Facultad de Veterinaria
Universidad de Murcia

UNIVERSIDAD DE MURCIA

EAEVE
European Association of Establishments for Veterinary Education

Re-Self Evaluation Report

CAMPUS MARE NOSTRUM
de Excelencia Internacional

01-02 October 2018

Index

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Based on the agreemts of the different meetings of the working group and the Faculty Board.

- *Version 1: July 19th, 2018*
- *Version 2: Ocober 16th, 2018*

ESEVT Re-Visitation to Veterinary Faculty University of Murcia
October 1st to 2nd, 2018

TIMETABLE UPDATED on Sept 27th 2018

Visitation Team:

ESEVT EXPERTS	*ESTABLISHMENT*
HILL, Lynne Victoria (CHAIRPERSON) ***Clinical Sciences – Companion Animal*** **Solihull, UK**	**ROS BERRUEZO, Gaspar** *Dean* Facultad de Veterinaria, Universidad de Murcia
ESEVT COORDINATOR	***ESTABLISHMENT***
LEKEUX, Pierre **Director of the European System of Evaluation of Veterinary Training (ESEVT)**	**DEL RIO ALONSO, Laura** *Internal Liaison Officer* Facultad de Veterinaria, Universidad de Murcia

NB: This Timetable is just indicative of the meeting and people attending. It can be adjusted to the requests of the Visitation Team.

Monday 1th October

Team arrive at hotel. "Rincón de Pepe" Hotel, C/ Apóstoles 34**,** 30001 Murcia. 15:00 at the latest.
Team transportation at 15.15 to the **FVETUM**.

15.30-18.30 **Meetings to review the Major Deficiency with the relevant people.** Sala de Juntas

- Gaspar Ros, Dean
- Laura del Río, Liaison Officer
- Octavio López Albors, Vice-Dean Vet Studies
- Fuensanta Hernández, Vice-Dean Research and Innovation, Coordinator Rotation Subject
- Juan José López García, Rector Team Representative
- Alejando Bayón, Animal Medicine and Surgery Department
- Antonia Gil, Animal Medicine and Surgery Department
- Francisco J. Pallarés, Veterinary Teaching Hospital
- Josefa Fernández, Veterinary Teaching Hospital
- Francisco Cuello, Animal Health Department
- Christian de la Fe, Animal Health Department
- Andrea Vera, Student
- Alejandra Criado Student

18.30-19.30 **Team private meeting.** Sala de Juntas.

20.30-22.30 **Dinner at Rincón de Pepe Restaurant with the Dean Rector representatives and and Liaison Officer.**

Tuesday 2nd October

08.00 **Team depart hotel to travel to FVETUM at Espinardo Campus.**
Establishment Team Room: Sala de Juntas.

08.30-11.30 **Review of the correction of Minor deficiencies and meeting with the relevant people** Sala de Juntas.

- Gaspar Ros, Dean
- Laura del Río, Liaison Officer
- Octavio López Albors, Vice-Dean Vet Studies
- Fuensanta Hernández, Vice-Dean Research and Innovation, Coordinator Rotation Subject
- Alejando Bayón, Animal Medicine and Surgery Department
- Antonia Gil, Animal Medicine and Surgery Department
- Francisco J. Pallarés, Veterinary Teaching Hospital
- Josefa Fernández, Veterinary Teaching Hospital
- Francisco Cuello, Animal Health Department
- Christian de la Fe, Animal Health Department
- Andrea Vera, Student
- Alejandra Criado Student

11.30-12.30 **Team private meeting.** Sala de Juntas.
12.30-13.00 **Exit presentation.** Sala de Grados.
13.30-15.00 **Lunch.**
15.00 **Transfer of the Team to the hotel.**

Introduction

Brief summary of the conclusions of the previous Visitation and of the commitment of the Establishment to correct the Deficiencies and to become fully compliant with the ESEVT Standards.

The previous full visitation took place on the 20th to the 24th of November, 2017. The team identified several areas worthy of praise (i.e. **Commendations**), e.g.:

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

The Visitation team also identified several items of partial compliance or recommendations (i.e. **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.)

And additionally, 34 **Suggestions** that are listed at the end of this R-SER (page) to avoid over duplication of the information.

The **VISITATION REPORT** (Draft C and D as well, November and December 2017, respectively) also identified 1 non-compliance (i.e. **Major Deficiency**) identified for **Standard 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) (Standard 3.6.)

ECOVE final decision (May 30th, 2018) ratify the status establishment in the final decision to "CONDITIONED ACREDITATED", highlighting the major deficiency for **Standard 3.5**:

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

Since then, FVETUM has been fully committed to the correction of all deficiencies pointed out by the EAEVE experts to be fully compliant with EAEVE standards. Once the Establishment received the final visitation report, the document was disseminated to all the members of the FVETUM. It was also presented to the Quality Assurance Committee (QAC) to propose an action plan that was approved by the Faculty Board in June the 11th. The Quality Assurance system started to work on the EAEVE Final Report in order to analyse and address the Major Deficiency, and also the Minor Deficiencies (Recommendations) and suggestions for improvement. For that purpose, the QAC and the Working Group opened a period of reflection; all the stakeholders of the FVETUM were involved in this fruitful process. The different proposals aimed at correcting the Major and minor deficiencies were discussed and approved, at a first level, by QAC, and finally, the Faculty Board ratified improvement.

