



**VISITATION REPORT**

**To Facultad de Veterinaria, Universidad de Murcia, Spain**

**On 20 – 24 November 2017**

**By the Visitation Team**

**Antti Sukura**, Helsinki, Finland: Visitor in Basic Sciences

**Lynne Hill**, Solihull, UK (Chairperson): Visitor in Clinical Sciences in Companion Animals

**Wendela Wapenaar**, Nottingham, UK: Visitor in Clinical Sciences in Food-Producing Animals

**Romano Zilli**, Rome, Italy: Visitor in Food Safety and Quality

**Peter Holm**, Copenhagen, Denmark: Visitor in Quality Assurance

**Christophe Buhot**, Castelnau-de-Médoc, France: Practitioner

**Cecilia Di Matteo**, Naples, Italy: Student

**Norm Williamson**, Massey, New Zealand: Observer AVBC

**José Antonio Pérez de la Calle**, Spain: Observer ANECA

**Hans Henrik Dietz**, Copenhagen, Denmark: ESEVT Coordinator

## **Contents of the Visitation Report**

Introduction

1. Objectives and Organisation
2. Finances
3. Curriculum
4. Facilities and equipment
5. Animal resources and teaching material of animal origin
6. Learning resources
7. Student admission, progression and welfare
8. Student assessment
9. Academic and support staff
10. Research programmes, continuing and postgraduate education
11. Outcome Assessment and Quality Assurance
12. ESEVT Indicators
13. ESEVT Rubrics

Executive Summary

## **Introduction**

The Facultad de Veterinaria de Murcia (FVETUM) was founded in 1982 within the Universidad of Murcia (UM) which was founded in 1915. FVETUM is located at the Campus of Espinardo, 7 km NW from downtown Murcia. FVETUM is operating on 2 locations two kms apart (Espinardo (Faculty Building and Veterinary Teaching Hospital (VTH)) and Guadalupe (the Veterinary Teaching Farm (VTF)).

The FVETUM was visited for the first time in 1996 with a revisitation in 1998 and second time the FVETUM was visited was in 2006 resulting in EAEVE approved status.

The FVETUM is ranked as no. 36 at the Shanghai List and is ranked no. 3 in Spain.

The FVETUM recognises its close relation with the local practitioners as an important means of gaining very good public recognitions. This is supported by highly motivated students with good academic background and a good working environment for students and staff.

Since the last Visitation a QA-system has been implemented including establishment of a Committee for the Assessment and Improvement of the Veterinary Degree Curriculum. Further to this a Biosecurity Committee has been established and an Ethics and Animal Welfare Committee of the University has been set up. Several curricular changes have been accepted, some of these due to national legislation and some due to EAEVE recommendations incl. increase of clinical training, rotations (included in clinics (VTH), herd health management and clinics (VTF) and VPH (abattoir and food pilot plant/food industry), and an elective 4-week placement) in VPH, graduation thesis and self-directed learning.

The global financial crisis has also had severe influence on the FVETUM financial situation with increased expenditures, significantly reduced revenues due to cutback from the public bodies. One major devastating example of this cutback is the decision by the National Government that only 10 % of staff leaving for any reason is replaced. Currently the situation has improved and the replacement and promotion has increased to almost 100%.

Spanish legislation has established that the Spanish DVM degree is now based on a 5 year/300 ECTS programme but discussions are underway to raise this to 5½ year/330 ECTS.

Some of the buildings and facilities have been renovated incl. isolation facilities SA and LA, infectious diseases exam room with direct access, updated biosecurity measures, necropsy room at the VTF, new storage facilities at the farm.

The current ESEVT Visitation was performed in agreement with the Uppsala SOP (2016).

## **1. Objectives and Organisation ([see Standards 1.1 to 1.6](#))**

### **Findings**

#### **1.1.1. Brief description of the Strategic Plan**

A clear strategic plan (translated into English and presented to the team) based on a SWOT highlights more than 70 action points within Teaching, Research, Management and Services, and Social Impact, Strategies and Actions (SER, Table 1.3, p.5).

The mission includes “training of professionals of recognized quality and prestige, also attending to

their training specialized and postgraduate courses, as well as their continuing education “.

A clear vision statement is presented (“The FVETUM wants to contribute to the progress of the society by offering quality teaching and developing advanced research, in accordance with the international requirements, with the aim of becoming a Veterinary Reference Establishment at European level.”). And in addition to this the FVETUM has a special emphasis on serving the Murcia Region.

### **1.1.2. Brief description of the Operating Plan**

The FVETUM operating plan is aligned with the operating plan of the University, and depending on the budget. The key elements to be carried out in the timeframe described (2015-2018) can also be identified in the Strategic Plan. An Operational Plan/Action Plan of the Deans team is submitted every year to the Faculty Board in order to achieve the main aims of the Strategic Plan.

### **1.1.3. Brief description of the organisation of the Establishment**

The FVETUM is organised with 10 departments and governed by the Dean who is a DVM. The Deans Office includes 4 vice-deans (DVM focus; food science focus; research and innovation focus; EAEVE accreditation focus). The Faculty Board has 178 members (academia 98; other teachers and researchers 18; students 53; technical staff 7). The board meets 6 – 8 times per year. Its main function is to make decisions, debate and approve Faculty policies.

In addition to the 10 departments in the FVETUM 15 departments in other areas of the Murcia University have teaching obligations in FVETUM.

Each department is headed by a Department Head and managed by a Department Council and each of the departments are fully responsible for teaching, HR-issues including renewal/replenishment of staff and research within their own department. Based on budgetary input from Dept. Heads and after discussions and evaluation in committees dealing with finances, HR, teaching and research the Vice-Chancellor for Finances makes a decision on how to allocate finances in the various areas.

The Dean does not have any influence on the budgetary process which is only a matter for discussion between the Dept. Heads and the Vice-Chancellor for Finances. Likewise the Dean does not have any influence on the transversal coordination of teaching, prioritisation of renewal/replenishment of infrastructure, or HR-matters including e.g. re-allocation of staff.

In addition to departments FVETUM has 4 infrastructure units each with a sovereign economy

- a Veterinary Teaching Hospital (small animal service and large animal service) run by a foundation governed by the Rector and the Dean and run by a manager who is a DVM
- a Veterinary Teaching Farm owned by private companies and governed by a director
- a Food Pilot Plant
- a Veterinary Anatomical Museum

There is a wide range of committees supporting the dean and the department heads (vide SER p. 4-5). Students participate as members in all committees in UM and FVETUM but the Committee of Academic Affairs (Comisión de Convalidaciones de Veterinaria). Stakeholders (e.g. practitioners, local veterinary authorities, VPH-representatives) participate in 3 committees (QA-committee, Academic Committee, and Curriculum Committee).

### **1.1.4. Brief description of the process and the implication of staff, students and stakeholders in the development, implementation, assessment and revision of the Strategic Plan and**

### **organisation of the Establishment**

The Strategic Plan and the organisation has been developed and decided through a process of dialogue, construction of strategic themes, committee work, QA-assessment, implementation, adjustments and communication involving among others also the Faculty Board and external stakeholders.

#### **1.2. Comments**

The Objectives and a rather complicated Organisation is described in sufficient details to give the team an impression of the governing structure and the points of decisive power in the FVETUM.

A SWOT analysis is included in the Strategy.

In the Spanish university governing system as it is applied in Murcia the Dept. Heads have absolute and full autonomy with respect to finances including budget and renewal of infrastructure, HR and teaching/curriculum. The Dean has no instructional power to control or influence Dept. Heads and their autonomy.

#### **1.3. Suggestions for improvement**

- UM and FVETUM should consider to delegate full instructional power to the Dean with respect to finances (incl. budget), infrastructure, HR and curriculum. This would ensure full transversal compliance throughout the FVETUM (and other Faculties) and place the ultimate responsibility for finances (incl. budget), infrastructure, HR and curriculum with one person i.e. the Dean
- FVETUM should review the HR-structure in the VTH with respect to the current differentiation between academic work, clinical work and technical work respectively performed by staff members employed by the UM or by the VTH Foundation
- FVETUM should consider to reduce the number of committees and to establish a clear structure with respect to governing bodies at Departmental and Faculty level. Especially committees with a transversal function should be prioritised

#### **1.4. Decision**

The Establishment is compliant with ESEVT Standard 1.

## **2. Finances ([see Standards 2.1 to 2.5](#))**

### **2.1. Findings**

#### **2.1.1. Brief description of the global financial process of the Establishment and its autonomy on it**

Spanish public universities are under a common legislation with defined frameworks for the budget. The fiscal year follows the calendar year. Table 2.1 should read 2016, 2015, 2014 and the total for 2015 be corrected to 1,140,173 €. And the mean for VTH should read 874,475.

In general tables 2.3 (annual revenues) and 2.4 (annual expenditure) document an Establishment with a balance between revenue (avg. 13.2 mio € per year over the last 3 years) and expenditure (avg. 12.3 mio € per year over the last 3 years). In case of over- or underfunding in a FY the UM absorbs the balance. However, it is allowed for departments and centres to carry over unused parts of the budget to the next FY if this is saved for investments in new or renewed equipment. Research budgets (2, 3, 4 or more years) are automatically carried over to the end of the project period.

The VTH can rent out space for private practitioners. Some of the staff (7 veterinarians) are hired directly by the Foundation running the VTH and not by the UM.

The annual cost for training a veterinary student is 16,295 € and the annual tuition fee per student is 1,006 € per student. The University of Murcia tuition which is decided by the regional government is among the lowest in Spain.

### **2.1.2. Brief description of the budget (expenditures, revenues, balance) of the last 3 years**

The total budget for University of Murcia (UM) in 2017 was 213 mio € based upon 62 % as basic funding, 18 % from fees etc. and 20 % from other sources.

The FVETUM receives an annual funding from UM of 1.076 mio € (2014), 1.140 mio € (2015) and 1.199 mio € (2016) for management out of which the majority (around 90 %) is for running costs at the VTH and VTF. The roughly 10 % spent on non-VTH issues (e.g. departmental budgets) is budgeted as 30 % fixed income and 70 % variable income based on student attrition, student satisfaction, budgetary preciseness etc.

The total expenditure for the FVETUM has been around 12 mio €/y during the last 3 years.

Renovation or new investments is reviewed every year by the Infrastructure and Economic Affairs Committee of the Faculty Board based on needs for improvement commonly identified by the Dean's Office and the Departments. The Faculty has only limited capacity for common spaces (e.g. lecture halls, computer rooms), but most of the renovation and improvement is the responsibility of the Department Heads, and the managers of the VTH or VTF.

All staff salaries are paid by the UM. There is an imbalance between the salaries paid to veterinarians by the VTH Foundation and the salaries paid to staff members directly by the UM.

Regarding the VTH the budgetary process, it is quite different as it is financed by a foundation with UM owning the shares. The main input funding comes from the members of the patronage, and within them the University of Murcia is almost the only one who funds the VTH Foundation. UM provides the infrastructure (building, equipment) and additionally electricity, water consumption, heating, cleaning services and support staff.

The VTH Foundation paid 815,000 €, 884,000 € and 923,000 € respectively in the years 2014, 2015 and 2016, with a total budget for the VTH of 1,355 mio €, 1,553 mio € and 1,624 mio € for the same period.

The budget for each of the FVETUM departments is negotiated between the Department Heads and the Vice-Chancellor without any influence from the Dean to secure transversal budgetary coordination.

### **2.1.3. Brief description of the projected budget (expenditures, revenues, balance) of the next 3 years**

The UM expects to project an annual budget increase (4.6 % in 2017) for the following fiscal years based on negotiations with the regional government. And this projection is expected to be reflected in the FVETUM budget.

#### **2.1.4. Brief description of the planned or on-going investments**

A rather short list of planned investment in VTH and VTF is presented (e.g. cat waiting room, skills lab, quarantine refurbishing, MRI).

#### **2.1.5. Brief description of the process and the implication of staff, students and stakeholders in the development, implementation, assessment and revision of the budget of the Establishment**

The FVETUM Infrastructure and Finances Committee (Dean, faculty secretary and elected members of the Faculty Board) proposes a budget which is communicated to staff and students by the Department Heads and the Faculty Council.

#### **2.2. Comments**

It is a fact that the veterinary programme is among the most expensive programmes in universities e.g. due to mandatory

- running fully operational veterinary teaching hospitals at the highest professional level
- running an ambulatory service
- minimum numbers of patients that should be seen by students
- running a 24/7 service for large and small animals
- laboratory training in many subjects
- pathology training using specially designed facilities

The financial situation is restrained but at a stable level taking into account the local level of salaries and expenses.

The basic financial construction of the VTH is solid for the current level of activity and with virtually no OH to be paid by the patient-related income.

