively contributing to the management of education.

# 1.2.2. Comments

The VEE is compliant with Standard 1.2 because the VEE:

- is part of a university;
- provides training recognised as being of an equivalent level and formally recognised as such in Italy;
- has a veterinarian as the person responsible for the veterinary curriculum;
- has a veterinarian as the person responsible for the professional, ethical, and academic affairs of the Veterinary Teaching Hospital (VTH);
- through its decision-making process, organisation and management allows implementation of its strategic plan and of a cohesive study programme in compliance with the ESEVT Standards.

#### 1.2.3. Suggestions for improvement

None.

#### 1.2.4. Decision

The VEE is compliant with Standard 1.2.

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

#### 1.3.1. Findings

The VEE has a broad strategy broken down into operational objectives and actions. The VEE has developed a strategic plan 2018/2022 where the VEE's objectives within teaching, research and outreach/knowledge transference include objectives i.e.:

- to offer high quality education by innovative teaching, continue revision of syllabi and definition of a coherent curriculum;
- to provide a wide range of opportunities to students and graduates: internationalisation, postgraduate doctoral and specialist training, and job placement;
- to comply with the requirements of the EAEVE and the ANVUR;
- to support the prosperity of the society by performing research activities in different fields of the veterinary medicine, including One Health and the sustainability of animal productions;
- to maintain/update facilities and equipment;
- to increase society awareness on the role of veterinary professionals and veterinary science.

The Head of the VEE monitors and periodically adjusts the plan that is formally approved by the VEE Council. The Operating plan (included in the Strategic plan) is yearly reviewed/monitored by the VEE head helped by delegates and pertaining commissions. When changes are deemed necessary the reviewed strategic plan must be approved by the VEE Council.

Strategic and more specific objectives are based on the expectations formulated in national (ANVUR, MUR) and international (ESG, EAEVE) standards, guidelines, and regulations. Further, the VEE has prepared a SWOT analysis and a subsequent operating plan listing Objectives and Indicators.

In the SWOT, one weakness listed is "Incomplete ability to meet the needs of stakeholders". During the meetings, it was clear that this actually reflects the cyclic evaluation of curriculum, e.g. discrepancies in skills taught and skills demonstrated during the State Board Examination. Identified discrepancies form the basis for internal discussion in the VEE's various committees. Informal inputs may also arise as the VEE participates in continuing education programmes.

Further, one of the subsequent objectives (OB2f) in the Operating plan is to strengthen collaboration between the VEE and professionals by annual meetings with professional associations and practitioners/companies.

The current strategic plan covers 2018-2022. A new strategic plan will be prepared in 2022 and will cover 2022-2026. The new department head will be elected in 2024 thus each strategic plan covers half of a VEE head mandate.

## 1.3.2. Comments

The VEE is compliant with Standard 1.3 because the VEE:

- has a strategic plan that includes a SWOT analysis of its current activities;
- has a list of objectives and an operating plan with a timeframe and indicators for its implementation for most initiatives.

## **1.3.3.** Suggestions for improvement

None.

## 1.3.4. Decision

The VEE is compliant with Standard 1.3.

Standard 1.4: The VEE must have a policy and associated written procedures for the assurance of the quality and standards of its programmes and awards. It must also commit itself explicitly to the development of a culture which recognises the importance of quality, and 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

In accordance with its Statute, the UniPi has a Quality Assurance Office which supervises the appropriate and consistent implementation of the procedures of quality assurance, guaranteeing the flow of information within the structures involved, as well as externally regarding National Agency for the Evaluation of Universities and Research Institutes (ANVUR).

The University's Quality Assurance Office has employee and student representation, i.e., 6 members of the teaching staff, and a student representative.

The Quality Assurance Office:

- organises and controls the continuous update of information as regards the quality of the University courses of study required by state legislation;
- supervises the regular implementation of quality assurance procedures for the teaching activities in accordance with what was programmed and declared;
- monitors the opinion surveys of students, near-graduates and postgraduates while maintaining their anonymity;
- regulates and checks the periodic revision of courses of study;
- evaluates the effectiveness of improvement measures and their effective consequences;
- verifies the continuous update of information with regard to the quality of the "University" research provided for under state legislation;

- supervises the regular implementation of quality assurance procedures for research activities in accordance with what was programmed and declared;
- ensures the correct flow of information to and from the Evaluation Committee and the joint committees with regard to matters of the latter's competences.

The VEE has a Quality policy in which the VEE commits itself explicitly to the development of a culture which recognises the importance of quality, and quality assurance.

The VEE has a Quality Assurance Group consisting of 3 academic staff with the objective to develop synergies among QA systems.

The VEE has a Quality Assurance (QA) system which is a set of activities through which the Department of Veterinary Sciences (VEE) implements its own Quality Policy. The QA system is publicly available on the VEE public website.

The VEE's QA System involves planning, implementation, monitoring and control actions, which is reflected in the Annual action points (SER p. 13).

The VEE's QA System also includes cyclic actions; The VEE Review Group prepares a cyclic review report (CRR) every 5 years. The DVM Course last issued this report in 2018. In 2019 it was subjected to an accreditation assessment by the ANVUR: both provided documents and the on-site visit led to national accreditation.

As part of the VEE's QA system, a Reporting Procedure (observations and complaints) has been approved by the Department Council with the aim of establishing clear and identified information channels suitable for guaranteeing the receipt and analysis of reports on services and performances provided by the VEE from all interested parties, and to define the activities necessary for their correct resolution.

The VEE's QA system is organised into:

- Ouality of Teaching– by monitoring and evaluating the management of the training offer, from design to review, of each Degree Course (DC) of the VEE. The documents that are related to the quality of teaching are the Scheda Unica Annuale (SUA) of the Degree Programmes (for veterinary medicine this is the SUA-CdS MV), which collects information useful for planning, implementation, management, self-assessment and redesign of the DC, the Scheda di monitoraggio annuale (Annual monitoring) and the Report of cyclical system review (Rapporto di riesame ciclico), which aim to periodically verify the level of the learning objectives that the DC has proposed, the correspondence between objectives and results and the effectiveness of the way in which the Course is managed. The DVM Course was evaluated by the European Association of Establishments for Veterinary Education (EAEVE) in December 2009 and the EAEVE Commission of the Department carried out the development and coordination of the activities necessary for maintaining EAEVE accreditation. In addition, the teaching QA system makes use of the contribution of the Annual Report of a Joint Faculty-Students Committee, providing indications, suggestions, and action proposals to the Degree Course, also in order to facilitate their task when preparing any changes to the legal system or regulations.
- Research Quality the VEE has the task of establishing the research objectives to be pursued, identifying and planning what is necessary to achieve them, monitoring the regular performance of research activities and verifying the extent to which the objectives are reached. The actions inherent to the research QA system concern the compilation of the

SUA-RD form, which collects information and data on scientific objectives, the organisation of research activities and related results, the quality policies pursued in relation to research and its promotion and critical review, and the Annual Report on Research and the Third Mission of the VEE.

- VM Course Quality of the Third Mission – The VEE also has the task of establishing the objectives of the third mission to be pursued. This involves identifying and planning what is necessary to achieve the objectives, monitoring the regular performance of the third mission activities and verifying the extent to which the goals are reached. The actions related to the QA system of the third mission concern the compilation of the SUA-RD form and the Annual Report on Research and the Third Mission of the VEE.

Through the various councils and committees, employees, students, and other internal stakeholders are actively involved in the development and implementation of the VEE's strategy.

The VEE Steering Group, appointed by the Department Council, has the task of facilitating and promoting relations between the department and the production context, bringing training courses closer to the needs of the labour market, and collaborating in defining the needs of stakeholders; it monitors the adaptation of the curricula offered by Degree Courses and evaluates the effectiveness of employment outcomes.

External Quality evaluations includes audit by ANVUR, audit by the University Evaluation Unit, and ISO 9001:2015 certification for laboratory analyses carried out on behalf of third parties of laboratory services, for the management of blood donations and preparation of blood components in dogs and cats by the Veterinary Transfusion Medicine service and for the management of the supply of medicines by the Pharmacy Service of the Veterinary Teaching Hospital.

External stakeholders are invited to give inputs to the strategy plan and to curriculum revisions and this input is included into the internal discussions.

The Quality system is also described at the VEE's public website (<u>Quality - Dipartimento di</u> <u>Scienze Veterinarie (unipi.it)</u>), which also includes a reference to the overall Quality policy of the VEE (<u>Quality-Policy.pdf (unipi.it)</u>).

Overall, three QA systems are in place inside the VEE, i.e.

- AVA -ANVUR (Autovalutazione – Valutazione periodica – Accreditamento). AVA-ANVUR is the national ENQA accredited agency for the Evaluation of Universities and Research Institutes.

This system includes Self-assessment, Periodic Evaluation, Accreditation. The system focus on compliance with 2015 ESGs (Standards and Guidelines for Quality Assurance in the European Higher Education Area).

- UNI EN ISO 9001:2015 Quality management system.

This system includes Self-assessment, third-party audit, certification. The system focuses on compliance with UNI EN ISO 9001:2015.

- EAEVE/FVE QA system ESEVT

This system includes Self-assessment, Periodic evaluation, Accreditation. The system focuses on compliance with 2015 ESGs (Standards and Guidelines for Quality Assurance in the European Higher Education Area) and the ESEVT SOP 2019 amended in 2021.

The VEE also demonstrated that it adheres to "closing the PDCA-loop", for example in relation to work health where the UniPi has collected and analysed data on stress experienced by employees. This in turn is discussed in the relevant bodies within the VEE with actions being taken to mitigate the experience of work-related stress. Other examples include the preparation of the SER which has involved the whole VEE including students, and the clinical pathological analyses offered by the Central Laboratory at the VTH which have been selected based on discussions between clinical pathologists and relevant clinicians.

The VEE has a policy and associated written procedures for the assurance of the quality and standards of its programmes and awards. The VEE is committed to the development of a culture which recognises the importance of quality, and quality assurance, within the VEE.

The VEE has developed and implemented a strategy for the continuous enhancement of quality. The strategy includes internal and external stakeholders, including students.

## 1.4.2. Comments

The VEE is compliant with Standard 1.4 because the VEE:

- has a policy and associated written procedures for the assurance of the quality and standards of its programmes and awards;
- is committed explicitly to the development of a culture which recognises the importance of quality and quality assurance;
- has developed and implemented a strategy for the continuous enhancement of quality;
- has secured a role for students and other stakeholders in the development and implementation of the VEE's strategy;
- has given the strategy a formal status and has made it publicly available.

## **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

The VEE has in its Strategic Plan what is named Third Mission which has the following objectives:

- to enhance the quality of the services according to codified procedures;
- to increase VEE visibility by efficient communication and inter-institutional agreements;

- to increase society awareness on the role of veterinary professionals and veterinary science.

The main activities of the Third Mission of the Department of Veterinary Sciences are:

- Public engagement (i.e., public events, popular publications, press review of popular publications, activities with schools, participation in committees for the definition of standards and technical regulations);
- Spin-offs;
- Patents;
- Activities on behalf of third parties (carried out at the VTH and in the laboratories);
- Continuing education.

The VEE and its staff participate in activities and develop actions to support the cultural enhancement of their area of expertise with the aim of promoting the visibility of veterinary medicine in society.

The Veterinary Anatomical Museum, located in the VEE, is part of the University's museum system.

Public information is clear, objective and readily accessible, e.g. on the UniPi and VEE websites; the information includes up-to-date information about the study programme, enrolment, the Italian educational system, views and employment destinations of past students as well as the profile of the current student population.

The VEE's public website <u>https://eaeve.vet.unipi.it/2012-visitation/</u> mention the ESEVT status of the VEE and its last Self Evaluation Report and Visitation Report.

On an aggregate level, not detailed into specific study programmes, the UniPi periodically carries out studies on the occupational status of its graduates (<u>https://www.unipi.it/index.php/indagini-e-studi/itemlist/category/1252-lacondizione-occupazionale</u>.

Other data on current student population are available on the UniPi portal UniPiStat: an internal database on students' admission and progression is accessible from the UniPi network (<u>https://www.unipi.it/index.php/amministrazione/item/14469-statistiche-su-studenti-e-corsi-distudio</u>).

## 1.5.2. Comments

The VEE is compliant with Standard 1.5 because the VEE:

- has provided evidence that it interacts with its stakeholders and the wider society;
- has made public information clear, objective and readily accessible;
- has ensured that the information includes 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;
- on its official website mentions the ESEVT VEE's status with its last Self Evaluation Report and Visitation Report easily available for the public.

#### **1.5.3.** Suggestions for improvement

The VEE is encouraged to further increase its interaction with external stakeholders e.g. in the food-producing sector.

#### 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

At the end of each semester, the University Portal "Valutami" (https://esami.unipi.it) makes a questionnaire available with which each student anonymously evaluates the courses they have attended.

Evaluation results are processed by the Planning and Evaluation Office of the University of Pisa.

The VEE Council, taking into account the "University Guidelines for the analysis and dissemination of the results of the evaluation questionnaires by students and the consequent actions for improvement", has decided that the complete disaggregated results of the evaluation questionnaires by students, divided by course/module and teacher, and excluding free comments, be made available to all members of the Councils of the different Degree Courses concerned and to all members of the Department Council through a reserved section of the departmental website. The guidelines were presented to the team before and during the evaluation.

These results, together with the summary of the analyses and any improvements suggested, are made available to all students enrolled in the course on the University Portal "Valutami".

The members of the Councils of the different Degree Courses and the members of the Department Council can access the evaluations of the courses by the students through the "Valutami" website.

Further, the UniPi and VEE have introduced the Annual Monitoring Report (AMR) and of the five years Cyclic Review Report (CRR). Both documents include self-evaluation of quantitative indicators on student careers, attractiveness, internationalisation, employability of graduates, quantity and qualification of the teaching staff, and satisfaction of graduates. The process helps, amongst other goals, in adjusting curriculum objectives in relation to the current needs of the veterinary profession.

The Annual Monitoring Report was introduced in 2017 and since then is annually used. The Cyclic Review Report was first introduced and used in 2018 when the DVM course underwent the AVA-ANVUR accreditation process.

Copies of the AMR2020, AMR2021, and CRR2018 were presented to the team before and during the evaluation.

The UniPi and VEE monitor and periodically review 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 latter because the results are also discussed in the VEE Steering Committee where 4 external professionals are included.

Through the website "Valutami", the VEE makes public how the evaluation results have been utilised in the further development of its activities.

Students and staff are involved in the evaluation process.

Any action planned or taken as a result of the evaluation is communicated to all those concerned, e.g., through the "Valutami" website.

The Valutami website was demonstrated during the visit both from the student's point and from the teacher's point.

## 1.6.2. Comments

The VEE is compliant with Standard 1.6 because the VEE:

- monitors and periodically reviews its activities, both quantitative and qualitative, to ensure that the VEE achieves the objectives set and responds to the needs of students and society;
- has made public how this analysis of information has been utilised in the further development of its activities;
- has provided 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 are communicated to all those concerned.

## 1.6.3. Suggestions for improvement

None.

## 1.6.4. Decision

The VEE is compliant with Standard 1.6.

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

## 1.7.1. Findings

The first EAEVE visit was in 1997-1998. On that occasion the VEE was not approved.

A second visit in 2009 showed two major deficiencies (facilities for ruminants and teaching in bovine medicine; absence of mobile clinic for farm animals) and several minor deficiencies whereby the decision was again non approval. The VEE of the UniPi was finally fully approved after a Re-visitation in 2012.

The VEE's public website gives access to e.g., SER 2009, SER 2012, Final report, ECOVE decision. The SER for the 2022 is listed as confidential to be published after the Visitation.

The SER also points out national evaluation of the DVM programme in March 2019 by the National Agency for Evaluation of Universities and Research Institutes (ANVUR). The outcome of the visit was fully satisfactory.

## 1.7.2. Comments

The VEE is compliant with Standard 1.7 because the VEE:

- on a cyclic basis undergoes external review through the ESEVT;
- has provided evidence of such external evaluation with the assurance that the progress made since the last ESEVT evaluation was linked to a continuous quality assurance process.

#### 1.7.3. 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

Expenditures of the VEE in the last 3 years are around 10 million euros. Most of these expenditures are personnel costs (around 8 million). Equipment expenditures have risen and are mostly due to acquisition of Veterinary teaching hospital instruments. Revenues come mostly from public authorities namely the University of Pisa. These revenues include salaries and a specific fund called Multifondo. This amount is depending on the number of students and staff, staff performance in research and teaching and internationalisation. For 2020 this Multifondo amount was around 200.000 euro. Also within the public authority budget is an annual 70.000 euro for update of VTH equipment. Clinical services including activities by the VTH and other diagnostic services have a revenue of around 1,5 million euros a year. Continuing education revenues paid by postgraduate students amount to on average 220.000 euro per year. Tuition fees are not directly transferred to the VEE but are a parameter in the Multifondo part of the revenues. The annual balance between expenditures and revenues of the VEE shows positive figures. In 2020 a balance of more than 1,1 million euro has been achieved.

## 2.1.2. Comments

The VEE is compliant with Standard 2.1 because:

- University of Pisa, UniPi is providing most of the funds;
- The VTH is providing paid services with an average revenue of 1.3 million euros;
- The annual balance of expenditures and revenues is positive.

A concern is that UniPi does not consider specificities and differences among different degree courses.

#### 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

Clinical and field services are seen as a priority for the VEE. The VTH has its own governing body, the VTH council, in charge for the organisational management of clinical and field services with an own director. The approval of the financial budget of the VTH is the responsibility of the Department of Veterinary Sciences. The VTH revenues are mostly spent on consumables, costs for practitioners' equipment and permanent staff overtime. The VTH revenues and expenditures are part of the revenues and expenditures of the Department of Veterinary Science. The VEE enjoyed sufficient autonomy in using its resources mainly represented by the Multifondo and overhead charges.

#### 2.2.2. Comments

The VEE is compliant with Standard 2.2 because the VTH has its own governing body in charge of management of clinical and field services. No overhead on services of the VTH is charged by the Department of Veterinary Sciences.

#### 2.2.3. Suggestions for improvement

None.

#### 2.2.4. Decision

The VEE is compliant with Standard 2.2.

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

#### 2.3.1. Findings

The decision-making process on resource allocation involves several steps. The VEE management, the Degree course councils, the VEE council, the VTH council as well as researchers. Also students play a role through their questionnaires and student representatives. The VEE has a Strategic plan 2018/2022 which is publicly available on the website of the Department.

#### 2.3.2. Comments

The VEE is compliant with Standard 2.3 because the financial situation is part of the decision process within the DVS council and part of the strategic plan. As the finances of the VEE is strongly

dependent on UniPi, the negotiations to consider specificities and differences among diverse degree payments are important. UniPi should be persuaded to accept that costs for veterinary student education are higher than for other students. These different costs should be compensated for in the Multifondo.

## 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

The current curriculum of the DVM Course, activated in 2009, has been structured under the regulation of the Ministerial Decree no. 270/2004. It has a total of 300 ECTS (25 hours per ECTS), organised in 5 years. Professional hands-on training accounts for 30 ECTS (10%) and 9 credits are Electives in the 5<sup>th</sup> year. The current syllabi were last reviewed in 2017 and the programme is monitored periodically by the DVM Council with the participation of both internal (staff and students) and external stakeholders (Steering Committee and professionals). Also, there is a special committee for PPT.

The programme of the DVM Course is structured in units of study that are linked to the ESEVT Day One Competences (detailed in SER Annex B). Face to face teaching is complemented with an e-learning platform (Moodle based) and detailed information about the learning outcomes, criteria and methods of assessment of each individual subject is available online through the UniPi website.

All subjects included in the curriculum are distributed in the areas included in the SOP and total workload per student is displayed in Table 3.1.3.

Before starting clinical rotations, most of the teaching of basic subjects is organised through lectures and laboratory or desk-based work sessions (modality D), while non-clinical and clinical animal work is predominant in subjects related to animal production, food safety and Clinical sciences respectively. However, the number of hours dedicated to other modalities, such as seminars or supervised self-learning is remarkably lower or absent in most subjects.

The Curriculum is monitored by DVM-JFSC and PPT Committee. In case of detecting inconsistencies, redundancies, or omissions, they can propose corrective actions. To ensure the connection between the learning outcomes of core subjects and the ESEVT Day One Competences, specific guidelines have been implemented in the curriculum and the assessment methods of different subjects (SER Annex 3).

The personal Logbook is the instrument to monitor the acquisition of practical skills. The list of competences included in the Logbook include skills that match the learning outcomes of core subjects and other clinical or practical skills that can be acquired during PPT. Last revision of the logbook was done in 2019.

Students are required to take 9 ECTS as Electives, organised during the 10<sup>th</sup> semester (5<sup>th</sup> year). Those credits can be chosen from a list of 13 subjects (listed in Table 3.1.5), or as Practical rotations (Table 3.1.4.). Most of them are taught in English, with a maximum of 10 students per class. The Administrative Didactic Unit ensures the match of the student preferences with the places available for each subject.

## **3.1.1.2.** Comments

The curriculum includes all the EU-listed subjects for which learning outcomes are aligned with the acquisition of Day One Competences.

Students, academic staff and external stakeholders participate in the active monitoring of the curriculum through the activities of the DVM-JFSC Committee.

Subject's syllabus, including detailed learning outcomes and assessment methods are easily accessible through the University website.

Teaching modalities such as seminars and supervised self-learning are not included in many preclinical and scarcely represented in some clinical subjects, although seminars and e-learning resources can be useful to cover some aspects of clinical teaching.

#### 3.1.1.3. Suggestions for improvement

It is recommended that self-learning in clinical subjects be enhanced through the use of e-learning resources.

## **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 sciences are taught amongst the first three years of the degree. There are 1555 teaching hours devoted to Basic subjects, and these subjects are compulsory, although some of the contents of basic sciences are also offered as 5 "electives", including a total of 126 h. Most basic subjects such as Anatomy, Physiology, Microbiology and Parasitology are taught mainly as lectures, including some sessions of laboratory or desk-based work. The learning outcomes and syllabus of all subjects

are available on the UniPi website (Valutami).

The practical teaching of comparative anatomy and topographical anatomy is restricted to the study of organs of domestic species and the dissection of a sheep carcass and a whole pig (1 every 5 students). Videos, models, fixed organs and other didactic materials are used for teaching other species.

Hands-on training on physiological evaluation of animals and animal handling is mainly taught in different subjects during the third, fourth and fifth year, including visits to dog shelters and teaching farm and during clinical activities and PPT.

## **3.1.2.2.** Comments

Theoretical contents of basic sciences are well represented and well balanced in the curriculum.

The Anatomy museum has an extensive collection of fixed antique pieces, some of them very valuable for their uniqueness. The museum can be visited for learning purposes at the student's request. There is an extensive practical training in histology and self-learning is enforced by the Department's e-learning portal.

There is a suboptimal hands-on training on dissection and comparative anatomy. This concern is covered in standard 5.1.

There is suboptimal practical training on physiological evaluations of different species and animal handling during the first two years of the curriculum. This is compensated in practical activities of clinical subjects and PPT.

## 3.1.2.3. Suggestions for improvement

Practical training in dissection should be implemented with more healthy carcasses of different species. Hands-on training on Physiology and animal handling of different species should be enhanced in the first two years of the curriculum.

## 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 300 ECTS for the course are distributed over 5 years, with an average annual workload of 60 credits. Furthermore, the national legislation provides for the distribution of 300 credits over a maximum of 30 core subjects, and the curriculum should be completed within 5 years (10 semesters), including PPT activities.

**Core clinical exercises/practicals/seminars prior to the start of the clinical rotations** – Before starting clinical rotations, students carry out the following preparatory activities organised in groups and consisting of seminars and practicals including non-clinical animal work, laboratory and desk-based work and simulations on anatomical preparations, cadavers and animal models (dummies).

**Core clinical rotations and emergency services** – Clinical rotations consist of the practical activities of clinical courses and ambulatory clinics as well as PPT activities.

<u>Practical activities in clinical courses and ambulatory clinic</u> held from the 7<sup>th</sup> to the 9<sup>th</sup> semester, these activities are provided to students divided into groups (6-7 students) and organised as follows:

- *Internal medicine area*: clinical activity at the VTH and ambulatory clinics on companion animals, farm animals and horses.
- *Reproduction area*: clinical activity at the VTH on companion animals, production animals, horses as well as ambulatory clinics on horses and farm animals.
- *Surgery area*: clinical activity at the VTH on companion animals, non-conventional pets, production animals and horses.

At the VTH, students are trained to collect the patient's complete signalment, history and to perform the clinical examination. Under the supervision of academic staff, students summarise and evaluate recorded data and plan further diagnostic investigations, suggest a list of differential diagnoses with corresponding therapies and prognoses, and plan patient follow-up. In addition, under the supervision of the teacher, students draw up the clinical report, participate in the compilation of drug prescriptions and inform the owner about the management of the patient. During these activities, students are also trained to discuss and report clinical cases to colleagues.

Clinical activities also involve training on animal models, simulators, organs and cadavers, providing the opportunity to acquire practical skills, confidence with tools and diagnostic and surgical procedures. In further didactic activities students (in small groups) discuss simulated clinical cases and agree on the diagnostic and therapeutic process; also, they participate in ambulatory clinics under academic or contracted staff supervision.

<u>PPT activities</u>: during the last year of the curriculum, in the 10<sup>th</sup> semester, students who have passed the preparatory exams may carry out the PPT in the clinical, surgical and obstetric areas (14 ECTS). PPT activities are carried out in small groups (1-3 students) supervised by academic staff and/or a reference veterinarian (who may be a hired practitioner):

- *Internal medicine:* (150 hours): companion animals (50 hours); intensive care following cases of medical competence (75 hours); livestock animals and horses (25 hours).
- *Surgery and reproduction:* (200 hours): activities in surgery, anaesthesia and diagnostic imaging of companion animals (75 hours); reproduction of companion animals (25 hours); reproduction of horses and farm animals (25 hours); emergency and intensive care following cases of surgical and reproductive competence (75 hours).

During the PPT, students are engaged in the management of hospitalised animals and in intensive care activities at the VTH for a total of 150 hours, divided into day and night shifts even on holidays. In addition, they participate in the management of medical, surgical and obstetric-gynaecological emergencies of all patients admitted at the VTH.

When applicable, students perform (or participate in) diagnostic imaging procedures and surgical activities during the PPT.

**Electives** – The DVM Course requires students to acquire 9 elective ECTS, which can be obtained through activities organised by the study course in the  $10^{\text{th}}$  semester: in particular students can choose among 13 elective subjects as shown in Table 3.1.5.

The fundamental practical activities necessary for the achievement of the study programme learning objectives are provided to students during the practical teaching associated with the

individual teaching modules and during the PPT activities: the skills acquired are recorded in a personal logbook. The logbook is divided into three parts: one dedicated to verifying the acquisition of safety and biosecurity instructions, one that refers to the acquisition of soft skills, and a third one that refers to the acquisition of professional skills for the various disciplines. During the training, after having acquired specific skills, students get the teacher's signature in the space beside the completed activity. Personal Logbooks must be completed before graduation; the DVM Course coordinator is in charge to check completeness.

During the periods of EPT, each student must write their objectives to be achieved at the extra venues. The veterinarian overseeing their EPT should see and sign off in the log books the objectives the student has completed which will in due course be signed by an academic staff member.

There are 10 hours of lectures covering exotic pets. These pets are not routinely seen in the VTH and the practical training is through a single opportunity during PPT when a variety of pets are brought into the clinic by a contracted veterinarian.

There is a PPT Committee which deals with all the aspects related to PPT both intra- and extramural; identifies potential deficiencies also related to ESEVT Day One Competences and proposes corrective actions that are adopted by the DVM Council with or without the preliminary opinion of the DVM-JFSC.

Remote PPT took place during COVID-19 restrictions.

The equine caseload has fallen in the past three years and therefore the opportunity for students to carry out practical skills on patients is diminished. This is partly due to COVID-19.

Students visit the Equine Tuscany Region stallions stud for reproduction teaching. This stud has horses and donkeys which are very used to being handled.

## **3.1.3.2.** Comments

The DVM curriculum aims to provide preparation, the scientific basis alongside the technical and practical skills necessary for practising the profession of a veterinarian. The VEE has looked at ways to adapt the course to meet national as well as changing ESEVT standards. They have tried to include more stakeholders on the Steering Committee to ensure the course meets requirements of the sector.