A strong, transparent and well planned overall and transversal strategy for the FVETUM financial situation would be helpful as a guideline for all staff members.

#### **2.3. Suggestions for improvement**

- The University of Murcia is strongly recommended to delegate full instructional power to the Dean with respect to finances (incl. budget) at the FVETUM (sub-standard 2.5. in partial compliance)
- There is an opportunity to increase service fees as the economic crisis is over to allow more funds to replace required aging equipment and to raise the salaries of non-UM staff members
- A strong, transparent and well planned strategy for the FVETUM financial situation should be constructed and implemented

#### **2.4. Decision**

The Establishment is partially compliant with sub-standard 2.5. because of the Dean's lack of instructional power over the FVETUM budget.

### **3. Curriculum (see Standards 3.1 to 3.10)**

#### **3.1. General curriculum**

##### **3.1.1. Findings**

*3.1.1.1. Brief description of the educational aims and strategy in order to propose a cohesive framework and to achieve the learning outcome.*

The degree in veterinary medicine provided by FVETUM and approved by Spanish authorities (Spanish Ministry in 12/11/2010) is a Master's level degree (Spanish Framework for Qualification for Higher Education, MECES, level 3). It is a five years curriculum consisting of 300 ECTS aiming to fulfil EU 2005/36 requirements.

The curriculum is not divided into Bachelor and Master Levels as in programmes following the Bologna Declaration (1999) in European higher education area. ANECA (Spanish Agency for the Evaluation of Quality and Accreditation), which is a member of ENQA, has verified and accredited the curriculum first time in 2009 and latest in 2017).

There is no tracking in the curriculum, and the volume of offered electives does not give opportunities to direct undergraduate studies to any specific field. The proposed 330 ECTS curriculum is designed to address that problem. However, extracurricularly (6 ECTS) students can do these based on their own interest via CRAU activities (Credits Recognized for University Activities, Spanish traditional student-department collaboration recognized by UM). About 40% of students use this opportunity.

The programme has been renewed 2010/2011 simultaneously with all Spanish Veterinary Degrees. These requirements are listed in Spanish in the ANECA approved "White book of the Veterinary degree".

*3.1.1.2. Brief statement if all EU-listed subjects are taught in the core curriculum to each student (independently of the tracking system).*

The curriculum has been accepted by ANECA (2017) with the aim to fulfil EU (2005/36) and national requirements.

*3.1.1.3. Brief description of how curricular overlaps, redundancies, omissions and lack of consistency, transversality and/or integration of the curriculum are identified and corrected.*

Annually curriculum is analysed on subject and department level. Semester coordinators gives their reports to vice dean of education and Committee for Academic Affairs analyse semester reports and recommend improvements to Faculty Board. Academic year 2016/17 has set up a Work-group for Coordination to improve vertical and horizontal integration.

*3.1.1.4. Description of the selection procedures of the Electives by the students and the degree of freedom in their choice (e.g. what happens when too many students select one specific track)*

Volume of elective studies in the total curriculum is only 2% (6 ECTS). Student have to select 6 ECTS out of offered 12 ECTS which limits their freedom to choose. If elective course is overbooked administration choose the students based on their academic marks.

*3.1.1.5. Brief description of the process and the implication of staff, students and stakeholders in the development, implementation, assessment and revision of the curriculum*

There are bi-annual meetings on subject level between students, semester coordinators and the Vice Dean for Education and at the department level to analyse and develop the teaching guide. At Faculty level, the Curriculum Committee has been dormant since the last major curriculum change.

### **3.1.2. Comments**

There is a lack of holistic and transversal view of the curriculum at the Faculty level (partial compliance sub-standard 3.2), although there is coordination on subject level within departments and between departments and administration.

Learning outcomes form a functional entity but are formalized heterogeneously between subjects. In some subjects they are clear and pedagogically mature in some subjects less so (i.e. written with several overlapping objectives and more emphasis on knowledge and remembering than analysing or creating synthesis) (partial compliance sub-standard 3.3).

The Faculty Curriculum Committee only functions during periods of curriculum renewal. However, the Establishment points out that the Academic Committee and the QA Committee develop the Curriculum Committee functions, since all these Committees are integrated by the same people. Additionally, the Faculty Working Group has been settled to stress the meaning of a coordinated horizontal and vertical (transversal) work between subjects.

The Faculty Curriculum Committee should be constantly functioning to oversee results from the semester and subject coordinators and secure transversal coordination of the curriculum (non-compliance sub-standard 3.4).

### **3.1.3. Suggestions of improvement**

- The Curriculum Committee should be revitalized and focused to increase QA and horizontal and vertical coordination between different subjects in the curriculum
- Ownership and control of the curriculum should move from departmental level to Faculty level.
- Disciplines should work with learning outcomes to build more cohesiveness and to streamline them to a pedagogically high level

## **3.2. Basic sciences**

### **3.2.1. Findings**

#### *3.2.1.1. Brief description of the theoretical and practical education in basic sciences*

In Basic sciences all types of teaching methods are applied (lectures, seminars, supervised self-learning, laboratory work, non-clinical animal work, clinical animal work). Basic subjects form 286 h (6.6%) and Basic Sciences 1,347 h (31.2%) out of a reported 4,320 tuition hours with different methods.

All the subjects of basic science are covered in curriculum.

### **3.2.2. Comments**

Limited number of clinical necropsies are performed and only very few students are involved with horse necropsies.

### **3.2.3. Suggestions of improvement**

- More communication between the veterinary pathology unit and VTH and teaching staff of forensic medicine in toxicology unit should be instigated to increase the number of diagnostic necropsies.

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

### **3.3.1. Findings**

#### *3.3.1.1. Brief description of the theoretical, practical and clinical education in Clinical Sciences in companion animals*

The curriculum in clinical science covers the following subjects in clinical sciences, obstetrics, reproduction and reproductive disorders, diagnostic pathology, medicine and surgery, including anaesthesiology, clinical practical training in all common domestic animals, preventive medicine, diagnostic imaging, state veterinary services and public health, veterinary legislation, forensic

medicine and certification, therapy in all common domestic animal species and propaedeutics of all common domestic animal species.

Each student has 908 hours in clinical subjects (including self-learning): 424 hours of lectures, 104 hours of seminars, 733 hours of animal clinical work, 167 hours of supervised self-learning, 54 hours of laboratory and desk based work and 86 hours of other activities. Clinical training with clients' pets and cadavers are used in different disciplines.

In anatomy, cadavers are used by both students and academics. Students use dogs for dissection and academics use dogs and other animals (whole or portions) for producing sections and plastinated specimens.

In special pathology cadavers are used by students for necropsy, however in rather limited number and often not representing clinical cases.

In general surgery (I), cadavers are used for some clinical practices.

Non-academic staff who assess EPT should sign an official agreement with UM (COIE) where understanding of the evaluation rubric is required. However, they do not receive direct training in assessment by the Faculty.

Likewise, the placement facilities should accomplish a number of conditions as established in the institutional agreement. However, those placements are not directly assessed by the Faculty.

*3.3.1.2. Description of the core clinical exercises/practicals/seminars in companion animals prior to the start of the clinical rotations*

During 1<sup>st</sup> and 2<sup>nd</sup> years, clinical topics are taken into account in most subjects. From the 5<sup>th</sup> to the 10<sup>th</sup> semester the teaching strategy is based on rotational teaching.

*3.3.1.3. Description of the core clinical rotations and emergency services (both intramural VTH and ambulatory clinics) in companion animals and the direct involvement of undergraduate students in it (responsibilities, hands-on versus observation, report writing, ..)*

From the 5<sup>th</sup> to the 9<sup>th</sup> semester students are assigned to 5 rotation groups on a two week basis. The 10<sup>th</sup> semester has groups of students assigned to rotation groups for a period of 15 weeks with 6 weeks in the VTH, 4 weeks in a selected placement, 2 weeks in an abattoir, 2 weeks in VTF and 1 week in the food pilot plant.

Each student undertakes a 24 h period per semester on emergency work in the VTH in either small animal or equine.

**3.3.2. Comments**

The clinical rotation time has been improved since the last visitation. However the period of time spent on a number of clinical rotations and working with actual clinical cases is limited within the time available when divided between dogs, cats and equine. There is only a short period spent in the emergency service.

Students are not involved in all parts of a clinical case build up e.g they do not take the clinical history of the animal nor are they involved in direct client communication or writing up patient notes and medical records. Students are not allowed access to clinical note writing on the computer system which is a beta version used only by the staff. Along 2018 it is expected to be fully implemented to be used by the students.

The indication that each student should have undertaken one neutering on the course would not indicate that competency could be reached. Every student should carry out at least one cat spay during the course. However, most surgery with student involvement is carried out on cadavers rather than actual cases where the experience is very different.

The elective programme is currently very limited to only four courses with none relating directly to small animals.

In clinical sciences, all relevant subjects are presented. The curriculum includes the subjects listed in Annex V.4.1 of EU Directive 2005/36/EC.

Students can accomplish 6 optional ECTS by enrolling into university activities, called CRAU, some of which are not related to veterinary medicine (sport and cultural activities, for ex.).

The EPT is part of the core curriculum though the standard state that this should complement rather than be instead of core curriculum work. This is non-compliance with sub-standard 3.6.

### **3.3.3. Suggestions of improvement**

- Students should be involved in all aspects of patient care and treatment including taking case histories, communicating directly with clients and writing medical records.
- Students should have increased time in the VTH.
- There should be consideration of the consistency of placements and formal teaching, and assessment training should be given to all those teaching students as well as those teaching within EPT placements to ensure assessments are consistent in all placements wherever they occur.
- Consideration of how clinics can be promoted more in the Murcia public to increase caseload should be made so that the student experience and number of cases seen remains adequate.
- EPT should not be used as part of the core clinical rotations.

## **3.4. Clinical Sciences in food-producing animals (including Animal Production)**

### **3.4.1. Findings**

#### *3.4.1.1. Brief description of the theoretical, practical and clinical education in Clinical Sciences in food-producing animals*

The majority of food-producing animal education is taught in animal production and welfare. The core subjects related to clinical sciences in food-producing animals are presented in Semester 9.

#### *3.4.1.2. Description of the core clinical exercises/practicals/seminars in food-producing animals prior to the start of the clinical rotations*

Core clinical exercises prior to start of rotations (p.17):

Without animal work:

Genetics

Nosology & physiopathology

General pathological anatomy (PBL clinical pathology, effect of *B. abortus*)  
Pharmacotherapy

With animal work:

Anatomy, histology, embryology  
Physiology  
Microbiology  
Immunology  
Parasitology  
Epidemiology, VPH (goat breeding units)  
Pharmacology

From the 5<sup>th</sup> to 10<sup>th</sup> semester the teaching strategy is based on clinical rotations and students are involved in clinical exercises such as farm visits (ruminants and pigs mainly), case studies, OOH (Out Of Hour), diagnostic data. From the 3<sup>rd</sup> y of the degree practical training is included, the inclusion of rotations earlier on gives the students more practical experience.

*3.4.1.3. Description of the core clinical rotations, emergency services (both intramural VTH and ambulatory clinics) and herd health visits in food-producing animals (i.e. ruminants, pigs and poultry) and the direct involvement of undergraduate students in it (responsibilities, hands-on versus observation, report writing, ...)*

Core clinical rotations

Farm animal clinics (21 hours cattle, pigs, small ruminants)

10<sup>th</sup> semester practicum (15 weeks):

6 weeks VTH (1 week ambulatory farm)

4 weeks selected placement

2 weeks abattoir

2 weeks VTF (porcine, bovine, ovine, caprine, rabbit poultry and equine)

1 week food industry

The ambulatory clinics list 5 days of farm animal clinics, but farm animal (practical) classes are also covered in other parts of the course (propaedeutics, pathology, reproduction).

*3.4.1.4. Brief description of the theoretical and practical education in Animal Production*

Paragraph 3.1.6. describes animal production teaching but most of the material is delivered in the VTF. Animal production includes nutrition, ethology, handling, ethnology, welfare, economy.

### **3.4.2. Comments**

All required topics are covered in theoretical teaching, the application of knowledge in a clinical setting (udder health, fertility at herd level) deserves more attention considering the role of farm animal vets in the current industry.

### **3.4.3. Suggestions of improvement**

- Include herd health management (applied epidemiology) in the bovine ambulatory rotation.

## **3.5. Food Safety and Quality (FSQ)**

### **3.5.1. Findings**

*3.5.1.1. Brief description of the theoretical and practical education in FSQ*

The Food Safety and Quality education to achieve the related main knowledge and skills in Food Technology, Hygiene and Safety is mainly delivered as described below, scoring in total for 24 ECTS (Table 3.1.1, p.12 curriculum). The main related subjects are described to be hygiene, security & food technology sem. 7&8 (9 ECTS); food hygiene, inspection & control sem. 8 (6 ECTS), food hygiene, inspection & control sem. 9 (6 ECTS), food safety sem. 9 (3 ECTS). The responsibility for the delivery of the above lies with the Dept. of Food Technology, Human Nutrition and Food Science.