The clinical cases of exotic animals, including birds, is limited to animals being brought in by a contracted staff member and some emergency cases brought to the VTH. Students can not undertake clinical treatments on a diverse range or number of exotic animals or species due to this.

The objectives for a student for EPT are not always clearly defined for practitioners.

#### 3.1.3.3. Suggestions for improvement

The VEE should improve the number and species of exotic animals being seen by students to ensure they are competent in their handling and treatment. There is limited compensation done through the contracted veterinarian attending the VTH but it is not sufficient.

Students should ensure they write clear objectives for EPT that practitioners can help them to fulfil on their placements.

The VEE is encouraged to develop further partnerships with equine practices in order for students to see more routine equine work other than reproductive cases.

## 3.1.3.4 Decision

The VEE is partially compliant with Standard 3.1.3 because of suboptimal clinical training in exotic pets.

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

## 3.1.4.1. Findings

Compulsory basic training in clinical sciences in food-producing animals is given in the 4<sup>th</sup> and 5<sup>th</sup> years of the degree programme. Compulsory courses of Andrology and reproductive technologies; Semiology, clinical pathology and internal medicine; Surgical pathology, surgical semeiotics and diagnostic imaging; Internal medicine of companion and large animals and Obstetrics and reproduction are offered in year 4. Veterinary surgery, surgical procedures and anaesthesiology and Internal medicine and veterinary legislation are offered in the final year. Besides food-producing animals, courses cover training in all common animal species. It is difficult to filter out the specific theoretical, practical and clinical aspects of education in clinical sciences in food-producing animals. The syllabus of all subjects is available on the UniPi website.

There are 1301 compulsory teaching hours devoted to clinical sciences including 740 hours as lectures and 602 hours as clinical animal work. In addition to the core curriculum, the students have access to a total of 7 elective courses in clinical sciences. A few elective course hours are related to food-producing animals. In the 4<sup>th</sup> year of the programme, students are included in 0.3 weeks of ambulatory clinical work for both internal medicine and reproduction. In addition, internal medicine herd health management practical rotation is available for 0.4 weeks in the 4<sup>th</sup> and 5<sup>th</sup> years. Around 200 internal medicine patients per year are seen by students in the teaching farm (mainly mastitis, pneumonia, foot lesions, rumen atony, diarrhea).

Regarding animal production and herd health management, each student has to take 484 curriculum course hours mainly in formats of lectures and non-clinical animal work. Compulsory courses in animal production do not include clinical animal work. In addition to the core curriculum, only one elective course on animal production (24 hours in total with 12 hours of lectures and 12 hours of non-clinical animal work) is offered. Animal production herd health management practical rotation is available for a total of 6.7 weeks in the first 4 years of the programme.

The total ECTS covered in the PPT organisation for food-producing animals is insufficient in both intramural and EPT activities in comparison to clinical sciences in companion animals and FSQ. Additionally, there are inadequate opportunities for students to experience emergencies in food-producing animals. EPT may offer an opportunity to compensate for a limited caseload.

## 3.1.4.2. Comments

The VEE provides training in herd health management, which is in agreement with the Standard. However the hands-on training on sick ruminants in the teaching farm is low for most students and not sufficiently compensated by the few cases covered by the ambulatory clinic.

## 3.1.4.3. Suggestions for improvement

It is suggested to reinforce the clinical training in individual medicine in ruminants, e.g. by enhancing the collaboration with local practitioners and the availability of videos on sick animals.

## 3.1.4.4. Decision

The VEE is not compliant with Standard 3.1.4. because of insufficient clinical training in individual medicine of Food Producing animals under supervision of academic staff, which may affect the acquisition by all students of Day One Competences in these species.

## **3.1.5. Food Safety and Quality**

## 3.1.5.1. Findings

Compulsory basic training in FSQ is given in two courses: Food Inspection and Hygiene, Food industry and Technology respectively in the 7<sup>th</sup> and 9<sup>th</sup> semester. These courses mainly consist of lectures, non-animal clinical work and clinical animal work. Within the courses students perform practical activities during visits to slaughterhouses, production plants for meat, milk derived products, bivalve molluscs. In these practical parts, attention is given to hygiene requirements, slaughter phases, management of by products, food labelling, food traceability and HACCP. The subject FSQ and VPH is also part of other courses like avian pathology and Microbiology and parasitology. Students also have practical rotations in these courses related to FSQ and VPH.

During PPT in the form of EPT students are expected to visit slaughterhouses and perform anteand post- mortem inspections and check hygiene requirements. Students have in total 75 hours/per student EPT. Teaching is done in small groups supervised by VPH veterinarians.

The VEE has no own slaughterhouse or other premises for production, processing of food of animal origin. Therefore, PPT is carried out in external private slaughterhouses and food processing plants. These places are situated 50 to 120 km away from the VEE. The abattoirs (2) are a small-medium size pig slaughterhouse (slaughtering around 2400 pigs a week) and a small sized abattoir in which they slaughter both cattle, swine, horses, sheep and goat.

The ESVET Indicators are very positive for FSQ/VPH, far more than the median level in training is given (+ 170 hours) and also extra-mural practical training is far above the median level (+ 37 hours).

## **3.1.5.2.** Comments

The VEE is compliant with Standard 3.1.5. In the curriculum extensive training in FSQ subjects is present. This includes courses and practical training.

Before the COVID-19 period students performed practical activities related to FSQ in EPT. Agreements are in place with EPT providers. Part of these agreements are specific working rules to guarantee students safety and welfare. Activities during this EPT period are monitored using a document that has to be signed by the official veterinarian and is checked by the responsible teacher of the module. Activities are also recorded in the personal EPT logbook of the student. Stakeholders in the field of FSQ are heavily involved in the teaching and the contents of the curriculum related

to FSQ. Also, scientific articles are published together with the stakeholders.

Professional Practical training in the form of EPT was not possible in the last 2 years because of COVID-19. Teaching of the practical skills in EPT was replaced by an online E-learning platform. The teaching effect of this module was evaluated and a scientific article was written on the effectiveness of the module.

## 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 teaching of Professional Knowledge takes place during courses, workshops and the clinical training, including EPT.

Under the chapter "Basic sciences", 122 hours are dedicated to professional subjects:

Information literacy and data management 13 hours, completed by learning how to use the internal IT system (Ociroe).

Professional Ethics and communication teaching takes place during the 5<sup>th</sup> year. The competency is attested in the logbook used for clinical training.

Animal ethology and Welfare 45 hours.

Animal health and Practice management 7 hours.

Under the chapter "Animal Production":

Animal production husbandry breeding and economics 429 hours.

Herd health management 55 hours.

Under the Chapter FSQ/VPH.

Veterinary legislation 294 hours.

Moreover, teaching veterinary legislation is provided through the public health course. It includes many subjects, such as organisation of the VPH in Italy and Europe, One Health concept, Veterinary professional organisations, Stray cats' management, or Microchip and registration of pets.

The skills of certification and reporting are taught during clinical courses and training.

Role playing communication skills are specifically taught in a module of internal medicine.

The communication towards pet owners, breeders and staff are developed through role playing and other methods. Workshops were dedicated the two last years to this topic.

## 3.1.6.2. Comments

Communication skills are mentioned as an objective during the practical training in the VTH, and the extramural activities. Being confident in how to interact appropriately with the owner or the breeder during the notice of an unfortunate event for the animal/herd with appropriate clarity, accuracy, empathy and sensitivity, is a clear objective.

## 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 has implemented a curriculum that considers a competences approach (SER Annex 3). The fundamental is that each teacher of each teaching unit identifies learning outcomes related to competences listed in the EU Directive 2013/55/EU and make them explicit within the syllabus. The teacher must also clearly state learning outcomes in terms of knowledge, skills, and behaviour with respect to the entire curriculum framework. The fundamental learning theoretical background is based om Miller's pyramid of competences; The learning outcomes gradually (from first years to the following) encompass the elements required for clinical competence: – from the underpinning cognitive levels of knowledge and application of knowledge (Knows and Knows How) to the behavioural levels of practical competence (Shows) and how a doctor (or veterinarian) actually performs in practice (Does).

Individual courses are supported by intended learning outcomes clearly laid out in a digital syllabus on the platform "Valutami". The training objectives are periodically updated through consultations with internal stakeholders (especially students and teachers of the study course) and with the external ones (Steering Committee and professionals).

The educational objectives are standardised by national legislation and defined by the MUR.

Day One Competences are further certified by the licence to practice exam. In Italy, this is mandatory to access the veterinary medicine profession. Related exams are held by a committee that includes veterinary practitioners, public health veterinarians and UniPi teaching staff, and consist of four main sections: 1-Internal medicine and avian pathology; 2-Surgery and reproduction; 3-Animal production; 4- FSQ and VPH. There are two sessions per year, in June and November.

The Qualification gained (Degree in Veterinary Medicine) refers to the correct level of the national qualification framework for higher education and thus also into the European qualification framework.

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

An environment conducive to learning is mediated through a mix of factors that range from the quality of students and teachers to the availability of several teaching resources in terms of patients, study material provided, the implementation of a clinical skills lab, simulators, e-learning resources.

The VTH clinical case database, the e-learning portal and the library are available to students for self-learning. The contact of students with external practitioners forms the basis for making the students aware of the necessity for life-long learning.

Details of the type, provision and updating of appropriate learning opportunities for the students are clearly described e.g., a formalised procedure is in place in the VTH: the VTH Director is in charge to ensure full functionality and upgrade on equipment to maintain and increase workplace health and safety and quality of services/research; the VTH Director receives proposals from the Operative Unit coordinators and collect all the information for discussion and decision within the VTH Council.

Students are present in the following committees:

- DVM-JFSC which is in charge of the analyses of teaching assessment questionnaires results and together with the DVM Course coordinator analyses corrective actions; deals with the preliminary phase of adaptations of the degree programme
- PPT Committee, which deals with all the aspects related to PPT both intra- and extra-mural; identifies potential deficiencies also related to ESEVT Day One Competences and proposes corrective actions that are adopted by the DVM Council with or without the preliminary opinion of the DVM-JFSC
- Steering Committee, which brings the training course closer to the needs of the labour market and collaborates in defining the needs of stakeholders; monitors the adaptation of the curriculum based on previously provided indications and graduate careers. Proposes corrective actions that are adopted by the DVM Council with or without the preliminary opinion of the DVM-JFSC
- Review Group: which is in charge of the AMR and CRR (every five years).

## 3.2.2. Comments

The VEE is compliant with Standard 3.2 because:

- the Veterinary study programme is competency-based and designed so that it meets the objectives set for it, including the intended learning outcomes
- the qualifications are clearly specified and communicated and refer to the correct level of the national qualification's framework for higher education and, consequently, to the Framework for Qualifications of the European Higher Education Area
- the QA system promotes and monitors the presence of an academic environment highly conductive to learning including self-learning
- details of the type, provision and updating of appropriate learning opportunities for the students are clearly described, as well as the involvement of students
- the VEE also describes how it encourages and prepares students for self-learning and lifelong learning.

## 3.2.3. Suggestions for improvement

None.

## 3.2.4. Decision

The VEE is compliant with Standard 3.2.

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

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

## 3.3.1. Findings

The DVM Course adopted an internal policy in the form of guidelines for the alignment of learning outcomes with ESEVT Day One Competences and with assessment methods thus ensuring alignment of content, teaching, learning and assessment activities of the degree programme to form a cohesive framework.

Programme learning outcomes include a description of Day One Competences.

The objectives and learning outcomes of individual study units are explicitly stated and available to students and teachers, e.g. through the "Valutami" website.

The programme learning outcomes are regularly monitored, updated and published.

## 3.3.2. Comments

The VEE is compliant with Standard 3.3 because the study programme learning outcomes:

- 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
- are communicated to staff and students
- are regularly reviewed, managed and updated to ensure they remain relevant, adequate and are effectively achieved.

## 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

The VEE, under the umbrella of the UniPi QA system, has put in place highly structured decisionmaking bodies and procedures to oversee QA of the curriculum, to perform periodic reviews, and to take action for continuous improvement using PDCA.

Teachers, committees, and directors have a clear description of their functions, duty and responsibilities and to whom they should report. Students are associated with and in many instances also taking part in the decision-making process.

# 3.4.2. Comments

The VEE is compliant with Standard 3.4 because:

- the VEE has a formally constituted committee structure that includes effective student representation and has clear and empowered reporting lines, to oversee and manage the curriculum and its delivery.
- The committee(s)
  - 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 are used for continuous improvement. Any action taken or planned as a result of such a review are 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.

## **3.4.3. 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

EPT is included in the clinical training. The total number of weeks has increased since 2019, from 9 to 13 weeks and ECTS. EPT takes place during the 4<sup>th</sup> and 5<sup>th</sup> years.

6 Weeks are dedicated to FSQ and VTH under supervision of academic staff and official vets. These weeks were mainly spent in slaughterhouses before the COVID-19 outbreak.

3 Weeks are spent on an animal production site.

3 weeks are spent in small animal clinics.1 week in a large animal clinic.

The PPT committee, and the VEE didactic unit are in charge of the regulation of the agreement of External structures and the monitoring of the skills acquisition during these weeks of EPT.

The logbook used by students is also used during extramural activities. Attendance and skills are monitored through it. Both signatures of external and academic tutors are needed for the certification of the skill.

A process of improvement is in place through filling by students a satisfaction form, under the supervision of the QA Manager. At the end of each academic year, the PPT Committee analyses satisfaction forms.

## 3.5.2. Comments

The balance between the duration in large animals/small animals is not related to the needs of competences acquisition.

Nobody knows when students can be allowed again to enter slaughterhouses.

## 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

The administrative management of the PPT, including EPT, is carried out by the VEE Administrative Didactic Unit.

Within the 30 ECTS of compulsory PPT, 9 were dedicated to EPT in the years included in this SER. A change (which increases the number of EPT ECTS from 9 to 13) was deliberated in AY 17/18 in order to ensure student exposure to extra-VTH clinical cases: this change will affect students from the 18/19 cohort.

The EPT allows students to encounter different professional realities from the academic world such as:

- Local Veterinary Units of the National Health System;
- Experimental Zooprophylactic Institute (IZS), a VPH institution that provides multiple services to support official and private veterinarians, breeders and the general public;
- Regional Breeders Association and associated farms;
- Bee farms;
- Private clinics.

In these structures, during the EPT activities, students have the opportunity to meet with practitioners or with official veterinarians.

The purpose of the EPT is to improve professional training, gain experience of daily professional life outside the academic world and to complete academic training.

## 3.6.2. Comments

EPT is managed through the VEE in an organised way. A procedure of formation of the EPT providers is in place.

Logbooks are checked and signed off.

The number of weeks in private clinics is limited.

#### **3.6.3.** Suggestions for improvement

A wider range of premises available for EPT could enlarge the areas of career for students.

A new form of logbook, could help to monitor the progression of the skills' acquisition (seen, done partially, done alone...).

Clear objectives acquisition for each week dedicated to EPT can improve the efficiency.

#### 3.6.4. Decision

The VEE is compliant with Standard 3.6.

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

## 3.7.1. Findings

During EPT placement students must record all the activities performed on a daily basis in a dedicated diary where both the student and the EPT tutor signatures must be present. The academic tutor, having checked the diary, finally certifies the skill on the Logbook.

In order to provide EPT activities, the VEE, in the person of the VEE Head, stipulates formal agreements with private and public structures belonging to the National Health System: the updated list of the affiliated structures with the indications of the sectors of interest is available.

## 3.7.2. Comments

The whole process contributes to the acquisition of many practical skills and professional knowledge.

## 3.7.3. Suggestions for improvement

None.

## 3.7.4. Decision

The VEE is compliant with Standard 3.7.

# Area 4. Facilities and equipment

Standard 4.1: All aspects of the physical facilities must provide an environment conducive to learning, including internet access. 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 veterinary course is taught over two campuses PiB and SPB. PiB was built in the sixties and is maintained with funding from UniPi. Since the nineties, however, the premises are less fit for purpose and a project to move all facilities to San Piero a Grado was initiated. Due to the size of the project, it was divided into three parts. The first two parts are completed: the construction of the Surgery and Reproduction Clinics (completed in 2000) and later of the Internal Medicine Clinic, completing the VTH, with the kennels for hospitalising both SA and LA (completed in 2009). Today the project for the third lot, with the construction of the remaining Department facilities and of the teaching facilities is approved, with 35.700.000 € allocated for completion.

Maintenance and upgrading of the Campus facilities is the responsibility of the UniPi Building management unit. IT infrastructures are planned and maintained by the UniPi Digital infrastructure management unit. Requests for maintaining/upgrading facilities are conveyed to the Building Management unit or the Digital Infrastructure management unit by a support staff. Within the limits of its budget, the VEE is responsible for further needs related to maintenance and upgrading of the educational equipment. A formalised procedure is in place in the VTH: the VTH Director is in charge to ensure full functionality and upgrade on equipment. The premises of the VEE are in Pisa downtown and in San Piero a Grado, approximately 10 km away. Buildings in Pisa (PiB) are

located close to the city centre and the railway station. Most of the teaching activities of the first three years of the DVM curriculum take place in this location, whereas during the last two curricular years, activities are predominantly carried out in San Piero a Grado, whose buildings (SPB) include the VTH. Close to SPB are a small group of buildings denominated "Le Querciole" (QuB) and the Teaching Farm (within CIRAA, see below), where intra-mural facilities for poultry and for dairy/beef cattle are located, respectively.

<u>*PiB*</u> include the Department's administrative and Head offices, most classrooms, other teaching facilities and laboratories, the main VEE library, study areas for students, offices for teaching, administrative and technical staff, as well as laboratories for teaching and research managed by the units of Veterinary Anatomy, Physiology, Parasitology, Animal Production, Animal Pathology, Infectious Diseases, Food Hygiene.

<u>SPB</u> include the VTH, facilities for small animals (SA) and large animals (LA) hospitalisation, isolation and research, classrooms for clinical teaching, meetings and seminars rooms, study areas for students, spaces for practical training with dummies, organs and animals, offices for teaching, administrative and technical staff. Laboratories for research and teaching managed by the units of Pharmacology, Internal Medicine, Surgery and Reproduction are also located in SPB.

<u>*QuB*</u> is located in front of the SPB, 0.5 km away on the opposite side of the road. Premises are currently used for chicken breeding (local breeds) and for research activities. This structure will soon be included in the main SPB space.

<u>The Teaching Farm</u> belongs to CIRAA (700 hectares), an interdepartmental research structure whose mission embraces biodiversity protection, maintenance of soil fertility, reduction of pollution and environmental sustainability. Most of the academic staff operating at CIRAA comes from the VEE and the DAFE. In particular, VEE is responsible for the health of all animals housed in the farm, namely 110 dairy cows/calves, 80 beef cows/calves, and 10 small ruminants on average. The premises are located 3 km away from SPB.

*Extra-mural facilities*, such as private clinics, farms, breeding centres, slaughterhouses, fish markets, food processing industries, shelters and sanitary kennels are also used for training activities.

## 4.1.2. Comments

The Anatomy Museum is commended for careful preservation of unique specimens and artefacts.

The VEE works over two campuses at present. Improving the SPB site has been taking place over a number of years and 2 of the 3 phases have now been completed. The third phase has not yet been started. The call for tenders is to be sent out shortly. The VEE has been awarded a further 10M Euros to take account of the increased costs since the pandemic. The UniPi is commended for its decision to financially support this move.

## 4.1.3. Suggestions for improvement

It is suggested that the 3<sup>rd</sup> phase is started as soon as feasible to ensure the movement to one site can take place to improve the experience of both staff and students.

The VEE is encouraged to intensify existing procedures for storage and substitution of old and

potentially out-dated chemicals.

## 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

On both PiB and SPB there are no dedicated catering or canteen services. There are automatic machines for delivery of coffee, food and beverages at SPB. From this study room students can also access a covered terrace, where chairs and a table are available.

In the VTH 2 students are present overnight. There is a room with one bed for these students.

Transport links between the two campuses are not extensive.

# 4.2.2. Comments

The SER states that there are no canteen facilities for students on the SPB site. This is difficult for both staff and students as there are no cafes or shops close by, unlike in Pisa. The new facilities at SPB will consist of new catering facilities for staff and students.

There are only a limited number of university buses between the campuses and not all students have cars. On occasions students have lectures in Pisa in the morning and need to be at SPB in the afternoon. This is not always possible due to travel restrictions which can mean some students missing classes. The movement to one campus will alleviate the transport issue for students.

Students in the VTH may or may not have many patients to look after at night. One bed may be insufficient for the needs of the students there.

## 4.2.3. Suggestions for improvement

It is suggested that improving catering facilities at SPB should be a priority.

Solutions for the transport issues for students should be sought.

It is suggested that more extensive sleeping arrangements are made for overnight students.

# 4.2.4. Decision

The VEE is compliant with Standard 4.2.

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

- be sufficient in capacity and adapted for the number of students enrolled in order to allow safe hands-on training for all students
- be of a high standard, well maintained and fit for the purpose

- promote best husbandry, welfare and management practices
- ensure relevant biosecurity and bio-containment
- be designed to enhance learning.

#### 4.3.1. Findings

The VEE facilities are sufficient for the number of students.

Appropriate protective clothing was not available in areas such as necropsy. Students wore their own white coats in this area.

Hard hats were not worn as protection when handling stallions.

There was no signage at CIRAA regarding biosecurity measures that should be taken, and no hand or boot washes were seen for students and staff.

In the VTH, staff and students wore rings and bracelets below elbows. Nail varnish was present on staff and students while working in clinical areas.

There are policies for biosecurity produced by the VEE. Where relevant these are displayed in rooms etc, however many are stuck to the walls using sellotape.

#### 4.3.2. Comments

There were insufficient biosecurity controls entering the necropsy area. In the necropsy room, students and staff did not wear protective clothing. Students wore their own white coats which they then took home, boots were not worn and overshoes were not worn in some cases either. There was a limited ability to wash down the floor of the necropsy room after a large body would have been presented there.

Biosecurity signage and protocols were attached to walls by sellotape. This is inappropriate as they can easily fall off and thus not be seen.

The wearing of jewellery, rings and nail varnish in clinical areas is poor practice for disease control.

The farm is of an old-fashioned construction and does not provide modern facilities for the cows, e.g. mastitis is a recurring issue there. There were no sufficient boot or hands washing areas at the farm.

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

Biosecurity protocols must be adhered to in all areas.

Biosecurity protocols must be placed at the entrance to necropsy, and these must be adhered to by all students and staff.

Students should not use their own white coats and then take these home as it is a disease hazard. The VEE should consider purchasing appropriate boots and overalls for student and staff use in this area.

Clinical staff should not wear jewellery or nail varnish when in clinical areas.

Staff and students must wear hard hats when dealing with stallions and adhere to the safety protocols.

Protocols and safety posters must be placed on walls/doors in securely mounted units.

The VEE should consider purchasing reusable safety and protective equipment to save money.

## 4.3.4. Decision

The VEE is not compliant with Standard 4.3. because biosecurity and biosafety measures are not systematically implemented in the VTH, necropsy room, teaching farm and equine reproduction unit.

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

The VTH incorporates the standards requirements of a VTH, from reception through to surgical facilities. The examination and treatment rooms reflect the caseload of the VTH. A clinical pathology laboratory is also situated within the VTH alongside a pharmacy.

For large animals there are examination areas and standing surgical facilities. As the majority of the caseload relates to reproduction in equine, facilities for procedures are available on site.

There are no specific LA radiology or ultrasonography rooms. Diagnostic activities can be performed using mobile instruments.

## The clinics operate in the following disciplines:

ophthalmology (Tuesday and Wednesday), dermatology (Tuesday and Thursday), oncology (Tuesday and Thursday), haematology (Monday, Wednesday and Friday), SA reproduction (Monday to Friday), surgery (Monday to Friday), orthopaedics (Tuesday, Wednesday and Friday), imaging diagnostics (Monday to Friday), anaesthesiology (Monday to Friday), nephrology (Monday to Friday), gastroenterology and endocrinology (Tuesday and Wednesday), cardiology

(Monday to Friday), pneumology (Monday), algology (Monday), blood donation (Monday, Wednesday and Friday), LA (on call).

## 4.4.2. Comments

The VTH meets modern standards for premises. It provides a 24/7 emergency service for small animals with staff on site over night to receive these cases and to treat hospitalised cases.

There are equine and LA ambulatory services which provide services limited primarily to reproductive equine work and herd health management for ruminants.

## 4.4.3. Suggestions for improvement

See 4.7.

## 4.4.4. Decision

The VEE is compliant with Standard 4.4.

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

## 4.5.1. Findings

The clinics are furnished with high standard equipment for routine examination and surgery, as commonly performed in general practice, in addition to state-of-the-art imaging, laparoscopy, endoscopy, dialysis and laboratory equipment. These instruments are routinely used for teaching during practical sessions and rotations, and the students participate and assist in surgical and diagnostic procedures.

Operating room cameras are available for recording and/or projecting real-time surgery during lectures. At the PiB there is a necropsy room to which all students have access to follow the practical teaching of the courses in anatomic pathology and autopsy. The design of the mandatory PPT programme ensures that all students have access to available diagnostic and therapeutic facilities and a variety of patients of the different species.

During the PPT, students are engaged in the management of hospitalised animals and in intensive care activities at the VTH for a total of 125 hours (5 ECTS, they were 9 - 225 hours till 17/18 cohort), divided into day and night shifts even on holidays. There are separate ICU wards for cats and dogs. In addition, students participate in the management of medical, surgical and obstetric-gynaecological emergencies of all patients admitted at the VTH, including wildlife.

#### 4.5.2. Comments

The visiting team welcomes the proposed changes to the facilities with the amalgamation of the two campuses and in particular the new enhanced necropsy room.

At present the necropsy room is small and it is difficult to receive whole large animal carcasses there.

#### 4.5.3. Suggestions for improvement

Improvements in the size and working protocols will be improved with the new facilities when they are available in the future so that whole large animal necropsies can take place with ease.

#### 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

Isolation units for companion animals (separate cat and dogs wards), equines (and farm, see below) animals, are present within SPB. They are located in a well-defined area structurally and functionally separated from the other VTH facilities by a perimeter security barrier. Access to isolation requires the use of individual protection devices and disinfection materials. Specific protocols are in place in the isolation unit to enforce optimum biosecurity and prevent dissemination of pathogens between stalls and from the isolation facility to the remainder of the Campus. The waste is treated as "special waste" with separate collection and disposal.

#### 4.6.2. Comments

There are no specific boxes for large ruminants but boxes for horses can be used if required. New isolation facilities (2 boxes for horses and 1 for ruminants) are nearing completion. In the meantime, part of the present equine stables can be altered to act as isolation facilities. These can be used for horses and cattle as necessary (few of the latter are ever admitted to the site). The team welcomes the new equine isolation facilities being finished.

#### 4.6.3. Suggestions for improvement

None.

# 4.6.4. Decision

The VEE is compliant with Standard 4.6.

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

# 4.7.1. Findings

The VTH is open 24/7 all year round for dogs, cats and horses. For ruminants, pigs and wild animals on-call service is available 24/7 as well. Hospitalisation has also been available for all species since 2009.

The theoretical basics of field veterinary medicine and Herd Health Management are provided to all students in the frame of core courses taught by members of the permanent teaching staff during

the 3<sup>rd</sup> ("Animal production" "Infectious Diseases", "Parasitic Diseases" "Epidemiology and VPH",), 4<sup>th</sup> ("Veterinary Internal Medicine 1-2", "Reproduction Technologies", "Reproduction Pathology") and 5<sup>th</sup> ("Veterinary Internal Medicine 3") curricular years.

In clinical rotations, students are trained in Herd Health Management and practical skills, e.g., transrectal palpation, pregnancy diagnosis by ultrasound, blood and milk sampling, as well as herd data analysis during their visits to both the Teaching Farm and the private farms joining the Herd Health Management service. All students have opportunities for volunteering at the Teaching Farm. Since 2018, the Herd Health Management service of the VEE is run by academic staff and it counts regular clients (who have contracted a regular service and is routinely visited) and farmers who call for specific problems (i.e., abortion, high mortality rate in calves, lameness, high somatic cell count, etc.). Client visits are part of practical rotations.