The same dept. is also responsible for the degree course on food technology. Other related integrated aspects like relevant legislation and veterinary public health are taught in different subjects like risk analysis, epidemiology, zoonosis & public health.

The actual teaching hours are broken up into the subjects

- Inspection and control of food and feed, 162 hrs
- Food hygiene and food microbiology, 56 hrs
- Practical work in places for slaughtering and food processing plants, 122 hrs
- Food technology including analytical chemistry, 118 hrs

The teaching strategy is described including a “broad variety of modalities including theory lectures, seminars, problem based learning, evidence based medicine, laboratory and desk based work” and the main FSQ subjects are reported as ”non-clinical animal”, consequently good part of those items are mainly lectured via theoretical teaching, but the practical components are anyway provided.

“Description of the teaching in abattoirs and in premises for the production, processing, distribution/sale or consumption of food of animal origin” at the specific chapter, practical activities are described extensively and are of impressive impact in quantity and quality, both intra and extra mural. A good number of agreements with food processing plants, consultant companies and local competent authorities, are active, in order to provide hands-on experience to students in the variety of FSQ fields.

The clinical rotations under academic staff supervision sees the students exposed to a good number of days (22) in the food hygiene I and food hygiene II/cow, small rum/pig/rabbits placed under the FSQ & VPH (Table 3.1.5)

*3.5.1.2. Description (timing, group size per teacher,..) of the teaching in slaughterhouses and in premises for the production, processing, distribution/sale or consumption of food of animal origin*

Food Hygiene, Inspection and Food Control (I): Laboratory and desk work for food quality and microbiology, 20 hrs/student (group size 20/teacher); seminar work 6 hrs/student (group size 20/lecturer) and visits to the catering services of UM to familiarise students with GHP and HACCP implementation.

Food Hygiene, Inspection and Food Control (II): 4 laboratory work sessions (total 12h), 1 visit to abattoir (6h, mandatory), 1 visit to the fish central market (4h, mandatory) and 1 visit to the milking goat room. Laboratory activities on animal origin foods (group size <20) and slaughterhouse (group size <5).

Food Security: Laboratory and desk based work, 10 hrs/student (group size 20/ lecturer); seminar work 5hrs/student, (group size 20/lecturer) on HACCP planning.

Food Technology: 7 laboratory work sessions, (laboratory and food pilot plant) and 1 seminar (group size around 20); total 24 hrs/student.

In the Practicum students spend 2 weeks at the slaughterhouse and wide options are offered in different food industries. Available options encompasses not only food production of animal origin.

### **3.5.2. Comments**

As a whole, the commitment in the core subject of FSQ is impressive both on theoretical and practical sides; especially the practical work is relevant. The related teaching is adequate in terms of time and resources used. The practical teaching on plant origin foodstuff is very interesting and appreciated since it is not common in veterinary establishments; it is a good example of FSQ really having meaning. Whole food chain approach could be even enriched and emphasized by a completed integration with animal production teaching.

The level of connection formalised into agreements with FBOs and local competent authorities, to have access to standards and procedures for both own checks and official controls is satisfactory.

The inclusion in the choice for Practicum of premises for production of food of non-animal origin is an asset.

The relevant EU and national legislation is taught mainly within the theoretical training in the above described teaching and reinforced by the official veterinarians during Practicum.

Risk analysis, epidemiology and VPH teaching are mainly provided under the responsibility of Animal Health Dept.

The integration with animal production subjects such as animal nutrition, ethnology and animal handling, ethology, animal welfare and animal protection is partially realised but a better connection could increase the quality of teaching in a whole food chain approach, as well as with zoonoses and public health for a One Health approach.

### **3.5.3. Suggestions of improvement**

None.

## **3.6. Professional knowledge**

### **3.6.1. Findings**

#### *3.6.1.1. Brief description of the theoretical and practical education in Professional Knowledge*

Professional knowledge is scarcely described in the SER and the information is mainly available in only two tables and in various paragraphs. Deontology, legal medicine and regional, national and EU veterinary legislation is taught during the second semester and accounts for 3 ECTS, and under basic sciences, professional communication and ethics are taught for 18 and 6 hours respectively.

The different topics of professional knowledge are taught mainly during the first year and in collaboration with the Collegio, as far as ethics and professional behaviour is concerned. In the VTH and during extra-mural activities, student communication with clients and writing of medical records is not performed on a regular basis. At the VTF students receive a specific course on animal welfare legislation. Practice management and veterinary economics are presented to the students.

#### *3.6.1.2. Brief description of the organisation, selection procedures and supervision of the EPT*

*During the practicum (semester 10) students must spend 4 weeks in any area linked to veterinary activities (practice, research centre, academic institution,...)*

The Vice-Dean is in charge of the EPT with the support of the Centre of Orientation and Information of Employment (COIE), which deals with the administrative tasks, and the registration of external entities where EPT will take place.

Students are supervised by both an academic of UM, who evaluates the student report and a veterinarian who certifies the achievement of professional skills on site. Students can evaluate the EPT through their reports in which they can detail their expectations, the degree of achievement of their learning goals, their personal treatment, their professional involvement, etc. In case of problems, students can directly report to the Vice-Dean in charge of EPT.

*3.6.1.3. Description of the procedures (e.g. logbooks) used to ascertain the achievement of each core practical/clinical activity (pre-clinical, clinical, ambulatory clinics, EPT) and professional knowledge by each student (independently of the tracking system)*

For each hand-on activity carried out, students have to write reports, which build up their logbooks. Day-One competences acquired during the Practicum are assessed by internal academic tutors for VTH and VTF, and external tutors for EPT and APT based on these logbooks. The students also have to answer a questionnaire every week evaluating their knowledge and technical skills they have demonstrated on site as well as their attitude and behaviour. 60% of the final mark is the results obtained at the questionnaires and 40% at the student report.

On-line logbooks for Practicum have been developed since the 2016-2017 period.

### **3.6.2. Comments**

Literacy, data management and the employability of the prospective students are described in Appendix 4.

The criteria to select EPT sites by the UM and the COIE are not described clearly in the SER.

The agreement between the Establishment and the EPT provider is described and students must sign the agreement.

### **3.6.3. Suggestions of improvement**

- More advantage should be taken by having a FVETUM representative sitting at the board of College of Veterinarians of Murcia, for professional ethics and employability for example

### **3.1.4. - 3.6.4. Decision**

The Establishment is partially compliant with sub-standard 3.2 because of lack of a holistic and transversal view of the curriculum at the Faculty level and partially compliant with sub-standard 3.3. because learning outcomes form a functional entity but are formalized heterogeneously between subjects. The Establishment is partially compliant in sub-standard 3.4. because the Faculty Curriculum Committee should be constantly functioning to oversee results from the semester and subject coordinators and secure transversal coordination of the curriculum. The Establishment is not compliant with sub-standard 3.5. because of insufficient acquisition of core Day One Competences in clinical sciences, due to insufficient clinical rotation under the supervision of academic staff.

## **4. Facilities and equipment ([see Standards 4.1 to 4.15 in Chapter 3](#))**

### **4.1. Findings**

#### **4.1.1. Brief description of the location and organisation of the facilities used for the veterinary curriculum**

The core of the FVETUM infrastructures are 3 buildings, a Main Building divided into 3 units (A, B and C), the Veterinary Teaching Hospital (VTH) and the Veterinary Teaching Farm (VTF). The Main Building and the VTH are located at Espinardo Campus of the UM, in the Northern area of Murcia, 6 km from downtown and very close to the A-7 and A-30 highways. Access is rapid and easy (North, East and South accesses). Buses and trams are currently communicating the Espinardo campus with the city of Murcia, and the main cities in the neighbourhood. VTF is less than 2 km from the Main Building of the Faculty. As a whole the FVETUM occupies a total area of 175,330 m<sup>2</sup> which corresponds to the Main Building (Units A, B and C) 15,330 m<sup>2</sup> and the VTF 160,000 m<sup>2</sup>.

#### **4.1.2. Description of the adequacy for the veterinary training of the premises for:**

##### *-) lecturing, group work and practical work*

There are 16 lecture theatres for use by veterinary students, ranging from large (390 seats) to small rooms with 10 seats only. Theatres are located in the main building as well as the VTH and VTF.

The rooms for working groups are found mainly in the Main building. All are fully equipped with individual PCs, centralised printing and media system and smart blackboard. VTH has a computer room with free access. Other areas are also available throughout the various buildings. 32 rooms of varying size are available.

Practical work is carried out within the Departments and Teaching Units and this is mainly done as laboratory exercises. 41 different premises are used. There are also 2 surgical labs and a large animal and a small animal examination room as well.

##### *-) housing healthy, hospitalised and isolated animals*

Housing of healthy animals cover all the expected species of small and large animals as well as rodents, bees and exotics. Hospitalised cases are held in the VTH covering 11 boxes for horses, 15 cages for dogs and 5 for cats.

There will be 2 isolation boxes in equine as they are under construction at the present time. In the meantime, 1 stable within the Equine Hospital has been allocated for this use in case it is needed. There is a room with 2 cages for cats and a second room with 2 cages for dogs.

Quarantine facilities are available in the VTF for pigs (30), equine/cattle (4), small ruminants (24), rabbits (20).

##### *-) clinical activities, diagnostic services and necropsy*

The VTH holds the normal expected facilities:

Small Animal Area: lobby, large waiting rooms for dogs and a specific room for cats, 9 consulting rooms (2 internal medicine, 1 cardiorespiratory, 1 ophthalmology, 1 dermatology, 1 exotic animals, 2 surgery, 1 reproduction), 2 laboratories (clinical pathology and reproduction technology), 1 pharmacy, 1 anaesthesia room, 1 ultrasound room, 1 X-ray room, 1 film reading room, 1 ct room, 1 student general exam room, 5 surgery rooms (2 student and 3 regular surgery rooms), 1 procedures room (dentistry and endoscopy), sterilization area, hospitalization area, medicine and surgery animals' premises.

Facilities being used for EPT, except slaughterhouses, are not described nor checked by the Establishment or the team. There are around 200 choices for these

*-) diagnostic services*

The Pathology Service carries out pathological diagnostics of necropsies and biopsies. The facilities of the Pathology Service are one Necropsy Room, a Histopathology Laboratory and one Pathology Diagnostic Room, which serve for pathological diagnosis from necropsies and biopsies.

*-) FSQ & VPH*

FTPP of the FVETUM is equipped with a complete line for dairy production and a complete line for meat production. The FPU is also equipped with a piston filler, double sealers, evaporator, rotavapor, incubation chambers, freeze dryer, vacuum/modified atmosphere packaging equipment, convection/steam oven, straight line exhaust box, autoclaves, retail displayers, and general equipment such as baths, working tables, washing machine, freezers and refrigerators. In addition, we have an experimental kitchen supported with the proper equipment.

Laboratories of Food Science and Technology Department are equipped with instruments and reagents for the evaluation of food composition.

*-) study and self-learning, catering, locker rooms, accommodation for on call students and leisure*

The FVETUM main building has a study room with 128 seats. The VTF also has a room with 35 seats available for student. WIFI access is available all around the Faculty premises. The University Library of the Campus is a building where there are 268 seats for study, 10 working rooms. Any student can use any room available.

The FVETUM has a canteen located in the main building, with 70 seats and an outdoor terrace with another extra 40 seats. Fresh cooked menus are served daily. Vending machines are also available in the hall of the FVETUM Main Building, as well as in the rest area of the VTH.

Students' lockers at FVETUM are distributed in the corridors in the Main Building (Unit A, at Ground floor toward Unit C, at First floor before Lecture Room 1.1.). Students manage the distribution of lockers under the supervision of the Secretary of the FVETUM, and covers mainly to students of the last 3 academic years. Lockers for proper dress are managed by the different Departments (anatomy and pathology) and services (VTH, 2 for staff and 1 for students, and VTF, 2 for students, 2 for staff and 2 in the quarantine area), including shower rooms, where needed (VTF).

Accommodation for on call students is offered for 4 on call students in two bedrooms with two beds each. Besides, accommodation is also available for students in the VTF with a maximum capacity of 16 students. No further than 10 min walk is the Hall of Residence (Apartamentos Campus) where students have fully equipped rooms available for rent.

Students have rest and meeting rooms, a refectory, an auditorium, exhibition areas, external theatre, bank, etc. Centro Social is run by the Students Union and hosts the headquarter of the Information Service for Students at the UM.

**4.1.3. Description of the adequacy for the veterinary training of the vehicles used for students transportation, ambulatory clinic, live animals and cadavers transportation**

Students make their own way to practical training e.g. to the VTF.

#### **4.1.4. Description of the adequacy for the veterinary training of the equipment used for teaching purposes and clinical services**

The teaching facilities and clinical services are well provided for and adequate for purposes. The University has a plan for maintenance of facilities. All equipment is depreciated within 5 year.

#### **4.1.5. Description of the adequacy of the biosecurity rules in the Establishment**

The FVETUM follows the general rules of the UM, which has the Service for Labour Risk Prevention, which is charged with managing all the aspects of risk prevention, including training for staff and students, and the removal of biosanitary waste and hazardous chemicals. X-ray protection is correctly implemented in both small animal and equine sections of the VTH.

In the academic year 2016-17, the FVETUM has begun the Centre Working Group where one of the lines of work is to reinforce and harmonise the biosecurity protocol of FVETUM. To raise awareness amongst students, from the 1st year, they receive specific mandatory training on basic risk prevention through a programme given by the supervisors of this issue both, in the FVETUM and in the University. Students are trained also on biosecurity procedures prior to any practical training activity.

The main pharmacy was well ordered and the controlled drugs books up to date and monitored. However out of the main pharmacy, a number of pharmaceutical products were found to be out of date or not marked with their opened date.

Some controlled drugs were being kept in unlocked stores e.g. the 'equine store'. Some locks were not of the standard expected for controlled drugs.

Utensils for eating and drinking were in the same area as drugs were being stored and made up.

#### **4.1.6. Brief description of the process and the implication of staff, students and stakeholders in the development, implementation, assessment and revision of facilities, equipment and biosecurity rules of the Establishment**

Facilities and equipment renovation or acquisition for teaching or working groups go through the Faculty (Dean's Team) to assess and the proposition to the FVETUM Committee of Infrastructure and Economic Affairs or the QA Commission, and from here to the Faculty Board for approval. These investments are either in the FVETUM budget or they apply to the UM. For practical training, the investment is decided by the Departments' Councils based on their needs. In some cases, or special projects, the Departments join their requests to the Faculty when these would impact the global teaching process (more students or subjects affected) and also mainly due to the high costs. The communication is made at the different decision bodies (Committees, Councils or Board), implemented, assessed and revised by the different Departments and the Faculty.

The VTH is open 24/7 365 days a year. Academic staff are in the VTH teaching in the mornings Monday to Friday. At all other times, the teaching of core subjects like ER is carried out by hospital staff (employed by the Foundation) and not UM staff.

## **4.2. Comments**

Teaching at all times in the VTH should be carried out by FVETUM staff or under strict supervision and responsibility of FVETUM staff. This is a partial compliance of sub-standard 4.8.

Facilities are adequate for the size of the years and to allow both lecturing to the whole course and enough small group teaching and study areas.

The number of cages and stables for hospitalisation of small animals is very low taking into consideration the number of academic teaching staff, cases seen and the offering of high quality clinical service.

The Establishment provides an ambulatory service for farm animals that carries out routine field work but they do not undertake routine herd health planning. This is a partial compliance of sub-standard 4.14.

Food and drink should not be taken into any of the clinical areas. This is a partial compliance of sub-standard 4.6.

All legal requirements regarding controlled drugs should be adhered to in every situation. Out of date drugs should be discarded and a proper routine of checking should be in place. This is a partial compliance of sub-standard 4.6.

EPT facilities are part of the Practicum and therefore core placements are not described.

#### **4.3 Suggestions for improvement**

- Academic staff should be in charge of teaching at all times. Having Hospital staff as adjunct to the UM would be a way to achieve this.
- Routine herd health planning should be introduced into the teaching through the field ambulatory service.
- Evaluate the inclusion of herd health management (fertility performance, udder health, lameness) when on ambulatory clinics.
- All drugs should be stored following the legal requirements of the country within properly locked cupboards.
- Food and drink should be removed from areas with drugs.
- Consider building more kennel space to allow for expansion of the services offered in the VTH.
- A replacement system for drugs should be put into place.

#### **4.4. Decision**

The Establishment is partially compliant with sub-standard 4.6. because food and drink should not be taken into any of the clinical areas and all legal requirements regarding controlled drugs should be adhered to in every situation. Out of date drugs should be discarded and a proper routine of checking should be in place. The Establishment is partially compliant with sub-standard 4.8. because teaching at all times in the VTH should be carried out by FVETUM staff or under strict supervision and

responsibility of FVETUM staff and partial compliance of 4.14 because the ambulatory service for farm animals should also undertake routine herd health planning.

## **5. Animal resources and teaching material of animal origin ([see Standards 5.1 to 5.6 in Chapter 3](#))**

### **5.1. Findings**

#### **5.1.1. Brief description of the global strategy of the Establishment about the use of animals and material of animal origin for the acquisition by each student of Day One Competences**

Clinical training is mainly supported by VTH with the aim to present small and large animal cases and balance the possible imbalance between species. The 1<sup>st</sup> opinion SA clinic works 5 afternoons/week and there is a 24/7 emergency service. In addition, new units have developed; CT, stem cells, minimally invasive surgery in cardiology, frozen canine semen exchange. The development of these units has led to an increase in 1<sup>st</sup> and referral cases.

The caseload in farm animal is challenging due to the urban location of FVETUM. Because of this large animal cases are not presented in the VTH. An increase in extramural teachers in the ambulatory service is making sure that sufficient large animal cases are encountered by students. The teaching farm is also a strategic pillar in food animal production training.

Only 12.5% of cases are centred around population medicine, 87.5% is individual animal medicine. The ambulatory clinic delivers a 100% 1<sup>st</sup> opinion service. Population medicine was predominantly taught around pigs. However, at the VTF, the visitation team observed a student team engaged in herd health management of the goat herd at VTF. The use of whole herd investigation, analysis and health & production management was limited in the bovine ambulatory clinic. The farms were not visited as no teaching was ongoing during our visit, however, conversation with the contracted veterinarian indicated the majority of time was spent on improving common bovine veterinary skills on the individual animal.

Bones, prosections or plastinated specimens from various species are used. Whole body cadavers used for teaching are mainly dogs. They are acquired in collaboration with the Zoonosis Service of the City Council of Murcia. Equine material comes mainly from private donations and local abattoirs. Food animal species (ruminants, poultry, pigs) are obtained from a local abattoir. Embryological specimens are obtained from private vets and abattoirs. All material is incinerated after use by an external company. The quantity of material used is sufficient.

VTF:

Swine: most visited, collect bloods, semen, boar management, reproduction

Goats: milking, feeding, reproduction, milk quality, milk hygiene, podiatry, herd health management

Sheep: husbandry, clinical evaluation, worming, shearing, reproduction

Poultry: nutrition, ethology, welfare

Dairy/beef: clinical examination, feeding, reproduction, milking, podiatry

Rabbit: reproduction

VTH & Ambulatory: Medical and surgical emergencies (24/7 for companion animal and equine), ambulatory carried out by 3 part-time teaching associates which are private practitioners of 'recognized standing'.

Learning based on animal models: there are models available although limited and could be expanded

to provide students with more 'practical' experience before starting clinics.

### **5.1.2. Description of the adequacy for the veterinary training of the enrolled students of:**

*-) the number and diversity of cadavers and material of animal origin used in anatomy, necropsy and FSQ;*

There is a shortage of equine cadavers for necropsy practice, due to cost implications of disposal which needs to be carried by the owner. There is discussion at university level to cover the incineration cost to encourage more submissions.

*-) the number and diversity of healthy live animals used for pre-clinical training;*

Diverse range of animals from bees to equine and cattle (Table 5.1.2., p.47), although the breadth of species students are exposed to with regards to exotics is limited due to lack of staff members to cover exotics species.

*-) the number of visits in herds/flocks/units of food-producing animals;*

Cattle, pigs and small ruminants farm visits are well presented, as well as a range of visits to other type of farms. Although the number of farms and animals reported in the SER are sufficient, we have concerns about the actual active participation of students in clinical rotations; there is good opportunities on the VTF to work with healthy species, however, there is limited opportunity to work on actual cases (herd or individual). This may be due to a lack of time in the programme to expose students to practice skills (pregnancy palpation, dystocia etc.) due to short teaching days/holiday time, as the teachers we saw and spoke to were dedicated to give students a good opportunity.

*-) the number and diversity of patients examined/treated by each student;*

There is a good diversity of patients following the Tables on p.48 in the SER. The actual interaction (examining/treatment) we observed or gathered from speaking to students, was ranging from limited to good (on occasions 15 students with 1 dermatology case, some students reported to have only performed 1 rectal examination on a cow while others had many more opportunities, sometimes students report to be able to take a history however this was dependent on the professor/situation and was not a standard procedure every student was expecting).

*-) the balance between species, between clinical disciplines, between first opinion and referral cases, between acute and chronic cases, between consultations and hospitalisations, between individual medicine and population medicine*

The balance between species is adequate although there is a bias towards small animal cases. The different disciplines are all presented, however there is a bias towards individual animal medicine as population/herd health medicine (shelter medicine but also in the food animal related herd health management) is limited in the clinical rotations. These areas are covered theoretically in the first years of study, however the clinical application for i.e. bovine farm animal practice before graduation was limited.

### **5.1.3. Description of the organisation and management of the VTH and ambulatory clinics**

#### **VTF:**

The management of the VTF is based on a management team (MT) of two academics. Teaching and other strategic activities are ruled by the Governing Council (GC) composed of the dean and representatives of the different units. Minor decisions are made by the MT, major decisions are subjected to the GC.

Teaching activities are supervised and approved by the GC. The MT writes an annual report. Several committees support the decision of the GC and these are reported to the Faculty Board.

**VTH:**

A Board (director, manager and secretary) is responsible for the daily management of the VTH. The VTH Council is composed of the board, the Rector of UM, Vice-rector of Teaching & Planning, Dean, Mayor of Murcia and several representatives of Murcia's regional government, the President of the Veterinary College of Murcia and two representatives of the Faculty Council. The VTH Council meets twice a year. There is a small animal, large animal and ambulatory clinic. Both the large and small animal clinic deliver an OOH service, managed by interns who call on academic staff if needed. The mobile clinic is run by private practitioners, emergency cases are referred to the VTH.

**5.1.4. Description of the group size for the different types of clinical training and of the hands-on involvement of students in clinical procedures in the different species**

Group size: Students are distributed in modules (5 modules with a mean of 20 students each per year in the last 3 years. Student to teacher ratio is never higher than 1:5 in clinical practice and 1:10 in laboratory practice. The ratio in the ambulatory clinic is 1:2-4.

Hands-on involvement: students are directly involved in both VTH and extramural clinical procedures. The team did not believe that all students in the clinics made sufficient use of or took the opportunity to be involved in all the examples of hands-on involvement presented in the SER, in particular:

First opinion consultations

Effective communication

Record keeping

Hospitalization & emergencies

Perform first aid

Treatment plan

Operating theatre

Participate in surgery and preparation of surgery

**5.1.5. Description of the patient record system and how it is used to efficiently support the teaching, research, and service programmes of the Establishment**

Computerized software is available since May 2017, its implementation is still on-going. The importance of implementing good record keeping was highlighted during our visit, when aiming to match the cases presented in the SER with actual cases in the hospital. For student learning it is important to have access to cases in the record system as they often will not be able to follow a case during their clinics (as the patient i.e. moves from intake to anaesthesia to imaging to surgery and hospitalization). While they have the opportunity to review cases they worked on, the current computerized system has not been fully implemented for students and staff to engage with.

**5.1.6. Description of the procedures developed to ensure the welfare of animals used for educational and research activities**

This is regulated by the Spanish transposition of Directive 2010/63/EU (Protection of animals used for scientific purposes). All procedures need to be approved by the institutional ethics committee and the competent authority.

**5.1.7. Brief description of the process and the implication of staff, students and stakeholders in the development, implementation, assessment and revision of the number and variety of animals and material of animal origin for pre-clinical and clinical training, and the clinical services provided by the Establishment**

The approximate number of animals required is determined by the teacher responsible for the subject. This is established 5-6 months in advance. The programme is discussed and approved by governing bodies such as the Department Council, VTH Board and Faculty Council. This programme is discussed (SER p. 46) annually by the Committee of Assessment and Curriculum Improvement, which is responsible for preparing the report for the Faculty Council. Academic staff, support staff and students are represented in the governing bodies.

**5.2. Comments**

The number and variety of animals for clinical training, cadavers for anatomy and pathology should be increased. This is a partial compliance with sub-standards 5.1. and 5.2.

Practical training at external sites is not under direct academic supervision. This is a partial compliance with sub-standard 5.3.