# 4.7.2. Comments

The number of cases seen by the ambulatory clinic is suboptimal as the majority of cases seen are for herd health and management rather than unhealthy animals, so students do not undertake examinations, diagnosis and treatments in sick animals.

# 4.7.3. Suggestions for improvement

See 3.4.

# 4.7.4. Decision

The VEE is partially compliant with Standard 4.7 because of a suboptimal ambulatory clinic for ruminants.

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

Ambulatory clinic service is performed with either academic staff- or VEE-owned vehicles depending on the number of students involved (i.e. car, vans, minibus, bus). Vehicles can be fully equipped as necessary.

The VEE owns the following vehicles: minibus that can transport 18 students; two vans for 6 students; two service cars.

The VEE has no vehicles for the transportation of live animals. For transportation of organs and small cadavers, there is a van with containers approved for this use. For LA cadavers, a private company has the responsibility for their transport to and from the VEE.

All VEE-owned vehicles operate in compliance with current regulations dealing with the qualification of individual drivers, vehicle insurance, periodic revision, seasonal use of winter tires, disinfection and cleaning.

For transportation of larger groups of students (e.g. to extra-mural facilities) 25 to 50-seats buses are rented in private companies.

#### 4.8.2. Comments

The VEE supplies adequate transport for students and staff on ambulatory visits.

Transport between campuses relies on students having cars, local buses or university buses. The latter two are not adequate for the needs of the students.

#### 4.8.3. Suggestions for improvement

The VEE should pay attention to the needs of the students over the next few years before the campuses combine to ensure attendance by students at lectures and practicals is possible when held on different campuses on the same day.

#### 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

Maintenance and upgrading of the Campus facilities is the responsibility of the Building management unit. IT infrastructures are planned and maintained by the Digital Infrastructure management unit. The VEE can convey its need to the mentioned unit both as a formal request or by or indicating the need for maintenance of specific structures. The decision for building of new facilities is the responsibility of the UniPi Board of Directors that approve a triennial plan related to the entire Campus.

Safety and biosecurity equipment is under the responsibility of UniPi both for changes and regular revisions (chemical hoods, fire extinguishers etc.); teaching, research and service equipment is responsibility of the VEE. For maintaining/upgrading current equipment and/or acquiring new ones, a specific procedure is in place in the VTH: the VTH Director is in charge to ensure full functionality and upgrade on equipment in order to guarantee workplace health and safety and quality of services/research; he/she receives proposals from the Operative Unit coordinators and collect all the information for discussion and decision within the VTH Council. The same applies to VEE needs (the VEE Head being in charge to manage the process) despite the fact that a dedicated procedure is not in place.

The pharmacy is accessible through two technicians. There are two controlled drugs cupboards, one for veterinary drugs and the second for human drugs. The keys for both of these cupboards hang in the pharmacy. The controlled drugs ledger is in a loose paper file in the cupboards. A member of the clinical staff checks the register frequently.

During nights and weekends another lockable cupboard for non-narcotic drugs and, inside this, a lockable compartment for narcotic drugs is also present in the Intensive Care Unit lab room. The drugs stored in this lockable cupboard are used by all the services (intensive care, anesthesiology, surgery, reproduction, livestock and horse services) during the night (18:00-7:30) and weekends

(from Friday evening to Monday morning 7:30). The management of the lockable drug cabinet is under the responsibility of the contracted veterinarian in charge for the intensive care unit. Contracted veterinarians register the use of whatever drug on OCIROE. The update on the official Narcotics Register (for narcotics) is carried out by the ISO9001:2015 referent.

# 4.9.2. Comments

Biosecurity manuals are available for staff and students and students must be aware of protocols for all activities. However, it is essential that protocols are followed by all staff and students alike. There is a clear loop of reporting and acting on accidents that occur within the VEE.

The controlled cupboard keys are available for anyone in the pharmacy to access. Loose leafed folders are not suitable for controlled drugs records as they can be altered at any point.

For out of hours emergencies and surgeries, the head anaesthetist has a key but the way how other contract staff gain access to controlled drugs e.g. opioids in the middle of the night in the different clinics is not clearly described.

#### 4.9.3. Suggestions for improvement

See 4.3. regarding biosecurity.

The loose leafed ledger system applied for controlled drugs must be replaced by a fixed page ledger. The way to access controlled drugs during night and w-e duties should be clearly defined and posted.

# 4.9.4. Decision

The VEE is partially compliant with Standard 4.9 because of suboptimal Good Pharmacy Practice.

# 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

The SER Annex F gives details on the number of animals, cadavers and material of animal origin regarding the ESEVT Indicators. Indicators that show a negative balance for the 2017/2018 and 2018/2019 academic years those included in SER are:

-) I11 –  $n^{\circ}$  of rabbits, rodents, birds and exotic x seen intra-murally /  $n^{\circ}$  of students graduating annually;

-) I12 –  $n^{\circ}$  of companion animal patients seen extra-murally /  $n^{\circ}$  of students graduating annually;

-) I13 –  $n^\circ$  of individual ruminants and pig patients seen extra-murally /  $n^\circ$  of students graduating annually;

-) I18 –  $n^{\circ}$  of ruminant and pig necropsies /  $n^{\circ}$  of students graduating annually;

-) I19 –  $n^\circ$  of equine necropsies /  $n^\circ$  of students graduating annually.

The anatomy museum has a large collection of fixed antiques. However, organs and cadavers used

in the anatomy courses are largely limited to small ruminants, pigs, aquatic animals, poultry and rabbits. The organs and cadavers used are generally fresh samples purchased at local slaughterhouses and supermarkets in the case of aquatic animals. Whole animals and animal parts of cattle, equine, companion animals and exotic pets are rarely used for hands-on training on dissection and comparative anatomy. Additionally, the relevant data are not presented in the SER.

Number of necropsies in ruminants, pigs, companion animals and exotic pets are inadequate. National legislation requiring territorial diagnostic service in case of death of a production animal constitutes a major obstacle to increasing the number of necropsies in food-producing animals. Efforts are made to increase the number of necropsies in the VEE. For instance, the VEE has an agreement with regional Experimental Zooprophylactic Institute (IZS) for performing necropsies of production animals in the VEE facilities. However, with the effect of COVID-19 outbreak, this agreement has not yet been reflected in the results.

Data on animal resources and teaching material of animal origin in VEE is regularly recorded. An annual reporting of animal resources as well as the monitoring of relevant indicators is performed. Samples of necropsied animals and biopsy specimens are catalogued with a unique number. Paraffin-embedded samples and slides are stored in archives. Records of all necropsy reports are available in electronic format. Necropsy reports include gross pathological and histological findings and the results of virological, bacteriological and parasitological examinations. Patients seen in the VTH are officially recorded in the electronic patient record system.

Available animal resources and teaching material of animal origin are adequately adapted to the number of students enrolled. Practical and safe hands-on training is performed in small groups of students.

There are no small ruminants, pigs, poultry and rabbits available at the VEE for preclinical training. A number of cattle, companion animals, equines and exotic pets have been reported in the SER (Table 5.1.2.). However, it has not been explained how healthy live animals are attained. A local ethical committee of UniPi, is in charge to evaluate academic staff requests and to ensure that experimental and educational procedures are in compliance with national regulations. Nevertheless, there is no regulation for the use of healthy animals in education and training in the VEE.

The vast majority of patients seen are first opinion cases except for companion animals. Intensive care and emergency units of the VTH receive high numbers of first opinion patients. Data on first opinion and referral patients for companion animals is provisional and the number of patients referred per discipline is not exhaustive.

The number of patients seen in the ambulatory clinics is suboptimal except for equine cases. Field veterinary medicine remains a small portion of the ambulatory clinic service as the majority of cases seen are for herd health.

#### 5.1.2. Comments

The low number of students per group allows each student to practice.

Only pigs and sheep are used for anatomical dissections.

Efforts are made to increase the number of necropsies which is slightly below the minimal values.

The efforts and commitment of the VEE for the clinical skills lab and the associated electronic platform are welcomed.

# 5.1.3. Suggestions for improvement

There is a need to increase the diversity of cadavers and material of animal origin used in practical anatomy teaching.

Continuing efforts to increase the number of cadavers used at autopsy, especially whole carcasses, are recommended.

The number of patients seen in the ambulatory clinics needs to be increased.

The VEE is suggested to take steps to regulate the use of healthy animals in education and training and to prevent legal problems.

# 5.1.4. Decision

The VEE is partially compliant with Standard 5.1 because of suboptimal diversity of cadavers for anatomical dissections and suboptimal caseload in necropsy.

# 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

The Physiology, Ethology and Animal Welfare course in the  $2^{nd}$  year of the curriculum includes visits to a shelter and a cattle farm. Students visit dairy and beef cow, sheep, swine and equine breeding facilities during the animal breeding course held in the  $3^{rd}$  year.

External herd health visits (ruminants and pigs) and visits to poultry, rabbits and fish facilities are organised during the  $3^{rd}$ ,  $4^{th}$  and  $5^{th}$  year of the curriculum by the relevant subject teacher.

During the PPT in the animal production area, students spend 2 weeks with the Regional Breeders' Association and 2 weeks within the internal Teaching Farm of the CIRAA. Starting from the 2020-2021 academic year students that have fulfilled requirements are able to start this part of PPT at the end of the 3<sup>rd</sup> year that they improve their knowledge and abilities on animal husbandry and handling before taking part in the lectures and practicals including in clinical subjects. Students visit the teaching farm during production animals and equine PPT in internal medicine and reproduction.

# 5.2.2. Comments

The VEE provides practical training on external sides under supervision of academic staff.

# 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 nursing care skills are implemented and taught to undergraduate students from the 2<sup>nd</sup> year of the curriculum to the end. Nursing care skills are taught by the teaching staff during practical sessions and by practitioners on duty at the VTH/Teaching Farm.

A course is available on safety in the working environment for students of the Degree Course in Veterinary Medicine. The first part of the course is prepared by the University's Safety and Environment Office and the second part is provided by the Department of Veterinary Sciences.

In addition to curricular hands-on activities, students of the 4<sup>th</sup> and 5<sup>th</sup> year may attend the VTH daily routine activity as collaborator students, on an extracurricular voluntary basis. Students can join the Journal Clubs organised by clinical services for interns, residents, PhD students and other junior staff.

#### 5.3.2. Comments

During clinical rotations and professional practical training, students participate in the clinical workup of patients, including problem-oriented diagnostic approach together with diagnostic decision-making.

#### **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

Since 2010 medical records in the VTH have been administered in an "home-made" record system called OCIROE (based on Claris FileMaker). In OCIROE, all data on VTH admitted patients or visited in extra-mural activities are conveyed in a single centralised data-warehouse, allowing a complete retrieval of any patient, case management and administrative information.

Diagnostic imaging reports are included in OCIROE, however digital images (from radiography, ultrasonography and TCs) are preserved through a separate software, namely "Horus". Students, teachers and clinicians have access to the record system on the computers of VTH. A signed document is in use for availability of data.

#### 5.4.2. Comments

Students frequently use the case records for their final thesis. Medical records support the teaching, research, and service programmes of the VEE.

# 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 VEE has its own library, open from 9 to 19, with study places on both sites PiB and SPB. Staff, an online platform and a specific search tool are available to provide assistance to users.

# 6.1.2. Comments

Both print and online resources are widely available.

# 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

IT facilities have been implemented since the first internet connection in 1986.

A Moodle e-learning platform, Microsoft Teams and Google workspace are available through free wireless access almost everywhere and a VPN.

# 6.2.2. Comments

A strong Wi-Fi signal was available in all the parts of the VEE.

#### 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 virtual learning environment uses, as in the university of Pisa, a combination of platforms, providing a modern blended learning environment. Most of the lectures are recorded, and available online.

A formal training is provided to the students in the first year. It allows them to use all the resources provided.

Some clinical skills facilities are available in a dedicated room in the VTH.

The COVID-19 outbreak has led the VEE to provide full access online to the learning resources.

# 6.3.2. Comments

The VEE is commended for its swift move to online learning during the COVID-19 outbreak. The students have access to relevant learning resources.

A project of a larger clinical skill lab is ongoing and is expected to open in September 2022.

#### 6.3.3. Suggestions for improvement

The VEE is encouraged to continue to enhance its skills lab.

#### 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 advertising for prospective national and international students.

Formal cooperations with other VEEs must also be clearly advertised.

# 7.1.1. Findings

At the UniPi website; Matricolandosi <u>https://matricolandosi.unipi.it/?lang=en</u>, prospective students can find links to the educational programmes, admission procedures and tuitions fees; this section also includes procedures to obtain scholarships, accommodation and access to the dining hall service. On each educational programme page, the prospective national and foreign students can access specific admission procedures.

On the UniPi website <u>https://esami.unipi.it/esami2/ects\_cds.php?cds=VET-LM5&aa=2021</u>, detailed information on e.g., Qualification awarded, Qualification Type/level, Number of year of study, Mode of study, Admission requirements, Programme profile, Occupational profile of graduates, Assessment methods and grading, Course structure, and detailed course descriptions (Syllabus/ detailed course description) is available in both Italian and English language.

In the last three years, the mean number of incoming Erasmus students attending specific courses and/or traineeship in the framework of international exchange programmes was 24.

Formal agreements, that are displayed online to the students, are in place with different VEEs for distinct cooperation fields:

1. Turin: a. Study centre on the appennin environment and society; b. Centro studi sul diritto e le scienze dell'agricoltura, alimentazione e ambiente; c. Agreement for PPT of DVM students

2. Milan: a. Centro inter-ateneo per la ricerca in etologia veterinaria e antro zoologia (etozoo);

3. Perugia: a. Centro inter-ateneo per la ricerca in etologia veterinaria e antro zoologia (etozoo); b. Agreement for PPT of DVM students;

- 4. Camerino: Centro interuniversitario di ricerca e di consulenza sulla genetica del cane;
- 5. Teramo: Agreement for PPT of DVM students;
- 6. Bologna: Agreement for PPT of DVM students;
- 7. Sassari: Agreement for PPT of DVM students;
- 8. Padova: Agreement for PPT of DVM students.

Information on the employment areas for newly graduates is annually collected by the VEE; the main areas for the first job following graduation is within the clinical area, specifically companion animals, farm animals and horses.

# 7.1.2. Comments

The VEE is compliant with Standard 7.1 because the VEE:

- consistently applies 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 provides 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 are clearly advertised.

# 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 total number of veterinary undergraduate students registered at the VEE is approx. 360 students.

During the last three years, the number of students admitted annually has been approx. 60.

The number of total admissible students in Italy and procedures are centrally determined by the MUR following proposals from the veterinary professional associations and the DVM Councils of each University through their respective Academic Senates.

ESEVT Indicators 1, 3, 8, 9, 10, 14, 15, 17, 20 exceed the minimum value. ESEVT Indicators 2, 11, 12, 13, 18, 19 are below the minimum value.

Indicator 2 concerns the number of veterinarians involved in veterinary training. The VEE explains the low value as caused by retirements in AY 2018-2019, and states that when looking at data related to the last three full AYs this value is again above the minimal requested value.

Indicator 11 concerns the number of non-conventional animals seen intra-murally. The VEE notes that by looking at data related to the last three full AYs this value is again above the minimal requested value.

Indicators 12 and 13 are related to the number of companion animals, ruminants and pigs seen extramurally. The VEE finds even if the numbers remain below the minimal requested value, they are well counterbalanced by Indicators 8 and 9 related to patients seen intra-murally. However, to increase the exposure of students to extra-mural companion animal patients, an increase of EPT ECTS was made and additional visits to shelters are completed.

Indicators 18 and 19 are related to ruminant/pig and equine necropsies respectively. The VEE considers Indicator 19 to be above the minimum value in the coming year, while Indicator 18 is foreseen still to be under the minimum value.

Every year, the DVM Council proposes to the UniPi Academic Senate the number of students to be enrolled at the 1<sup>st</sup> year of the DVM Course. This is a result of an internal analysis that considers ESEVT relevant indicators, the historical number of admitted students, the staff FTE and available facilities.

#### 7.2.2. Comments

The VEE is compliant with Standard 7.2 but there are some concerns regarding the resources available at the VEE in relation to animal resources, as described in Standard 5.1.

#### 7.2.3. Suggestions for improvement

None.

#### 7.2.4. Decision

The VEE is compliant with Standard 7.2.

Standard 7.3: The selection and progression criteria must be clearly defined, consistent, and defensible, be free of discrimination or bias, and take into account the fact that students are admitted with a view to their entry to the veterinary profession in due course. The VEE must regularly review and reflect on the selection processes to ensure they are appropriate for students to complete the programme successfully. If the selection processes are decided by another authority, the latter must regularly receive feedback from the VEE. Adequate training (including periodic refresher training) must be provided for those involved in the selection process to ensure applicants are evaluated fairly and consistently.

#### 7.3.1. Findings

The admission procedure is published on the UniPi website, and is regulated at the national level by MUR, just like the number of students that can be admitted.

The admission test is organised also by the Ministry and is the same at all Italian universities. Admission tests are regulated and organised by the MUR at a national level, and normally consists of multiple-choice questions to be answered in a determined number of minutes. Students achieving a minimum score are listed in one national ranking list and assigned to a DVM Course on the basis of: i) score obtained; ii) number of available places at each University; iii) student geographical preferences (students must indicate three Italian Universities in order of preference).

The selection and admission procedure are made public also on different websites supervised by MUR, the UniPi and VEE. However, an internal committee (designated annually) ensures the correct application of general procedures and of the policy for students with disabilities.

The selection process is thus not controlled by the VEE, however, the MUR in charge of the process consults academic institutions.

It is possible to appeal against MUR selection criteria and/or procedures to MUR and to the Regional Administrative Court.

#### 7.3.2. Comments

The VEE is compliant with Standard 7.3 because:

- the selection and progression criteria are clearly defined, consistent, and defensible, 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 regularly reviews and reflects on the selection processes to ensure they are appropriate for students to complete the programme successfully.
- the selection processes are also decided by national authorities who is also given feedback regularly from the VEE

- adequate training (including periodic refresher training) is provided for those involved in the selection process to ensure applicants are evaluated fairly and consistently.

#### 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

The UniPi provides special services for disabled and SLD students to enhance the best inclusion, and their possibility to learn. The services include tutorship, additional time, video-magnifiers, specific software, and teaching material. A specific service of UniPi provides assistance for disable and ill students. Specific procedures are in place for international students with disabilities. In addition to the central services, the VEE has established its own Internal Committee that ensures correct application of general procedures and policy for students with disability. A specific task of this committee is to collect input on students in need of disability help and submit this to the central services.

In case a student has a disability occurring during the study, individual solutions are investigated and implemented so that the student may progress to graduation, i.e. the student with a sudden disability occurring during the study is not automatically excluded from the study.

#### 7.4.2. Comments

The VEE is compliant with Standard 7.4 because there are 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.

#### 7.4.3. 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 requirements for progression are regulated in the curriculum and made available to the students on the VEE website. Students can convey their needs through their representatives in the DVM-JFSC and DVM Council.

Students enrolled in the DVM curriculum must attend at least 70% of teaching (including lectures and practical activity) within each course to sit the course exams.

Information concerning exam timetables is available online for the entire upcoming academic year. As per university decision, students that have not acquired more than 6 ECTS before the end of the  $1^{st}$  year or 18 ECTS before the end of the  $2^{nd}$  year are automatically excluded.

Student enrolment to the following academic year automatically takes place upon payment of fees until the  $5^{th}$  year.

Students that do not graduate by the 5<sup>th</sup> year's last graduation session (February of the sixth year), will qualify as students enrolled outside of the prescribed time and will have to pay new annual tuition fees (off-course students). Students will be able to graduate upon completion of all subjects included within their study plan, including PPT.

Students who do not perform adequately receive additional support from the Tutoring Service.

The VEE currently observes a drop-out rate of approx. 8% at the end of the first year. The dropout rate after the 1<sup>st</sup> year cannot be precisely estimated because data is related to students enrolling for the first time to University and does not consider students coming from other degree programmes. Based on data provided by the ANVUR, values are below the national average.

Approximately 38% of students graduate within the normal duration of the programme. This percentage of students graduating is reportedly above the national average.

According to the students, a student who does not perform adequately most often contacts the professor for assistance and assistance is most often also given.

# 7.5.2. Comments

The VEE is compliant with Standard 7.5 because:

- The basis for decisions on progression (including academic progression and professional fitness to practise) are explicit and readily available to the students;
- The VEE has provided 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 has mechanisms in place to monitor attrition and progression and is able to respond and amend admission selection criteria (to the degree allowed by national or university law) and student support if required.

#### 7.5.3. Suggestions for improvement

If possible, analysis of reasons for dropout could be undertaken along with an analysis of barriers for completing the DVM course within 5 years.

# 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

As noted in Standard 7.5, a number of publicly available exclusion criteria exists.

Exemptions from the exclusion criteria are present, e.g., they do not apply to students with disabilities, students that have acquired all the ECTS excluding the final thesis, foreign students that are allowed to live in Italy thanks to a study VISA, imprisoned students.

Exclusion is communicated to students, a one-month warning is given in advance. Students can appeal within 45 days from exclusion as established by the teaching regulation. Excluded students can appeal to the Rector. The decision cannot be appealed to others on the basis of what is foreseen in the UniPi teaching regulation. The entire process is centrally managed by UniPi and the VEE does not have a role.

Every student that has lost her/his status can enrol again asking for the complete recognition of the previously obtained ECTS. To obtain the ECTS recognition and thus to obtain a new enrolment to the DVM Course, the admission procedures described above (e.g., the admission test) must be followed once again.

# 7.6.2. Comments

The VEE is compliant with Standard 7.6 because:

- Mechanisms for the exclusion of students from the programme for any reason are explicit;
- The VEE's policies for managing appeals against decisions, including admissions, academic and progression decisions and exclusion, are transparent and publicly available.

#### 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

The UniPi and the VEE have set up several means to support physical, emotional and welfare needs of students, e.g., through a mentoring system, possibilities for assistance in case of illness, impairment and disability, a committee promoting equal rights opportunities and welfare at work and against discrimination (CUG), clubs and student organisations.

The DVM Course coordinator is regarded as the first contact person students may refer to for grievances. Additionally, students are provided with personal tutors to which they may refer chosen from the teaching staff.

In December 2021, the Academic Senate and the Board of Directors approved the University's Gender Equality Plan drafted in agreement with the UniPi Guarantee committee for equal opportunities established by the University statute (Art. 19). UniPi Gender Equality Plan is structured around five thematic areas:

- balance between work and private life and organisational culture
- gender balance in leadership and decision making
- gender equality in recruitment and career progression
- integration of the gender dimension in research and teaching content
- measures against gender-based violence, including sexual harassment.

The English version of the document is available at: https://www.unipi.it/images/pdf/gep22-24en.pdf.

# 7.7.2. Comments

The VEE is compliant with Standard 7.7 because:

- Provisions, such as learning support and counselling services, career advice, are made by the VEE to support the physical, emotional and welfare needs of students.
- There are fair and transparent mechanisms for dealing with student illness, impairment and disability during the programme, e.g. by providing reasonable adjustments for disabled students, consistent with all relevant equality and/or human rights legislation
- There are effective mechanisms for resolution of student grievances (e.g. interpersonal conflict or harassment).

#### 7.7.3. Suggestions for improvement

The VEE is encouraged to sustain the functionality of the provisions given to support students with physical, emotional and welfare needs.

# 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

As noted in Standard 7.7, the DVM Course coordinator is regarded as the first contact person students may refer to, and students are also provided with personal tutors.

Further, students can express their needs to their representatives in the various committees and councils, e.g. the VEE Council, the DVM Council and the D-JFSC.

A mechanism for anonymous complaints exists, and the UniPi has also established a "Whistleblower" service for students and staff that is aimed at denouncing crimes of any nature.

# 7.8.2. Comments

The VEE is compliant with Standard 7.8 because:

- There are mechanisms in place by which students can convey their needs and wants to the VEE
- The VEE provides 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.

#### 7.8.3. 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

Assessment procedures are implemented according to the UniPi teaching regulation, but the VEE, through the DVM-JFSC has adopted specific internal assessment policies for the Veterinary Degree (Table 8.1.1.). The DVM-JFSC is in charge of proposing changes related to assessment within the DVM Course, being the DVM-Council the main responsible for making decisions and approving the examination schedule every year.

#### 8.1.2. Comments

Some of the teaching training modules, offered by the University, are focused on assessment, and most junior assistant professors can benefit from this training.

In oral exams, examination boards are constituted by several teachers and with the presence of more than one student, in order to ensure homogeneity between assessments and minimise subjectivity.

Practical examinations and direct practical assessments are scarcely represented in most units of study, relying on the final oral or written exam to evaluate the acquisition of knowledge of each student.

# 8.1.3. Suggestions for improvement

The extent of the use of oral exams in certain units of study needs to be critically reviewed. The VEE should consider increasing the use of other examination modalities, in order to assess direct evaluation of practical skills and problem-solving abilities.

# 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 lecturer responsible for a specific unit of study decides every year the assessment methods and grading criteria of theoretical knowledge and practical skills to be used in his/her course, according to the terms established by the DVM Council. Teachers include this information in the syllabus that is published before starting the course.

In general, subject requirements (barrier exams), and exam calendars are established annually and published by the DVM Council at the beginning of each academic year.

Only after the students have been notified of exam grades - by email - and they have been accepted, grades are registered by the system.

DVM Council regulates the procedure for graduation exams. This procedure is published yearly on the website. The Degree Committee, which is appointed by the DVS Head, on the recommendation of the DVM Course coordinator is responsible for the assessment of the presentation of the graduation thesis and registering the final grade.

Recently, an internal policy has been adopted in the form of guidelines to ensure the alignment of learning outcomes with ESEVT Day One Competences and with assessment methods. These guidelines include the procedure for post-assessment feedback when requested by students.

# 8.2.2. Comments

The grading criteria and the assessment methods for each unit of study are available in the syllabus and published from the beginning of each academic year. There is a well-established procedure implemented for appealing against assessment outcomes and this procedure is available to students. The units of study offer several opportunities to access examination sessions. This flexibility allows each student to adapt their assessment to different paces according to their needs.

#### 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 DVM-JFSC is in charge of reinforcing consistency and reviewing the assignment design of different units of study and initiating revision in case it is needed. Students are involved with this process through their representatives in the Committee. There is an annual review of the indicators related to assessment procedures and any corrective measures are proposed by the DVM Course coordinator directly to the teachers. The D-JFSC acts as an external monitoring body that also reviews methods of assessment.

Guidelines adopted in 2021 for the alignment of learning outcomes with ESEVT Day One Competences include a specific strategy on assessment criteria and methods, in compliance with the UniPi teaching regulation.

The teacher of each subject is the final responsible for the consistency and registration of the achievement of these competences. A substantial majority of the examinations are oral.

#### 8.3.2. Comments

DVM Council has adopted some extra regulations for student assessment, specifically, the requirement to pass specific barrier exams for some units of study, also, a minimum of 70% attendance is mandatory for lectures and practical work, and 100% in the case of PPT. The new system for measuring the success rate of the assessment takes into account the abandonment of the examination session or the failure of the examination by the students.

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

Barrier exams and possible failure in final exams can be a cause of difficulty and frustration for some students. The VEE should ensure mechanisms for detecting and assisting burn-outs and students with difficulties.

Reports of success rate of different subjects should be analysed and reviewed periodically. This can be a useful tool to monitor and ensure consistency of assessment methods in the different units of study.

#### 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

Grades of individual units of study are certified and registered for every student and individual data or performance can only be accessed by authorised support staff. However, cohort data can be made available to the DVM Council for management purposes.

Students are included in advisory and decision-making committees relevant for the assessment strategy. An active role of the students is ensured by the participation of their representatives in joint Committees (DVM-JFSC and D-JFSC) and other decision bodies.

During the COVID-19 lockdown staff made a quick and effective adaptation to on-line assessment methods, performing oral exams by videoconference and written exams with Moodle platform.

#### 8.4.2. Comments

This academic year, a new system has been implemented to register students that do not perform well on the exams, in order to monitor the passing rates of each unit of study.

The dedication and involvement of the teachers tutoring students for the preparation of their final Thesis ensures individual monitoring of learning outcomes and gives students the opportunity to further deepen their training in different disciplines within Veterinary Medicine.