Students were not active participants in the workup of patients on all occasions. Students do not always participate in history taking and direct contact with animal owners. This is a partial compliance with sub-standard 5.5.

Student group size in consult rooms and use of student time (start/finish time, holidays) considering the current case load are a limiting factor when aiming to achieve this standard. The current patient record system is not effective in retrieval of data to support teaching, research or service programmes; however we are aware work is ongoing in this area and measures are in place to improve the situation. Therefore there is partial compliance in sub-standard 5.6.

Once fully implemented, students should have full access to the computer system.

The use of external farms and contracted veterinarians is well organised, the inclusion of herd health skills as outlined above are recommended to be included in that part of teaching, as it creates an excellent opportunity to learn about the population level skills a food animal vet currently needs to add value to their (client's) business.

**5.3. Suggestions for improvement**

- The number and variety of animals for clinical training, cadavers for anatomy and pathology should be increased.
- Practical training at external sites should be under direct academic supervision.
- Students should be active participants in the workup of patients on all occasions. Students should participate in history taking and direct contact with animal owners.
- Evaluate the most efficient way to use the caseload to provide more actual hands-on experience.
- The patient record system should be effective in retrieval of data to support teaching, research or service programmes

**5.4. Decision**

The Establishment is partially compliant with sub-standards 5.1., and 5.2. because the number and variety of animals for clinical training, cadavers for anatomy and pathology should be increased. Sub-standard 5.3. is partially compliant because practical training at external sites is not always under direct academic supervision. Sub-standard 5.5. is partially compliant because students do not always participate in history taking and direct contact with animal owners. Sub-standard 5.6. is partially compliant because the current system is not effective in retrieval of data to support teaching, research or service programmes.

## **6. Learning resources ([see Standards 6.1 to 6.4 in Chapter 3](#))**

### **6.1 Finding**

#### **6.1.1. Brief description of the main library (facilities, equipment, staff, (e)books and (e)periodicals, software for databases)**

UM have centralized University Library, previous FVETUM library is used as a study room also there is a library at the farm (VTF). University main library is close to the main building of FVETUM. University Library is sufficiently staffed. University policy is to offer textbooks to students and staff. Students have satisfied access to e-books. Printed textbooks in different editions are available.

#### **6.1.2. Description of the available electronic information and e-learning courses, and their role in supporting student learning and teaching in the core curriculum**

All the electronic information and e-learning courses are available to students and staff.

#### **6.1.3. Description of the accessibility for staff and students to electronic learning resources both on and off campus**

Free access computer room (total 75 seats) and WiFi in the Campus is available with VPN connections outside of the Campus. Virtual classroom is a portal for several programmes and is offered for all students and staff.

#### **6.1.4. Description of how the procedures for access to and use of learning resources are taught to students**

The library gives introductory and other courses to students. Library staff is involved in postgraduate studies also.

#### **6.1.5. Brief description of the process and the implication of staff, students and stakeholders in the development, implementation, assessment and revision of learning resources**

The Library Committee decides on new purchases.

### **6.2. Comments**

Lack of electricity plugs in lecture room challenge students using their own laptops and I-pads during lectures.

### **6.3. Suggestions for improvement**

None.

### **6.4. Decision**

The Establishment is compliant with ESEVT Standard 6.

## **7. Student admission, progression and welfare ([see Standards 7.1 to 7.15 in Chapter 3](#))**

### **7.1. Finding**

#### **7.1.1. Brief description of the admission procedures for standard and for full-fee students**

The admission procedure for the veterinary education at FVETUM is decided by UM and follows regional legislation.

All applicants including international students should hold a Baccaureate certificate and participate in the regional University Entrance test (EBAU). The test consists of two parts: a general part that is compulsory for applicants at UM and an additional and more subject orientated part that applicants applying for entrance into educations with limited student capacity has to fulfil. This allows applicants for these educations, including the veterinary programme to improve their admission score. Applicants are ranked according a calculated admission score based on their Baccaureate grade points and the admission test scores. For applicants for the veterinary education, it is necessary to engage in the voluntary part of the entrance test in order to obtain test scores that are high enough to assure entrance to the veterinary programme.

Five % of student places are reserved for disabled students that are characterized as more the 33% disabled according to a University of Murcia procedure. These students are as regular students selected on the basis of their grade point marks and test scores.

FVETUM does not have full-fee students.

Admission procedures are described in details and public accessible on the university website, eg. academic requirements and application procedures, selection procedures, appeal procedures and specific admission rules for disabled applicants.

Hence, the admission procedures form a fair and transparent process for selecting students for the veterinary programme based on their upper secondary school performance and results of a general university defined test. FVETUM has neither influence on the content of the general part of the EBAU-test, nor the specific additional part.

#### **7.1.2. Description of how the Establishment adapts the number of admitted students to the available educational resources and the biosecurity and welfare requirements**

FVETUM admits 90 students per year. This number has been adapted to the current resources and is approved by UM and the Spanish accreditation body ANECA.

All first year students are allocated to an academic tutor (3-5 students per tutor). The tutor organises at least to meetings with the students, one at the beginning and one the end of the first study year. The outcomes of these meeting are reported to the ViceDean for Education, and fed into the QA-circle via the QA-committee.

New students are also introduced to biosecurity procedures within the introduction “Welcome and Training Week”, during which they are directed to familiarize themselves with the School’s Safety

and Biosecurity procedures on the university website. Furthermore, students are introduced to biosecurity procedures within the first week of each semester subjects.

### **7.1.3. Description of the progression criteria and procedures, the available remediation and supports, the rate and main causes of attrition**

Students have to pass at least one of the course subjects within their first year of study. Furthermore, they must have passed a minimum of 70% of ECTS to be enrolled in EPT, rotations and graduation thesis, and cannot present their graduation thesis until they have passed all the subjects of the Degree.

The official drop out rate within the last 3 years is 6.7%. The average study time from enrolment to graduation is according to the Dean 5,6 years. The Dean and the semester coordinators informed at a meeting on November 22<sup>nd</sup> that students of all years get delayed. The major reasons for attrition is according to the SER unfulfilled expectations, poor performance and/or rising tuition fees.

Attrition is monitored as a part of the QA-system. Students' study performance eg. exam results, delays are discussed every semester in relation to the coordinating meetings between semester coordinators, student representatives and Vice-Dean and subsequently in the QA-commission.

Since the implementation of the new curriculum 2010/11 an increased number of students have been delayed. Consequently, relative low numbers of students graduated in 2014/15 (31 students) and 2015/16 (63 students; see table 7.1.3). However in 2016/17, 90 students has graduated.

### **7.1.4. Brief description of the services available for students**

A comprehensive variety of student services are provided by UM and FVETUM. For veterinary students, these services are coordinated by the Office of the Vice-Dean for Students and International Affairs in close collaboration with the Student Secretary Office responsible for admission, registration etc.

The services include Mobility Office, pedagogical student support, Practice and Employment, Integration of People with Disabilities, Student Information Service, University Ombudsman etc (se SER, page 56).

### **7.1.5. Brief description of the process and the implication of staff, students and stakeholders in the development, implementation, assessment and revision of the admission procedures, the admission criteria, the number of admitted students and the services to students**

Procedures and criteria for admission of students into the veterinary programme are subject to the general admission procedures and regulations of UM, and not specifically adapted to the veterinary programme. These admission procedures have been approved from the Ministry of Education, Culture and Sports and the Autonomous Government of Murcia.

## **7.2. Comments**

None.

## **7.3. Suggestions for improvement**

None.

## **7.4. Decision**

The Establishment is compliant with ESEVT Standard 7.

## **8. Student assessment (see Standards 8.1 to 8.9 in Chapter 3)**

### **8.1. Findings**

#### **8.1.1. Brief description of the student's assessment strategy of the Establishment**

The overall assessment strategy (programme) for the veterinary degree is laid out in the curriculum, which is approved by the Faculty Council and verified by ANECA. Students' knowledge, skills and competences are assessed in relation to their performance at the individual courses. These formative and summative exams are organised and supervised by the respective department.

No final degree exam exists for the veterinary degree programme at FVETUM. No external examiners are used at FVETUM, but oral exams are public.

Information about assessments, eg. exam dates and location, assessment methodology and criteria and requirements for passing the exams, are described and available for students on the faculty webpage at least 2 months prior to start of semester.

(see: <http://www.um.es/web/veterinaria/contenido/estudios/grados/veterinaria/2016-17/guias>)

The QA-system at FVETUM includes monitoring, planning and procedures for improvement of assessments on the basis of acquired information.

#### **8.1.2. Description of the assessment methodology to ensure that every graduate has achieved the minimum level of competence, as prescribed in the ESEVT Day One Competences**

A variety of assessment methods are used at the subject exams.

At the basic and preclinical subjects, students' theoretical knowledge and basic practical skills are assessed in relation to the supervised theoretical and practical exercises and assignments, e.g. practical performance, written reports, oral presentations and written mid-term and final written assessment. These skills include basic Day 1 competences.

At the clinical and paraclinical level, theoretical knowledge is assessed by final written exams. The practical clinical/paraclinical skills of 4<sup>th</sup> year students are assessed by direct observation of students performance. During "PRACTICUM" rotations, logbooks, direct observations of practical students performance by tutors and portfolio reports form the basis for the assessment of students' Day 1 competences.

#### **8.1.3. Description of the processes for providing to students a feedback post-assessment and a guidance for requested improvement**

Students receive post-assessment feedback if they ask for it. The feed-back is given at specific dates, which are published when exam results are present. Exam results are not finalised until students have had the opportunity to receive this feedback.

If students are not satisfied with the assessment they can complain directly to the Dean via on-line template on the faculty web-site.

#### **8.1.4. Brief description of the process and the implication of staff, students and stakeholders in**

**the development, implementation, assessment and revision of the student's assessment strategy.**

Teachers responsible for the coordination of the subject syllabi meet with student representatives during and the end of the semester to evaluate the teaching programme including assessment. These meetings chaired by the Vice-Dean for Education and are a part of the QA-system. The outcomes of the meetings are reported and subsequently discussed in the Department Councils and the Quality Committee as part of the annual revision of the teaching guides. The proposals for revised teaching guides including the assessment programme are forwarded to the Faculty Board for final approval.

**8.2. Comments**

None.

**8.3. Suggestions for improvement**

None.

**8.4. Decision**

The Establishment is compliant with ESEVT Standard 8.

**9. Academic and support staff ([see Standards 9.1 to 9.6 in Chapter 3](#))**

**9.1. Findings**

**9.1.1. Brief description of the global strategy in order to ensure that all requested competences for the veterinary programme are covered for both academic and support and that they are properly qualified and prepared for their roles**

All AS are divided into 'Areas of Knowledge' and these are linked to the subjects that make up the curriculum. All teachers involved in the different subjects must be accredited by ANECA (or regional agencies) in the corresponding subject areas, including training and research activities. In each subject of the programme, the lessons are assigned to the teachers that are specialised in the different topics. The number of AS relates to the teaching needs based on the number of credits that can be taught(capacity) as the sum of all credits that all professors are able to teach which has to be balanced with the teaching load that is calculated by the number of theoretical and practical credits and based on the number of students to be taught. If there is an imbalance, the Department should request the University for a new AS to fill the teaching duties required. This request is analysed by the University and various committees within the action plan for the University and its budget. The University Council has the final say in granting this or not.

All academic staff must have a PhD and may have a specialist qualification. All teachers involved in different subjects must be accredited by the National Accreditation Agency (ANECA) in their corresponding subject areas including training and research areas.

Every 5 years UM evaluate the global teaching activities and if positive this is reflected in the tenured AS salaries. All AS at the FVETUM have been awarded with the teaching evaluation award named "quinquenio". Research is a national evaluation (by the National QA Agency for Research) performed on voluntary based and every 6 years.

Tenured and non tenured AS are evaluated by the students every second year. Support staff have their training needs assessed yearly and a training schedule is designed to fit those needs.

### **9.1.2. Description of the adequacy of the number of academic and support staff in the different departments/units with the number of students to be taught**

The overall number of teaching staff and supporting staff is adequate.

It is expected that 2 academic staff of 3 departments will retire within the next 3 years, and that all will be replaced. All areas are evaluated for new positions based on different UM criteria, mainly based on the teaching capacity (number of ECTS teaching load per academic staff, with an average of 24 ECTS) and the teaching load (calculated on the number of ECTS per subject and calculated on theoretical and practical teaching) ratio.

A number of non-academic staff are employed by the VTH and play a significant role in teaching the students as do the interns and residents.

### **9.1.3. Brief description of the process and the implication of staff, students and stakeholders in the development, implementation, assessment and revision of the strategy for allocating, recruiting, promoting, supporting and assessing academic and support staff**

There is a bureaucratic process for replacing staff at all levels and there has been a freeze on replacements in the past few years. The promotion pathways are clearly visible for all staff. New positions are becoming available with some retirements and recent loosening of the freeze. The VTH can recruit its own veterinarians if required. There is a low percentage of support staff in a number of areas e.g. nursing support in the VTH.

## **9.2. Comments**

With the academic staff generally only being in the Hospital until 2.30 pm, many of the teaching duties out of hours and in equine are carried out by VTH staff. However these are not recognised as teachers by UM. Due to the establishment of the Foundation, and the dichotomy that these staff are used in the ratios as teachers but not contractually by their conditions of work and salary. These points need to be addressed. This is partially compliant with sub-standard 9.1. and 9.3.

Although UM makes available teaching education to all staff, not all academic staff are trained in assessment and teaching methods.

And VTH staff employed by the foundation does not have access to UM or FVETUM training activities. This is partially compliant with sub-standard 9.1. and 9.3.

## **9.3. Suggestions for improvement**

- Formal training should be in place for all staff involved with teaching.
- Review the status of the VTH teachers within the context of providers of much of the teaching of undergraduates.
- Consider promoting professional development among the SS and organising a plan of professional education for the SS.
- Training for all teachers whether academics or not should be available at equal terms.

## **9.4. Decision**

The Establishment is partially compliant with sub-standard 9.1. and 9.3. because formal training also on a continued basis should be in place for all staff involved in teaching.

## **10. Research programme, continuing and postgraduate education ([see Standards 10.1 to 10.4 in Chapter 3](#))**

### **10.1. Findings**

#### **10.1.1. Brief description of how the research activities of the Establishment and the implication of most academic staff in it contribute to research-based undergraduate veterinary education**

At FVETUM research is one of the 3 main duties given to any Academic Staff (AS), along with teaching, and extension-assistant. It is also regarded as essential for AS career promotion. Research staff are arranged into Research Groups (RG), at the moment 17 in the Establishment. The entire tenure staff hold a PhD Degree. The UM launches a call on yearly basis to score and rank the RGs of Faculties; as the other Faculties FVETUM is scored and its position ranks usually high. It is reported that for the period 2014-2016, FVETUM affiliated publications in JCR indexed journals, counts as 454 and an average of 20 students/year received support to conduct their PhD training, and 22 PhD thesis/year have carried out their PhD thesis under the direction/supervision of FVETUM AS, while the income for research grants obtained was 6,289,322/year.

FVETUM has a Vice-Dean appointed to postgraduate studies, research and innovation. He also supervises the accomplishment of the outcomes regarding the Day-One competences, and develops a strategic plan where research is given 2 objectives, 2 strategies and 8 actions.

The number of research staff of the FVETUM equals in total 399 units

#### **10.1.2. Description of how the postgraduate clinical trainings of the Establishment contribute positively to undergraduate veterinary education and how potential conflicts in relation to case management between post- and undergraduate students are avoided**

Currently there are two residency training programme approved by different EU boards of specialists.

Postgraduates collaborate in the practical training of undergraduate students in different subjects during degree, especially in the 5<sup>th</sup> academic year during clinical rotations at VTH. Besides the current number of Specialists and Diplomates of the European Colleges among the academic staff is 23 and the number of teachers accredited by the Spanish Small Animal Veterinarians Association (AVEPA) is 14. The number of postgraduates on clinical trainings at VTH nowadays is 12 (2 in residency programmes and 10 internships).

#### **10.1.3. Brief description of the process and the implication of staff, students and stakeholders in the development, implementation, assessment and revision of research, continuing and postgraduate education programme organised by the Establishment**

The SER describes that all veterinary students actively participate in research through their graduation thesis project, which includes an experimental research, either a laboratory experiment, a clinical study, an analytical activity or a critical review.

Students report to be aware of the importance of scientific research and lifelong learning along with the essential methodology of scientific research, along with the use of resources and methodology related to bibliographic search. They are also given an opportunity to attend different events where science based approach is promoted.

During a yearly conference library staff explain how to use the operation and resources of the scientific library of the UM. Graduation Thesis is mandatory in Spain since 2014. It includes an experimental research part, either a laboratory experiment, a clinical study, an analytical activity, or a critical review. At FVTUM the Graduation Thesis is always produced by students under the supervision of an AS (1 or 2).

As for research programme students are given the opportunity to join research programme on a non-compulsory basis by non-compulsory research programmes; internship, where the collaboration is recognized as elective ECTS (CRAU) - 60 students/year, collaboration scholarships, granted by Ministry of Education, Science and Sport (5 /year in the last three years), internships at research centres (EPT) (180 student in the last three years).

UM runs research programmes like undergraduate scholarships to participate in RDI and Research Initiation Grants dedicated either to students of last year and graduated from UM or to those who are in possession of the official title of Degree or equivalent or Master by UM. It is reported that in the last 2 academic years, the UM has financed 11 students in the FVETUM by this programme

As for continuing education programme the SER describes that four official master programmes (OMP) are taught at FVETUM by academics and professionals with good experience (Table 10.1.3): the different MSc offered are reported to be popular and fully attended, with more applicants than places available.

FVETUM has relationships with public and private veterinary institutions and associations, such as cultural associations, Professional Board and National Health Service. One of the objectives of these relationships is the organization of continuing education seminars and seminars for postgraduates. Private-public partnership is realised within some specific research projects.

FVETUM has a specific policy to plan, communicate, implement, assess and revise the research, continuing and postgraduate education programme via specific Academic Commissions and Research and Postgraduate Committee.

## **10.2. Comments**

FVETUM shows a good degree of research activities, where the research performed by AS integrated with the veterinary degree programme through a good level of research-based teaching. Students are taught about and have the opportunity to be exposed to scientific methods and evidence based medicine approach, since the early career steps. The direct involvement in research programme is done on individual basis and sporadically achieved.

Impact of research results is evident and the students are clearly given the opportunity to be aware of that. PhD courses are widely covering and well organised. Some PhD fellows are attending with no financial support.

CPD programmes and opportunities for the different categories of teaching and support staff is satisfactory.

- CPD programme to postgraduates are set according to assessment of needs from public and private veterinary institutions and associations, such as cultural associations, Professional Board and National Health Service.
- One of the objectives of these relationships is the organization of continuing education seminars and seminars for postgraduates.

### **10.3. Suggestions for improvement**

None.

### **10.4. Decision**

The Establishment is compliant with ESEVT Standard 10.

## **11. Outcome Assessment and Quality Assurance ([see Standards 11.1 to 11.10 in Chapter 3](#))**

### **11.1. Findings**

#### **11.1.1. Description of the global strategy of the Establishment for outcome assessment and Quality Assurance (QA), in order to demonstrate that the Establishment:**

*-) has a culture of QA and continued enhancement of quality;*

FVETUM has been applying the principles of QA in the veterinary education since 2009, when the Establishment became part of a Pilot Project of ANECA implementing the national Internal Quality Assurance System at UM. FVETUM was accredited by ANECA 16/09/2009. ANECA is the national accreditation agency for higher education and is ENQA accredited.

Since the QA system (QAS) has been revised several times (2013, 2014, 2015 and 2016) as part of the continuous improvement of educational quality and according to the national Internal Quality Assurance System for university required by ANECA in order to maintain QA-certified status.

The basic principles of QAS are:

- approval, monitoring and periodic review of study programme and academic titles;
- assessment of students;
- quality assurance of teaching staff;
- learning resources and student support;
- information systems and public information.

The QAS regarding the veterinary degree at the Establishment relies according to the SER on 3 main decision bodies:

- Committee for Assessment and Improvement of the Veterinary Degree Curriculum (CAIVDC) reported to be in charge of the “day-to-day decisions of the QA of the veterinary degree”. This includes “gathering of information and evidences on the implementation and the development of the syllabus, according to the objectives, contents, teaching activities, assessment, communication and quality procedures established by ANECA in the document of the Degree in Veterinary.
- The Quality Assurance Committee receiving all information on QA-matters, including reports and proposals from CAIVDC, Department Councils and other units dealing with QA-matters. The QA-committee coordinates the QA-work at the Establishment, and forward decision to the Faculty Board.
- The Faculty Board approving all QA-decisions.

However, CAIVDC is only active when significant changes of curriculum are to be discussed made. Hence the day-to-day QA-discussions and proposals for improvements of teaching, subject syllabi, exams, students welfare within the present curricular framework take place at semester meetings between semester coordinators, student representatives and the Vice Dean for education and in the Department Councils. Outcomes of these meetings are forwarded to the QA-committee.

*-) operates ad hoc, cyclical, sustainable and transparent outcome assessment, QA and quality enhancement mechanisms;*

The activities of QAS are managed by the QAS-coordinator. The QA System (QAS) is described in the Quality Guidebook. It includes descriptions of how critical processes are implemented and monitored, the representation of FVETUM staff, students and stakeholders in the QA-bodies and the frequency and format of global and cyclic input/output from all parties involved in QAS.

The Quality Guidebook is available on-line on the University's web page.

*-) collect, analyse and use relevant information from internal and external sources for the effective management of their programmes and activities (teaching, research, services);*

The QA committee coordinates and receives information (reports, improvement proposals, subject evaluations, teacher evaluations, results of biannual outcomes assessment etc.) from the different bodies of the Establishment and provides an integrated QA coordination within FVETUM's educational programmes.

The Faculty Board reviews and approves the activities of the QA committee.

*-) informs regularly staff, students and stakeholders and involves them in the QA processes;*

The QA activities include input and output to and from staff, students and stakeholders, ie. procedures for academic follow-up report regarding the veterinary education, teaching follow-up meetings, direct input from student representatives (Student Office), assessments minutes, handling of complaint and suggestions, internal surveys completed by students, teachers and support staff, handling of external survey, as UM satisfaction surveys, teachers assessment and reports from external QA Agencies.

*-) closes the loop of the QA Plan-Do-Check-Act (PDCA) cycle;*

The QA-cycles of FVETUM contain closed *Plan-Do-Check-Act (PDCA)* cycles. The inputs and outcomes of QA-activities and loops are evaluated and publish annually in the Self-Evaluation Report summarizing results on:

- Communication and transparency.
- Structure and functioning of the QA.
- Performance indicators.
- Implementation of systems for quality improvement.
- Implementation of the recommendations by QA Agencies in previous evaluations
- Modification of the syllabus.
- Evaluation of the strengths and weaknesses of the programme.

The report is published on the UM web-site.

*-) is compliant with ESG Standards*

The QAS implemented at the Establishment is compliant with ESG and EAEVE Standards.

QAS is evaluated annually by the UM Quality Office, and periodically by national QA Agency – ANECA, which is accredited by ENQA. In 2013, the QAS at FVETUM obtained a special

government quality award “AUDIT”, which valid until 2/12/2017, which will be re-evaluated again in 2018.

**11.1.2. Brief description of the specific QA processes for each ESEVT Standards**

The QA-procedures described in the former chapters are all but one (see chapter 3.4) in full compliance with the QA-requirements of the respective Standards.

**11.1.3. Brief description of the process and the implication of staff, students and stakeholders in the development, implementation, assessment and revision of the QA strategy of the Establishment**

The QA strategy is revised on the basis of yearly self-evaluation reports, data collection from internal and external stakeholders, and the inputs from external QA agencies. Revisions are suggested and discussed within QA-Committee, membered by academic and support staff, students and external stakeholders, including representatives of the Official College of Veterinarians in Murcia, and finally approved by the Faculty Board.

**11.2. Comments**

The Committee for Assessment and Improvement of the Veterinary Degree Curriculum, which according to the SER is in charge of the day-to-day QA concerning the Veterinary programme, is not active. Instead, the day-to-day QA- discussions and proposals regarding coordination and improvement of teaching, syllabi, exams and student life take place on faculty level at semester meetings between semester coordinators, student representatives and on department level at meetings in the Department Councils.

**11.3. Suggestions for improvement**

- Revival of the Committee for Assessment and Improvement of the Veterinary Degree Curriculum, so it can take over the day-to-day QA-work regarding the veterinary programme as stated in the SER.

**11.4. Decision**

The Establishment is compliant with ESEVT Standard 11.