#### 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

The written and oral exams are the most common assessment methods for theoretical knowledge, while pre-clinical practical skills are mostly assessed formatively during practical sessions. However, the mixed examination format is the predominant assessment method from the third year onwards.

Acquisition of hands-on skills and practical competences is registered in the Logbook of each student and certified by the continuous assessment of academic staff, based on the PPT tutors' recordings. The DVM Course coordinator is the main responsible person for controlling

completeness of the Logbooks before graduation.

The final Dissertation Thesis can only be presented after all ECTS have been obtained by a student and this is evaluated by an academic committee.

The State Board Examination to obtain the national veterinary qualification, mandatory to access the veterinary medicine profession is the only phase during which the student's level of competences and skills are assessed by external committee members.

# 8.5.2. Comments

The acquisition of the learning outcomes of the core subjects and their recording in the logbook is based, in some cases, on the mere participation of the student in practical activities, but a more direct assessment of practical skills would be necessary to ensure the acquisition of day one competences by the students.

#### 8.5.3. Suggestions for improvement

The VEE is encouraged to adapt the Logbook, e.g. along the lines of the formal fundamental learning theoretical background described in Standard 3.2, i.e. Miller's pyramid of competences.

# 8.5.4. Decision

The VEE is compliant with Standard 8.5.

# 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

The required skills for the veterinary programme are covered in the VEE by the Italian system, culturally identifying academic staff according to scientific-disciplinary sectors and the corresponding recruitment fields.

Recruitment and promotion of academic staff depend on available public funding. Staff recruitment budget is annually assigned to the VEE from UniPi on the basis of several parameters, including turnover. The number of FTE academic and support staff of the veterinary programme is not expected to change significantly in the next 3 academic years. There is no plan to recruit additional academic staff, except for replacing the retiring teachers. Academic staff is composed of full professors, associate professors, type-A and type-B assistant professors and external/practitioners. The vast majority of teaching staff are permanent and full time and take part in both teaching and

research activities. Eight external/practitioners employed have teaching responsibilities, mainly in internal medicine of companion and large animals.

The UniPi Board of Directors decides on staff recruitment. At the VEE level, the Staff Planning Committee, composed of 17 academic staff members, periodically identifies specific needs and submits recruitment proposals for deliberation to the VEE Council. The VEE Council deliberations are analysed by the UniPi Board of Directors. The VEE periodically identifies specific new support staff needs, both for administrative and technical duties, and makes recruitment/promotion proposals to UniPi. The support staff qualifications are ensured by the competitive selection process for recruitment/promotion and by the continuing education courses, organised by UniPi.

A formal training programme to improve quality of teaching skills has been offered by UniPi. The programme includes good teaching and evaluation practices, learning and e-learning resources, biosecurity and QA procedures. Academic staff involved with teaching enrol in the formal training on a voluntary basis. Training of newly recruited academic staff of the VEE is a priority in the programme. In 2021, a PowerPoint presentation was implemented for the basic training of external PPT tutors and VTH practitioners.

More than 2/3 of teaching staff involved in the veterinary curriculum hold a DVM diploma and postgraduate qualifications. Nine members of the academic staff hold a European Board of Veterinary Specialisation (EBVS) diploma.

Members of the permanent academic staff complete an annual report including teaching, research and organisation activities and UniPi evaluates the academic staff on the basis of their research, teaching and service activities every 2 years and a positive evaluation is linked to a salary increase.

# 9.1.2. Comments

The annual reports of permanent academic staff are evaluated by the DVS Head, by the means of a specific committee of academic staff members.

Academic staff recruitment is in agreement with the national and EU regulations.

There seems little possibility to recruit additional academic staff, except for replacing the retiring ones.

# 9.1.3. Suggestions for improvement

In order to enhance the universality of the VEE, it is suggested to recruit more postgraduate students and academic staff who have been trained in other VEEs.

Basic training to teach and to assess is suggested for practitioners involved with EPT and support staff involved with teaching.

# 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 total number and qualifications of academic and support staff currently involved in the veterinary programme are sufficient to deliver the educational programme and fulfil the VEE's mission. The decrease of permanent FTE observed in 2020-2021 is counterbalanced by the increase of newly recruited Type A and Type B assistant professors. The VEE invests a remarkable proportion of its budget to the recruitment of new academic staff holding a veterinary degree in order to comply with ESEVT indicator I2.

The national recruitment procedures are set to guarantee a high teaching staff qualification. In particular, the possession of the NSQ for a specific academic discipline ensures that the permanent academic staff can provide up-to-date research-based education. Teaching quality is regularly assessed on multiple levels by committees and student assessments.

#### 9.2.2. Comments

Mandatory annual performance reviews serve towards assisting career development of academic staff.

#### 9.2.3. Suggestions for improvement

A more robust procedure in place is suggested to assess teaching quality in the VEE.

#### 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

The VEE included academic staff training among the objectives of its Strategic Plan. Courses, seminars and events to extend staff teaching skills are proposed by VEE and UniPi.

For all teaching and support staff, the salary is fixed by law. After a positive evaluation of teaching and research activities by UniPi, academic staff are guaranteed a standard salary increase every 2 years. Support staff are evaluated periodically for category pay rises. Support staff with higher professional positions who are linked to specific allowances are evaluated every year.

A precise balance between teaching, research and services and flexibility among recruited staff is not regulated in the Italian system. Teaching load within the VEE is not uniformly distributed among teaching staff with cases of heavy teaching load not linked to salary increase or professional progression. Neither UniPi nor VEE provide a formally approved reward system for excellence in teaching. Academic staff obtaining a high grade in the student evaluation are acknowledged in the annual reports. Neither PPT tutoring activities nor institutional duties are formally included in the staff workload.

# 9.3.2. Comments

Courses, seminars and events on veterinary education are being organised in the VEE. Academic staff have opportunities for participation in scholarly activities. None of the support staff benefited from mobility programmes.

#### 9.3.3. Suggestions for improvement

Continuous efforts are recommended to ensure a balanced workload of teaching, research and service.

#### 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 recently established a Veterinary Education Committee and dedicated events on veterinary education were organised in 2020 and 2021. Support staff growth and development is ensured by activities organised by UniPi.

The criteria and processes for promotion are clearly defined.

Academic and support staff work under the guidance of one or more senior members of the VEE. Individual advice, coaching and training are provided in a collaborative environment.

All members of the academic staff as well as support staff representatives participate in the VEE Council, the main decision-making body of the VEE. The vast majority of the staff are involved in the working bodies of the VEE.

Permanent academic staff can be promoted via competitive selection procedures advertised by UniPi and regulated by a specific regulation complying with national laws. Competitive selection

procedures can be open to all NSQ qualified participants or restricted to UniPi qualified academic staff. Horizontal and vertical progression of support staff is possible.

# 9.4.2. Comments

Academic and support staff feel that they are involved. The VEE is commended for the opportunities of academic and support staff to contribute to the VEE's direction and decision-making processes.

# 9.4.3. Suggestions for improvement

None.

# 9.4.4. Decision

The VEE is compliant with Standard 9.4.

Standard 9.5: A system for assessment of teaching 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

Students regularly assess teaching staff through a mandatory and anonymous online evaluation system offered on the online UniPi platform "Valutami". The questionnaire covers dimensions of students' assessment of teaching, students' satisfaction and students' learning engagement. A similar questionnaire is also used for the assessment of PPT activities and tutors.

A well-established system is in operation for evaluating student assessment and for using results for improvements. Students' opinions are publicly available in the Degree Course Single Annual Report (SUA-CdS) and reports approved by the VEE Council are available for external reviews on request.

# 9.5.2. Comments

Student assessment of teaching is used in regular improvements in teaching. Additionally, students are able to share their teaching-related problems with the relevant people directly.

# 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 UniP is ranked 383 in the QS ranking related to research activities. The number of indexed research articles by VEE staff has risen from 2018 to 2020 and reached 240 in 2020. The research is incorporated in the teaching by e.g. using relevant articles in courses and accumulates for the students in the graduation thesis. During thesis preparation students participate in hands-on research activities.

Funding of research comes from both Italian and European funds.

#### 10.1.2. Comments

The VEE is compliant with Standard 10.1 because the VEE stimulates staff members to be active in research. Staff members are assisted in writing research proposals through the UniPi research office. This office organises formative events for academic and support staff. The number of published papers has increased significantly in the last 3 years.

Research achievements of academic staff are important for promotion and judged in a yearly evaluation process.

#### 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

Academic staff encourage students to develop a scientific approach in all learning activities by presenting relevant case studies, holding class discussions and giving suggestions for outstanding literature. Students are trained during the curricular years in statistics and effective data presentation. Students are invited to take part in research-oriented events like the European Researchers Night or seminars and conferences. Participation can be included as ECTS related to the obligatory ECTS of the electives. Specific courses are given to learn using bibliographic tools and performing bibliographical searches.

Students have to write a graduation thesis (15 ECTS). The mark of the graduation thesis is part of the final graduation mark.

# 10.2.2. Comments

The VEE is compliant with Standard 10.2 because students have to finish a compulsory graduation thesis. To help the students to complete this thesis specific courses are given to learn using bibliographic tools and performing bibliographical searches. This research thesis is guided by enthusiastic staff and students can choose a knowledge area of interest by contacting staff members.

#### **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

Several post-graduate programmes are provided by the VEE. In total 6 post graduate students are enlisted in EBVS specialisation programmes. Furthermore 98 students are enrolled in clinical masters, 25 students are active in PhD programmes and 20 students are registered in non-clinical specialisation schools. The VEE expects that the number of students enrolled in post-graduate programmes will increase because a new specialisation school in Equine Medicine and Surgery has started in 2021. Post-graduate students have teaching obligations and they provide support for the academic staff in hands-on training for under-graduate students are during clinical activities in the VTH. During these activities the post-graduate students are supervised by academic staff.

The VEE also provides continuing education programmes to veterinary professionals. Veterinary continuing education is mandatory in Italy.

#### 10.3.2. Comments

The VEE is compliant with Standard 10.3 because the VEE:

- is very active in providing training programmes for postgraduates;
- encourage staff to undertake EBVS residencies despite the fact that EBVS specialists are not recognised in the Italian system;
- has an active policy to provide specialisation schools.

#### **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 quality is monitored using specific national and local evaluation systems and the quality is compared with corresponding research units in other VEEs in Italy. Evaluation systems are active on 3 levels. At the Department level this is done by the Research Committee. This Committee works following formalised guidelines. Results are discussed in the VEE Council and published on the VEE website. The Research Committee also prepares an annual SUA-Research report

requested by UniP. At UniP level monitoring is aimed at promoting continuous improvement of the scientific output. At national level the ANVUR (national agency for evaluation of research) uses the VQR system to evaluate research output. The latest VQR covers the period 2015-2019. The VQR is discussed at the University and VEE council.

The PhD programme is managed by a specific Council and a coordinator. The composition and functions of this PhD council are described in specific regulations. The accreditation of PhD programmes is under the responsibility of the Ministry of University and Research.

The specialisation schools' learning objectives and subjects are defined by the Ministry of University and Research. Each school has a Council. The Council is responsible for defining competition procedures, composition of board members and exams.

The Master Degree training courses are organised and managed by a coordinator with help of at least 3 UniPi academic staff members. An educational project is proposed to the VEE Council and evaluated by UniPi. The Master Degree is awarded after a final test and requires a minimum attendance.

# 10.4.2. Comments

The research committee has identified 4 macro areas: One Health, One Medicine, Human animal bond and Quality of food/sustainable production. These areas are included in the strategic plan and are monitored by checking the achievement of the indicator on published papers. In a survey most academic staff complied with these 4 areas.

# 10.4.3. Suggestions for improvement

None.

# 10.4.4. Decision

The VEE is compliant with Standard 10.4.

# **11. ESEVT Indicators**

ALVE -	ESEVT Indicators							
	Name of the Establishment:							
	Name & mail of the Head:							
	Date of the form filling:							
	Raw data from the last 3 full ac	demic years		2020-21	2019-20	2018-19	Mean	
1	n° of FTE academic staff involved in vete	rinary training		46	46,1	46,4	46,17	
2	n° of undergraduate students			360	350	367	359,00	
3	nº of FTE veterinarians involved in veteri	nary training		36,8	34,5	35,2	35,50	
4	n° of students graduating annually			47	43	68	52,67	
5	n° of FTE support staff involved in veteri	nary training		44,8	46,8	46,5	46,03	
6	n° of hours of practical (non-clinical) train	ing		755	741	766	754	
7	n° of hours of clinical training			746	746	746	746	
8	n° of hours of FSQ & VPH training			485	465	466	472	
9	n° of hours of extra-mural practical training			106	112	112	110	
10	n° of companion animal patients seen intr			3142	2896	3495	3178	
11	n° of ruminant and pig patients seen intra-	murally		690	696	351	579	
12	n° of equine patients seen intra-murally			484	785	706	658	
13	n° of rabbit, rodent, bird and exotic patien			90	88	69	82,3	
14	n° of companion animal patients seen extr			5	0	4	3,0	
15	n° of individual ruminants and pig patient	s seen extra-murally		36	19	49	34,7	
16	n° of equine patients seen extra-murally			77	60	65	67,3	
17	n° of visits to ruminant and pig herds			36	65	65	55,3	
18	n° of visits of poultry and farmed rabbit u	nits		0	0	3	1,0	
19	n° of companion animal necropsies			72	32	104	69,3	
20	n° of ruminant and pig necropsies			18	4	74	32,0	
21	n° of equine necropsies			8	10	3	7,0	
22	n° of rabbit, rodent, bird and exotic pet ne			68	23	112	67,7	
23	n° of FTE specialised veterinarians involv	ed in veterinary training		18,6	16,1	14,5	16,4	
24	n° of PhD graduating annually			5	7	4	5,3	
The boxes <b>v</b>	within the red frames must be filled in by	y the Establishment (the	other values	will be auton	natically calcu	ilated)		