**12.ESEVT Indicators (see Annex 4)**

<b>Name of the Establishment: Murcia 2017</b>					
<b>Date of the form filling:</b>					
<b>Calculated Indicators from raw data</b>					
		<b>Establishment values</b>	<b>Median values<sup>1</sup></b>	<b>Minimal values<sup>2</sup></b>	<b>Balance<sup>3</sup></b>
<b>I1</b>	n° of FTE academic staff involved in veterinary training / n° of undergraduate students	0,243	0,16	0,13	0,117
<b>I2</b>	n° of FTE veterinarians involved in veterinary training / n° of students graduating annually	1,571	0,87	0,59	0,982
<b>I3</b>	n° of FTE support staff involved in veterinary training / n° of students graduating annually	1,000	0,94	0,57	0,434
<b>I4</b>	n° of hours of practical (non-clinical) training	900,000	905,67	595,00	305,000
<b>I5</b>	n° of hours of clinical training	900,000	932,92	670,00	230,000
<b>I6</b>	n° of hours of FSQ & VPH training	300,000	287,00	174,40	125,600
<b>I7</b>	n° of hours of extra-mural practical training in FSQ & VPH	90,000	68,00	28,80	61,200
<b>I8</b>	n° of companion animal patients seen intra-murally / n° of students graduating annually	82,119	70,48	42,01	40,110
<b>I9</b>	n° of ruminant and pig patients seen intra-murally / n° of students graduating annually	5,438	2,69	0,46	4,975
<b>I10</b>	n° of equine patients seen intra-murally / n° of students graduating annually	7,952	5,05	1,30	6,654
<b>I11</b>	n° of rabbit, rodent, bird and exotic seen intra-murally / n° of students graduating annually	0,062	3,35	1,55	-1,483
<b>I12</b>	n° of companion animal patients seen extra-murally / n° of students graduating annually	9,757	6,80	0,22	9,210
<b>I13</b>	n° of individual ruminants and pig patients seen extra-murally / n° of students graduating annually	54,710	15,95	6,29	48,415
<b>I14</b>	n° of equine patients seen extra-murally / n° of students graduating annually	0,119	2,11	0,60	-0,476
<b>I15</b>	n° of visits to ruminant and pig herds / n° of students graduating annually	3,962	1,33	0,55	3,415
<b>I16</b>	n° of visits of poultry and farmed rabbit units / n° of students graduating annually	0,881	0,12	0,04	0,836
<b>I17</b>	n° of companion animal necropsies / n° of students graduating annually	1,486	2,07	1,40	0,086
<b>I18</b>	n° of ruminant and pig necropsies / n° of students graduating annually	1,852	2,32	0,97	0,882
<b>I19</b>	n° of equine necropsies / n° of students graduating annually	0,024	0,30	0,09	-0,069
<b>I20</b>	n° of rabbit, rodent, bird and exotic pet necropsies / n° of students graduating annually	2,462	2,05	0,69	1,769
<b>I21*</b>	n° of FTE specialised veterinarians involved in veterinary training / n° of students graduating annually	0,210	0,20	0,06	0,146
<b>I22*</b>	n° of PhD graduating annually / n° of students graduating annually	0,319	0,15	0,09	0,231
<sup>1</sup>	Median values defined by data from Establishments with Approval status in April 2016				
<sup>2</sup>	Recommended minimal values calculated as the 20th percentile of data from Establishments with Approval status in April 2016				
<sup>3</sup>	A negative balance indicates that the Indicator is below the recommended minimal value				
*	Indicators used only for statistical purpose				

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

<b>Standard 1: Objectives and Organisation</b>	<b>C</b>	<b>PC</b>	<b>NC</b>
1.1. The Establishment must have as its main objective to provide, in agreement with the EU Directives and ESG recommendations, 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.	X		
1.2. The Establishment must develop and follow its mission statement which must embrace all the ESEVT standards.	X		
1.3. The Establishment 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.	X		
1.4. 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.	X		
1.5. The organisational structure must allow input not only from staff and students but also from external stakeholders.	X		
1.6. The Establishment must have a strategic plan, which includes a SWOT analysis of its current activities, a list of objectives, and an operating plan with timeframe and indicators for its implementation.	X		
<b>Standard 2: Finances</b>			
2.1. Finances must be demonstrably adequate to sustain the requirements for the Establishment to meet its mission and to achieve its objectives for education, research and services.	X		
2.2. The finance report must include both expenditures and revenues and must separate personnel costs, operating costs, maintenance costs and equipment.	X		
2.3. Resources allocation must be regularly reviewed to ensure that available resources meet the requirements.	X		
2.4. 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. Clinics must be run as efficiently as possible.	X		
2.5. The Establishment must have sufficient autonomy in order to use the resources to implement its strategic plan and to meet the ESEVT Standards.		X	
<b>Standard 3: Curriculum</b>			
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.	X		
3.2. The learning outcomes for the programme must be explicitly articulated to form a cohesive framework.		X	
3.3. Programme learning outcomes must be communicated to staff and students and: - ) underpin and ensure the effective alignment of all content, teaching, learning and assessment activities of the degree programme; - ) form the basis for explicit statements of the objectives and learning outcomes of individual units of study; - ) be regularly reviewed, managed and updated to ensure they remain relevant, adequate and are effectively achieved.		X	
3.4. The Establishment 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, - ) review the curriculum at least every seven years by involving staff, students and stakeholders, - ) identify and meet training needs for all types of staff, maintaining and enhancing their competence for the on-going curriculum development.		X	
3.5. The curriculum must include the subjects (input) listed in Annex V of EU Directive 2005/36/EC and must allow the acquisition of the Day One Competences (output) (see Annex 2). This must concern all groups of subjects, i.e. Basic Sciences, Clinical Sciences, Animal Production, Food Safety and Quality, and Professional Knowledge.			X
3.6. External Practical Training (EPT) are training activities organised outside the Establishment, 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, herds visits, practical training in FSQ).		X	
3.7. Since the veterinary degree is a professional qualification with Day One Competences, EPT must complement and strengthen the academic education by enhancing for the student the handling of all common domestic animals, the understanding of the economics and management of animal units and veterinary practices, the communication skills for all aspects of veterinary work, the hands-on practical and clinical training, the real-life experience, and the employability of the prospective graduate.	X		
3.8. The EPT providers must have an agreement with the Establishment and the student (in order to fix 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 Establishment on the EPT programme.	X		
3.9. There must be a member of the academic staff responsible for the overall supervision of the EPT, including liaison with EPT providers.	X		
3.10. 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 Establishment and evaluating the EPT. Students must be allowed to complain officially or anonymously about issues occurring during EPT.	X		
<b>Standard 4: Facilities and equipment</b>			
4.1. All aspects of the physical facilities must provide an environment conducive to learning.	X		

## FINAL REPORT AS ISSUED BY ECOVE ON 30 MAY 2018

4.2. The veterinary Establishment must have a clear strategy and programme for maintaining and upgrading its buildings and equipment.			
4.3. 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.	X		
4.4. Students must have ready access to adequate and sufficient study, self-learning, recreation, locker, sanitary and food services facilities.	X		
4.5. Offices, teaching preparation and research laboratories must be sufficient for the needs of the academic and support staff.	X		
4.6. Facilities must comply with all relevant legislation including health, safety, biosecurity and EU animal welfare and care standards.		X	
4.7. The Establishment's livestock facilities, animal housing, core clinical teaching facilities and equipment must: -) be sufficient in capacity and adapted for the number of students enrolled in order to allow hands-on training for all students -) be of a high standard, well maintained and fit for purpose -) promote best husbandry, welfare and management practices -) ensure relevant biosecurity and bio-containment -) be designed to enhance learning.	X		
4.8. Core clinical teaching facilities must be provided in a VTH with 24/7 emergency services at least for companion animals and equines, where the Establishment can 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 and pigs, on-call service must be available if emergency services do not exist for those species in a VTH. The Establishment must ensure state-of-the-art standards of teaching clinics which remain comparable with the best available in the private sector.		X	
4.9. The VTH and any hospitals, practices and facilities (including EPT) which are involved with the curriculum must meet the relevant national Practice Standards.	X		
4.10. All core teaching sites must provide dedicated learning spaces including adequate internet access.	X		
4.11. The Establishment must ensure students have access to a broad range of diagnostic and therapeutic facilities, including but not limited to: pharmacy, diagnostic imaging, anaesthesia, clinical pathology, intensive/critical care, surgeries and treatment facilities, ambulatory services and necropsy facilities.	X		
4.12. Operational policies and procedures (including biosecurity, good laboratory practice and good clinical practice) must be taught and posted for students, staff and visitors.	X		
4.13. 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 in accordance with updated methods for prevention of spread of infectious agents. They must be adapted to all animal types commonly handled in the VTH.	X		
4.14. The Establishment 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.		X	
4.15. 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.	X		
<b>Standard 5: Animal resources and teaching material of animal origin</b>			
5.1. The number and variety of healthy and diseased animals, cadavers, and material of animal origin must be adequate for providing the practical training (in the area of Basic Sciences, Clinical Sciences, Pathology, Animal Production, Food Safety and Quality) and adapted to the number of students enrolled.		X	
5.2. It is essential that a diverse and sufficient number of surgical and medical cases in all common domestic animals and exotic pets be available for the students' clinical educational experience and hands-on training.		X	
5.3. In addition to the training provided in the Establishment, experience can include practical training at external sites, provided this training is organised under direct academic supervision and at the same standards as those applied in the Establishment.		X	
5.4. The VTH must provide nursing care skills and instruction in nursing procedures.	X		
5.5. Under all situations students must be active participants in the workup of patients, including physical diagnosis and diagnostic problem oriented decision making.		X	
5.6. 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 Establishment.		X	
<b>Standard 6: Learning resources</b>			
6.1. State-of-the-art learning resources must be available to support veterinary education, research, services and continuing education. 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.	X		
6.2. Staff and students must have full access on site to an academic library, which is administered by a qualified librarian, an Information Technology (IT) unit, which is managed by an IT expert, an e-learning platform, and the relevant human and physical resources necessary for development by the staff and use by the students of instructional materials.	X		
6.3. The Establishment must provide students with unimpeded access to learning resources which include scientific and other relevant literature, 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 innovations in learning resources.	X		
6.4. The relevant electronic information, database and other intranet resources must be easily available for students and staff both in the Establishment's core facilities via wireless connection (Wi-Fi) and from outside the Establishment via Virtual Private Network (VPN).	X		

## FINAL REPORT AS ISSUED BY ECOVE ON 30 MAY 2018

<b>Standard 7: Student admission, progression and welfare</b>			
7.1. The selection criteria for admission to the programme must be consistent with the mission of the Establishment. The number of students admitted must be consistent with the resources available at the Establishment for staff, buildings, equipment, healthy and diseased animals, and materials of animal origin.	X		
7.2. In relation to enrolment, the Establishment must provide accurate information in all advertisements regarding the educational programme by providing clear and current information for prospective students. Further, printed catalogue and electronic information must state the purpose and goals of the programme, provide admission requirements, criteria and procedures, state degree requirements, present Establishment descriptions, clearly state information on tuition and fees along with procedures for withdrawal, give necessary information for financial aid programmes, and provide an accurate academic calendar.	X		
7.3. The Establishment's website must mention the ESEVT Establishment's status and its last Self Evaluation Report and Visitation Report must be easily available for the public. Not applicable.	X		
7.4. The selection and progression criteria must be clearly defined, consistent, and defensible, be free of discrimination or bias, and take account of the fact that students are admitted with a view to their entry to the veterinary profession in due course.	X		
7.5. The Establishment must regularly review and reflect on the selection processes to ensure they are appropriate for students to complete the programme successfully, including consideration of their potential to meet all the ESEVT Day One Competences in all common domestic species (see Annex 2).	na		
7.6. Adequate training (including periodic refresher training) must be provided for those involved in the selection process to ensure applicants are evaluated fairly and consistently.	na		
7.7. There must be clear policies and procedures on how applicants with disabilities or illnesses will be considered and, if appropriate, accommodated in the programme, taking into account the requirement that all students must be capable of meeting the ESEVT Day One Competences by the time they graduate.	X		
7.8. The basis for decisions on progression (including academic progression and professional fitness to practise) must be explicit and readily available to the students. The Establishment 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.	X		
7.9. The Establishment must have mechanisms in place to monitor attrition and progression and be able to respond and amend admission selection criteria (if permitted by national or university law) and student support if required.	X		
7.10. Mechanisms for the exclusion of students from the programme for any reason must be explicit.	X		
7.11. Establishment policies for managing appeals against decisions, including admissions, academic and progression decisions and exclusion, must be transparent and publicly available.	X		
7.12. Provisions must be made by the Establishment to support the physical, emotional and welfare needs of students. This includes, but is not limited to, learning support and counselling services, careers advice, and fair and transparent mechanisms for dealing with student illness, impairment and disability during the programme. This shall include provision of reasonable accommodations/adjustments for disabled students, consistent with all relevant equality and/or human rights legislation.	X		
7.13. There must be effective mechanisms for resolution of student grievances (e.g. interpersonal conflict or harassment).	X		
7.14. Mechanisms must be in place by which students can convey their needs and wants to the Establishment.	X		
7.15. The Establishment must provide students with a mechanism, anonymously if they wish, to offer suggestions, comments and complaints regarding compliance of the Establishment with the ESEVT standards.	X		
<b>Standard 8: Student assessment</b>			
8.1. The Establishment must ensure that there is a clearly identified structure within the Establishment showing lines of responsibility for the assessment strategy to ensure coherence of the overall assessment regime and to allow the demonstration of progressive development across the programme towards entry level competence.	X		
8.2. The assessment tasks and grading criteria for each unit of study in the programme must be clearly identified and available to students in a timely manner well in advance of the assessment.	X		
8.3. Requirements to pass must be explicit.	X		
8.4. Mechanisms for students to appeal against assessment outcomes must be explicit.	X		
8.5. The Establishment must have a process in place to review assessment outcomes and to change assessment strategies when required.	X		
8.6. Programme learning outcomes covering the full range of professional knowledge, skills, competences and attributes must form the basis for assessment design and underpin decisions on progression.	X		
8.7. Students must receive timely feedback on their assessments.	X		
8.8. Assessment strategies must allow the Establishment to certify student achievement of learning objectives at the level of the programme and individual units of study.	X		
8.9. 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 students logbooks in order to ensure that all clinical procedures, practical and hands-on training planned in the study programme have been fully completed by each individual student.	X		
<b>Standard 9: Academic and support staff</b>			
9.1. The Establishment must ensure that all staff are appropriately qualified and prepared for their roles, in agreement with the national and EU regulations. 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 FTE academic staff involved in veterinary training must be veterinarians. It is expected that greater than 2/3 of the instruction that the students receive, as determined by student teaching hours, is delivered by qualified veterinarians.		X	
9.2. The total number, qualifications and skills of all staff involved with the programme, including teaching staff, 'adjunct' staff, technical, administrative and support staff, must be sufficient and appropriate to deliver the educational programme and fulfil the Establishment's mission.	X		
9.3. Staff who participate in teaching must have received the relevant training and qualifications and must display competence and effective teaching skills in all relevant aspects of the curriculum that they teach, regardless of		X	