Arres

# ESEVT Indicators

Name o	of the Establishment:					
Date of the form filling:						
Calcul	ated Indicators from raw data	Establishment	Median	Minimal	<b>Balance</b> <sup>3</sup>	
		values	values1	values <sup>2</sup>		
I1	n° of FTE academic staff involved in veterinary training / n° of undergraduate students	0,129	0,16	0,13	0,003	
12	n° of FTE veterinarians involved in veterinary training / n° of students graduating annually	0,674	0,87	0,59	0,084	
13	nº of FTE support staff involved in veterinary training / nº of students graduating annually	0,874	0,94	0,57	0,308	
I4	n° of hours of practical (non-clinical) training	754,000	905,67	595,00	159,000	
15	n° of hours of clinical training	746,000	932,92	670,00	76,000	
16	n° of hours of FSQ & VPH training	472,000	287,00	174,40	297,600	
17	n° of hours of extra-mural practical training in FSQ & VPH	110,000	68,00	28,80	81,200	
18	nº of companion animal patients seen intra-murally / nº of students graduating annually	60,335	70,48	42,01	18,326	
19	n° of ruminant and pig patients seen intra-murally / n° of students graduating annually	10,994	2,69	0,46	10,530	
I10	n° of equine patients seen intra-murally / n° of students graduating annually	12,500	5,05	1,30	11,202	
I11	n° of rabbit, rodent, bird and exotic seen intra-murally / n° of students graduating annually	1,563	3,35	1,55	0,018	
I12	n° of companion animal patients seen extra-murally / n° of students graduating annually	0,057	6,80	0,22	-0,166	
I13	n° of individual ruminants and pig patients seen extra-murally / n° of students graduating and	0,658	15,95	6,29	-5,637	
I14	n° of equine patients seen extra-murally / n° of students graduating annually	1,278	2,11	0,60	0,683	
I15	n° of visits to ruminant and pig herds / n° of students graduating annually	1,051	1,33	0,55	0,503	
I16	n° of visits of poultry and farmed rabbit units / n° of students graduating annually	0,019	0,12	0,04	-0,026	
I17	n° of companion animal necropsies / n° of students graduating annually	1,316	2,07	1,40	-0,084	
I18	n° of ruminant and pig necropsies / n° of students graduating annually	0,608	2,32	0,97	-0,363	
I19	n° of equine necropsies / n° of students graduating annually	0,133	0,30	0,09	0,040	
120	n° of rabbit, rodent, bird and exotic pet necropsies / n° of students graduating annually	1,285	2,05	0,69	0,592	
I21*	n° of FTE specialised veterinarians involved in veterinary training / n° of students graduating	0,311	0,20	0,06	0,248	
I22*	n° of PhD graduating annually / n° of students graduating annually	0,101	0,15	0,09	0,013	
1	Median values defined by data from Establishments with Approval status in April 2016					
2	Recommended minimal values calculated as the 20th percentile of data from Establishments v	with Approval status is	n April 2016			
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	С	PC	N C
Standard 1.1: The VEE must have as its main objective the provision, in agreement with the EU Directives and ESG 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.	Х		
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.	Х		
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.	Х		
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.	Х		
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.	Х		
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. Area 2. Finances	Х		
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).	Х		
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.	Х		
Standard 2.3: Resources allocation must be regularly reviewed to ensure that available resources meet the requirements.	Х		
Area 3. Curriculum Standard 3.1: The curriculum must be designed, resourced and managed to ensure all graduates have achieved the graduate attributes expected to be fully compliant with the EU Directive 2005/36/EC (as amended by directive 2013/55/EU) and its Annex V.4.1. The curriculum must include the subjects (input) and must allow the acquisition of the Day One Competences (output) listed in 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		

3.1.2. Basic sciences	Х		
3.1.3. Clinical Sciences in companion animals (including equine and exotic pets)		Х	
3.1.4. Clinical Sciences in food-producing animals (including Animal Production and Herd Health Management)			Х
3.1.5. Food Safety and Quality	Х		
3.1.6. Professional Knowledge	Х		
Standard 3.2: Each study programme provided by the VEE must be competency-based and designed so that it meets the objectives set for it, including the intended learning outcomes. The qualification resulting from a programme must be clearly specified and communicated and must refer to the correct level of the national qualifications framework for higher education and, consequently, to the Framework for Qualifications of the European Higher Education Area.         The VEE must provide proof of a QA system that promotes and monitors the presence of an academic environment highly conducive to learning including self-learning. Details of the type, provision and updating of appropriate learning opportunities for the students must be clearly described, as well as the involvement of students.         The VEE must also describe how it encourages and prepares students for self-learning and lifelong learning.	X		
<ul> <li>Standard 3.3: Programme learning outcomes must:</li> <li>ensure the effective alignment of all content, teaching, learning and assessment activities of the degree programme to form a cohesive framework</li> <li>include a description of Day One Competences</li> <li>form the basis for explicit statements of the objectives and learning outcomes of individual units of study</li> </ul>	X		
<ul> <li>be communicated to staff and students</li> <li>be regularly reviewed, managed and updated to ensure they remain relevant, adequate and are effectively achieved.</li> </ul>			
<ul> <li>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: <ul> <li>determine the pedagogical basis, design, delivery methods and assessment methods of the curriculum</li> <li>oversee QA of the curriculum, particularly gathering, evaluating, making change and responding to feedback from stakeholders, peer reviewers and external assessors, and data from examination/assessment outcomes</li> <li>perform ongoing 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</li> </ul> </li> </ul>	X		
<ul> <li>planned as a result of such a review must be communicated to all those concerned</li> <li>identify and meet training needs for all types of staff, maintaining and enhancing their competence for the ongoing curriculum development.</li> </ul>			
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.			
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.			
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.			
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.	X		
Standard 4.2: Lecture theatres, teaching laboratories, tutorial rooms, clinical facilities and other teaching spaces	Х		

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.			
Standard 4.3: The livestock facilities, animal housing, core clinical teaching facilities and equipment used by the			Х
VEE for teaching purposes must:			
• be sufficient in capacity and adapted for the number of students enrolled in order to allow safe hands-			
on training for all students			
• be of a high standard, well maintained and fit for the purpose			
promote best husbandry, welfare and management practices			
ensure relevant biosecurity and bio-containment			
• be designed to enhance learning.	17		
Standard 4.4: Core clinical teaching facilities must be provided in a veterinary teaching hospital (VTH) with 24/7	Х		
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.			
Standard 4.5: The VEE must ensure that students have access to a broad range of diagnostic and therapeutic	Х		
facilities, including but not limited to: diagnostic imaging, anaesthesia, clinical pathology, intensive/critical			
care, surgeries and treatment facilities, ambulatory services, pharmacy and necropsy facilities.			
Standard 4.6: Appropriate isolation facilities must be provided to meet the need for the isolation and containment	Х		
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.			
Standard 4.7: The VEE must have an ambulatory clinic for production animals or equivalent facilities so that		Х	
students can practise field veterinary medicine and Herd Health Management under academic supervision.			
Standard 4.8: The transport of students, live animals, cadavers, materials from animal origin and other teaching	Х		
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.			
Standard 4.9: Operational policies and procedures (including e.g. biosecurity, good laboratory practice and good		Х	
clinical practice) must be taught and posted for students, staff and visitors and a Biosafety manual must be		Λ	
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.			
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		Х	
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.			
Standard 5.2: In addition to the training provided in the VEE, experience can include practical training at external	Х		
sites, provided this training is organised under direct academic supervision and following the same standards			
as those applied in the VEE.			
Standard 5.3: The VTH must provide nursing care skills and instruction in nursing procedures. Under all	Х		
situations students must be active participants in the clinical workup of patients, including problem-oriented			
diagnostic approach together with diagnostic decision-making.			
Standard 5.4: Medical records must be comprehensive and maintained in an effective retrieval system (preferably	Х		
an electronic patient record system) to efficiently support the teaching, research, and service programmes of			
the VEE.	<b> </b>		
Area 6. Learning resources Standard 6.1: State-of-the-art learning resources must be adequate and available to support veterinary education,	X		
research, services and continuing education. When the study programme is provided in several	Λ		
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.			

Standard 6.2: Staff and students must have full access on site to an academic library administered by a qualified	Х		
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).			
Standard 6.3: The VEE must provide students with unimpeded access to learning resources, internet and internal	Х		
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.			
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	Х		
student "life cycle", e.g. student admission, progression and certification.	21		
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.	X		
Standard 7.2: The number of students admitted must be consistent with the resources available at the VEE for	х		
staff, buildings, equipment, healthy and diseased animals, and materials of animal origin.	37		
Standard 7.3: The selection and progression criteria must be clearly defined, consistent, and defensible, be free of	Х		
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.			
Standard 7.4: There must be clear policies and procedures on how applicants with disabilities or illnesses are	Х		
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.			
Standard 7.5: The basis for decisions on progression (including academic progression and professional fitness to	Х		
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.			
Standard 7.6: Mechanisms for the exclusion of students from the programme for any reason must be explicit.	Х		
The VEE's policies for managing appeals against decisions, including admissions, academic and progression			
decisions and exclusion, must be transparent and publicly available.			
Standard 7.7: Provisions must be made by the VEE to support the physical, emotional and welfare needs of	Х		
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).			
	X	$\vdash$	
Standard 7.8: Mechanisms must be in place by which students can convey their needs and wants to the VEE. The	Λ		
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.	$\vdash$	$\vdash$	
Area 8. Student assessment			
Standard 8.1: The VEE must ensure that there is a clearly identified structure within the VEE showing lines of	Х		
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.		$ \square$	
Standard 8.2: The assessment tasks and grading criteria for each unit of study in the programme must be	Х		
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.			
Standard 8.3: The VEE must have a process in place to review assessment outcomes, to change assessment	Х		
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			
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assessment design and underpin decisions on progression.			
Standard 8.4: Assessment strategies must allow the VEE to certify student achievement of learning objectives at	Х		
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.			
Standard 8.5: Methods of formative and summative assessment must be valid and reliable and comprise a variety	Х		
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.			
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	Х		
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.			
Standard 9.2: The total number, qualifications and skills of all staff involved with the programme, including	Х		
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teaching staff, 'adjunct' staff, technical, administrative and support staff, must be sufficient and appropriate			
to deliver the educational programme and fulfil the VEE's mission.			
A procedure must be in place to assess if they display competence and effective teaching skills in all relevant			
aspects of the curriculum that they teach, regardless of whether they are full or part time, residents, interns			
or other postgraduate students, adjuncts or off-campus contracted teachers.			
Standard 9.3: Staff must be given opportunities to develop and extend their teaching and assessment knowledge	Х		
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.			
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.			
Standard 9.4: The VEE must provide evidence that it utilises a well-defined, comprehensive and publicised	Х		
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.			
Standard 9.5: A system for assessment of teaching staff must be in operation and must include student	Х		
participation. Results must be available to those undertaking external reviews and commented upon in			
reports.			
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	Х		
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and strengthen the veterinary degree programme through research-based teaching.	v		
Standard 10.2: All students must be trained in scientific method and research techniques relevant to evidence-	Х		
based veterinary medicine and must have opportunities to participate in research programmes.	v		
Standard 10.3: The VEE must provide advanced postgraduate degree programmes, e.g. PhD, internships,	Х		
residencies and continuing education programmes that complement and strengthen the veterinary degree			
programme and are relevant to the needs of the profession and society.			
Standard 10.4: The VEE must have a system of QA to evaluate how research activities provide opportunities for	Х		
student training and staff promotion, and how research approaches, methods and results are integrated into			
the veterinary teaching programmes.			
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C: (total or substantial) compliance; PC: partial compliance (Minor Deficiency); NC: non-compliance (Major Deficiency);	eficiena	cy)	

# **Executive Summary**

The first course in veterinary medicine in the University of Pisa (UniPi) started in 1839. After various denominations, it has been called the Department of Veterinary Sciences (called the VEE in this report) since 2012.

The VEE is currently located in Pisa both in the Viale delle Piagge campus and in the San Piero a Grado campus.

The VEE was visited by EAEVE/ESEVT in 1998 and 2009 and was eventually granted Approval status in 2012. The VEE has also been visited and approved by the National Agency for the Evaluation of Universities and Research Institutes (ANVUR) in 2019.

The SER was provided on time and written in agreement with the SOP 2019 as amended in 2021. 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 teaching staff who are available to mentor students in their field of interest

- -) Strong involvement of junior staff in the learning process and in the ESEVT Visitation
- -) Enthusiastic students
- -) Expansion of teaching in the English language for all undergraduate students
- -) Swift adaptation to online teaching during the COVID-19 lockdown
- -) Extensive training in FSQ
- -) Encouragement of staff to undertake EBVS residencies
- -) Increased number of scientific publications during the last three years

Additional commendations are described in the Visitation Report.

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

-) Partial compliance with Standard 3.1.3 because of suboptimal clinical training in exotic pets

-) Partial compliance with Standard 4.7 because of suboptimal ambulatory clinic for ruminants

-) Partial compliance with Standard 4.9 because of suboptimal Good Pharmacy Practice

-) Partial compliance with Standard 5.1 because of suboptimal diversity of cadavers for anatomical dissections and suboptimal caseload in necropsy

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

-) Non-compliance with Standard 3.1.4 because of insufficient clinical training in individual medicine of Food Producing animals under supervision of academic staff, which may affect the acquisition by all students of Day One Competences in these species

-) Non-compliance with Standard 4.3 because biosecurity and biosafety measures are not systematically implemented in the VTH, necropsy room, teaching farm and equine reproduction unit

Additional suggestions for improvement are described in the Visitation Report.

# Glossary

ANVUR: National Agency for the Evaluation of Universities and Research Institutes DVM: Degree in Veterinary Medicine EAEVE: European Association of Establishments for Veterinary Education EBVS: European Board of Veterinary Specialisation ECOVE: European Committee of 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 FSQ: Food Safety and Quality FTE: Full-Time Equivalent IT: Information Technology MUR: Ministry of Education and Research in Italy **OSCE:** Objective Structured Clinical Examination PDCA: Plan Do Check Adjust **PPT: Professional Practical Training** QA: Quality Assurance SER: Self Evaluation Report SOP: Standard Operating Procedure UniPi: University of Pisa **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 3.1.4 because of insufficient clinical training in individual medicine of Food Producing animals under supervision of academic staff, which may affect the acquisition by all students of Day One Competences in these species.
- 2. Non-compliance with Standard 4.3 because biosecurity and biosafety measures are not systematically implemented in the VTH, necropsy room, teaching farm and equine reproduction unit.

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