## FINAL REPORT AS ISSUED BY ECOVE ON 30 MAY 2018

whether they are full or part time, residents, interns or other postgraduate students, adjuncts or off-campus contracted teachers.			
9.4. Academic positions must offer the security and benefits necessary to maintain stability, continuity, and competence of the academic staff. Academic staff should have a balanced workload of teaching, research and service depending on their role; and should have reasonable opportunity and resources for participation in scholarly activities.	X		
9.5. The Establishment 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 Establishment's direction and decision making processes.	X		
9.6. 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.	X		
<b>Standard 10: Research programmes, continuing and postgraduate education</b>			
10.1. The Establishment must demonstrate significant and broad research activities of staff that integrate with and strengthen the veterinary degree programme through research-based teaching.	X		
10.2. All students must be trained in scientific method and research techniques relevant to evidence-based veterinary medicine.	X		
10.3. All students must have opportunities to participate in research programmes.	X		
10.4. The Establishment 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.	X		
<b>Standard 11: Outcome Assessment and Quality Assurance</b>			
11.1. The Establishment must have a policy for quality assurance that is made public and forms part of their strategic management. Internal stakeholders must develop and implement this policy through appropriate structures and processes, while involving external stakeholders.	X		
11.2. The Establishment must have processes for the design and approval of their programmes. The programmes must be designed so that they meet the objectives set for them, including the intended learning outcomes. The qualification resulting from a programme must be clearly specified and communicated, and 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.	X		
11.3. The Establishment must ensure that the programmes are delivered in a way that encourages students to take an active role in creating the learning process, and that the assessment of students reflects this approach.	X		
11.4. The Establishment must consistently apply pre-defined and published regulations covering all phases of the student "life cycle", e.g. student admission, progression, recognition and certification.	X		
11.5. The Establishment must assure themselves of the competence of their teachers. They must apply fair and transparent processes for the recruitment and development of staff.	X		
11.6. The Establishment must have appropriate funding for learning and teaching activities and ensure that adequate and readily accessible learning resources and student support are provided.	X		
11.7. The Establishment must ensure that they collect, analyse and use relevant information for the effective management of their programmes and other activities.	X		
11.8. The Establishment must publish information about their activities, including programmes, which is clear, accurate, objective, up-to date and readily accessible.	X		
11.9. The Establishment must monitor and periodically review their programmes to ensure that they achieve the objectives set for them and respond to the needs of students and society. These reviews must lead to continuous improvement of the programme. Any action planned or taken as a result must be communicated to all those concerned.	X		
11.10. The Establishment must undergo external quality assurance in line with the ESG on a cyclical basis.	X		
<i>C: (total or substantial) compliance; PC: partial compliance (Minor Deficiency); NC: non-compliance (Major Deficiency)</i>			

## **Executive Summary**

### Brief history of the Establishment and its previous EAEVE Visitations

The Facultad de Veterinaria, Murcia (FVETUM) was founded in 1982 and it is a part of the Universidad de Murcia.

FVETUM was ordinarily visited by EAEVE in 1996 with a re-visitation in 1998. In 2006 the Establishment was visited resulting in EAEVE approved status.

Since the last Visitation a QA-system has been implemented including establishment of a Committee for the Assessment and Improvement of the Veterinary Degree Curriculum. Further to this a Biosecurity Committee has been established and an Ethics and Animal Welfare Committee of the University has been set up. Several curricular changes have been accepted, some of these due to national legislation and some due to EAEVE recommendations incl. increase of clinical training, rotations in VPH, graduation thesis and self-directed learning.

The global financial crisis has also had severe influence on the FVETUM financial situation with increased expenditures and significantly reduced revenues due to cutback from the public bodies.

Spanish legislation has established that the Spanish DVM degree is now based on a 5 year/300 ECTS programme but discussions are underway to raise this to 5½ year/330 ECTS.

Some of the buildings and facilities have been renovated incl. isolation facilities SA and LA, infectious diseases exam room with direct access, updated biosecurity measures, necropsy room at the VTF, new storage facilities at the farm.

The current ESEVT Visitation was performed in agreement with the Uppsala SOP (2016).

### Brief comment on the SER

The SER was very long and not sufficiently concise within all areas. However, the FVETUM immediately made up in a very satisfactorily way for these issues when prompted.

### Brief comment on the Visitation

The visitation was performed in a very friendly and informative atmosphere and the team met open doors in all areas visited with a strong emphasis on demonstrating exactly what the team wished to see.

### Commendations (areas worth of praise)

1. Excellent training in Food Hygiene and Veterinary Public Health
2. Excellent, open relationship between students and staff
3. Good student facilities
4. Good virtual learning environment
5. Good QA-system at department level
6. Good clinical training and facilities in the VTF
7. Commendable progress on implementing biosecurity protocols

### Recommendations (list of the Minor Deficiencies)

1. The Establishment must have sufficient autonomy in order to use the resources to implement its strategic plan and to meet the ESEVT Standards (Standard 2.5.)

2. The learning outcomes for the programme must be explicitly articulated to form a cohesive framework (Standard 3.2.)
3. Programme learning outcomes must be communicated to staff and students and:  
-) underpin and ensure the effective alignment of all content, teaching, learning and assessment activities of the degree programme (Standard 3.3.)
4. The Establishment 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 (Standard 3.4.)
5. Facilities must comply with all relevant legislation including health, safety, biosecurity and EU animal welfare and care standards (Standard 4.6.)
6. Core clinical teaching facilities must be provided in a VTH with 24/7 emergency services at least for companion animals and equines (Standard 4.8.)
7. The Establishment 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 (Standard 4.14.)
8. The number and variety of healthy and diseased animals, cadavers, and material of animal origin must be adequate for providing the practical training (Standard 5.1.)
9. It is essential that a diverse and sufficient number of surgical and medical cases in all common domestic animals and exotic pets be available for the students' clinical educational experience and hands-on training (Standard 5.2.)
10. In addition to the training provided in the Establishment, experience can include practical training at external sites, provided this training is organised under direct academic supervision and at the same standards as those applied in the Establishment (Standard 5.3.)
11. Under all situations students must be active participants in the workup of patients, including physical diagnosis and diagnostic problem oriented decision making (Standard 5.5.)
12. 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 Establishment (Standard 5.6.)
13. 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 (Standard 9.1.)
14. Staff who participate in teaching must have received the relevant training and qualifications (Standard 9.3.)

### Suggestions

1. UM and FVETUM should consider to delegate full instructional power to the Dean with respect to finances (incl. budget), infrastructure, HR and curriculum. This would ensure full transversal compliance throughout the FVETUM (and other Faculties) and place the ultimate responsibility for finances (incl. budget), infrastructure, HR and curriculum with one person i.e. the Dean.
2. FVETUM should review the HR-structure in the VTH with respect to the current differentiation between academic work, clinical work and technical work respectively performed by staff members employed by the UM or by the VTH Foundation.
3. FVETUM should consider to reduce the number of committees and to establish a clear structure with respect to governing bodies at Departmental and Faculty level. Especially committees with a transversal function should be prioritised.

4. The University of Murcia is strongly recommended to delegate full instructional power to the Dean with respect to finances (incl. budget) at the FVETUM (sub-standard 2.5. in partial compliance).
5. There is an opportunity to increase service fees as the economic crisis is over to allow more funds to replace required aging equipment and raise the salaries of non-UM staff members.
6. A strong, transparent and well planned strategy for the FVETUM financial situation should be constructed and implemented.
7. The Curriculum Committee should be revitalized to increase QA and horizontal and vertical coordination between different subjects in the curriculum.
8. Ownership and control of the curriculum should move from departmental level to Faculty level.
9. Disciplines should work with learning outcomes to build more cohesiveness and to streamline them to a pedagogically high level.
10. More communication between the veterinary pathology unit and VTH and teaching staff of forensic medicine in toxicology unit should be instigated to increase the number of diagnostic necropsies.
11. Students should be involved in all aspects of patient care and treatment including taking case histories, communicating directly with clients and writing medical records.
12. Students should have increased time in the VTH.
13. There should be consideration of the consistency of placements and formal teaching, and assessment training should be given to all those teaching students as well as those teaching within EPT placements to ensure assessments are consistent in all placements wherever they occur.
14. Consideration of how clinics can be promoted more in the Murcia public to increase caseload should be made so that the student experience and number of cases seen remains adequate.
15. EPT should not be used as part of the core clinical rotations.
16. Include routine herd health management (applied epidemiology) in the bovine ambulatory rotation.
17. More advantage should be taken by having a FVETUM representative sitting at the board of College of Veterinarians of Murcia, for professional ethics and employability for example.
18. Academic staff should be in charge of teaching at all times. Having Hospital staff as adjunct to the UM would be a way to achieve this.
19. Routine herd health planning should be introduced into the teaching through the field ambulatory service.
20. Evaluate the inclusion of herd health management (fertility performance, udder health, lameness) when on ambulatory clinics.
21. All drugs should be stored following the legal requirements of the country within properly locked cupboards.
22. Food and drink should be removed from areas with drugs.
23. Consider building more kennel space to allow for expansion of the services offered in the VTH.
24. A replacement system for drugs should be put into place.
25. The number and variety of animals for clinical training, cadavers for anatomy and pathology should be increased.
26. Practical training at external sites should be under direct academic supervision.
27. Students should be active participants in the workup of patients on all occasions. Students should participate in history taking and direct contact with animal owners.
28. Evaluate the most efficient way to use the caseload to provide more actual hands-on experience.

29. The patient record system should be effective in retrieval of data to support teaching, research or service programmes.
30. Formal training should be in place for all staff involved with teaching.
31. Review the status of the VTH teachers within the context of providers of much of the teaching of undergraduates.
32. Consider promoting professional development among the SS and organising a plan of professional education for the SS.
33. Training for all teachers whether academics or not should be available at equal terms.
34. Revival of the Committee for Assessment and Improvement of the Veterinary Degree Curriculum, so it can take over the day-to-day QA-work regarding the veterinary programme as stated in the SER.
35. External Practical Training (EPT) are training activities organised outside the Establishment, 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, herds visits, practical training in FSQ) (Standard 3.6.).

#### List of Major Deficiencies

Non-compliance with Standard 3.5 because of insufficient acquisition of some of core Day-One Competences in clinical sciences, due to insufficient clinical rotation under the supervision of academic staff.

#### **Glossary**

None.

## **Decision of ECOVE**

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

- non-compliance with Standard 3.5 because of insufficient acquisition of some of core Day-One Competences in clinical sciences, due to insufficient clinical rotation under the supervision of academic staff.

The 'Facultad de Veterinaria, Universidad of Murcia (FVETUM)' is therefore classified as holding the status of: **CONDITIONAL ACCREDITATION**.