Among these measures, a significant increase of hands-on clinical training hours has been introduced in the core curriculum within a short period of time. This would not have been possible without the efforts of the staff and students of the Establishment. The FVETUM also acknowledges the counselling and helpful advice of the EAEVE to solve all the questions and queries, especially those regarding the increase of hours of hands-on clinical training.

Finally, we would like to point out that since the EAEVE visitation, the FVETUM also received the visitation of the National Quality Agency (ANECA, ENQA member) on Mach 2018 to audit the Internal Quality Assurance System (so called SGIC or SAIC of FVETUM). A renewal of the AUDIT certificate has been obtained in July 2018 (http://www.um.es/web/veterinaria/contenido/calidad/sistema-de-garantia-de-calidad).

1. CORRECTION of the MAJOR DEFICIENCY

MAJOR DEFICIENCY.

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

Factual information

The causes of non-compliance with the standard and the potential margin for improvement were thoroughly analyzed by the Faculty Board in several sessions during academic year 2017-18.

After considering all the comments included in the final report (draft D), it was agreed that the Major Deficiency was associated to deficits in the PRACTICUM, and especially in some rotations involving Clinical Practical Training. Special emphasis was taken to review the extramural rotation of 4 weeks expended by each student in a selected placement. This was identified by the evaluation committee as EPT, despite being slightly supervised by one academic tutor (written reports), as well as by the practitioner (evaluation by rubric). Additionally, the possibility of increasing the total number of hours of compulsory clinical training in the intramural rotations (Veterinary Teaching Hospital, VTH) was considered a priority.

On the other hand, increasing the number of academic staff involved in the supervision of the rotations was an urgent need. Since the power to hire academics is on the University Government, an immediate official request was submitted. Due to bureaucratic and legal issues, it normally takes quite long (months) to get the approval of new academic contracts, however as the need was justified and the Rector team very receptive full support from the University has been obtained (**Annex I**).

In the following lines the actions taken with regards to the increase of clinical rotations and improvements in the academic supervision are explained in detail.

Clinical rotation.

Table I displays the total number of hours of Clinical Practical Training in the FVETUM curriculum in the year of the visitation (2017-18) and also what is being implemented during the present academic year (2018-19).

Clinical training runs from the 4th to the 10th semester, with special emphasis in the PRACTICUM (clinical rotations). In the year of the visitation (2017-18) it accounted for a total of 733 hours, owing to the PRACTICUM 246 intramural hours, 18 extramural hours and 160 hours of EPT. In addition to those 160 compulsory hours, students of the 5th year could take up to 750 elective hours/year of EPT (maximum 910 hours). Those 160 hours embedded in the PRACTICUM were quite controversial during the visitation because while compulsory (taken by all the students) and slightly supervised, they did not comply with the direct supervision of academic staff.

In the present academic year (2018-19), significant changes in the PRACTICUM have been introduced, altogether accounting for an increase of 178 hours (14 intramural + 164 extramural) of Clinical Practical Training. Changes mainly consisted in i) actions over the 160 hours which were considered as EPT by the ESVET Committee, and ii) increasing some hours of intramural training in the VTH (direct actions on the Major deficiency). New or longer rotations were created in those areas of clinical training identified by the Committee as Minor Deficiencies or areas of improvement. See **Table II** for further detail:

INTRAMURAL (14 hours)

- 14 hours have been increased at the VTH-Clinical Medicine Services (4th and 5th Rotation weeks):
    - 8 hours added to Afternoon Clinics at the VTH.
    - 6 hours at VTH-Clinical Medicine Services based on the reorganization of the Rotatories, from 30 hours in 2017-18 to 36 hours in 2018-19, distributed as follows:
        - 10 hours VTH-Dermatology. Mandatory rotation.
        - 10 hours VTH-Exotics Clinic included within the rotations at the VTH. Mandatory rotation.
        - 16 hours of VTH-Clinical Medicine Services elected by the students according to their preferences.

EXTRAMURAL (164 hours)

- 12 hours increased in Ambulatory Clinic: Cattle (8th Rotation week) to a total of 30 hours in 2018-19.
- 72 hours assigned to new extramural rotations (9th Rotation week):
    - Ambulatory Clinics: Equine (16 hours),
    - Ambulatory Clinics: Zoo Medicine (8 hours),
    - Ambulatory Clinics: Small Animal Medicine in a Shelter (8 hours).
    - Ambulatory Clinics: Small Ruminants and Pigs (40 hours),
- 80 hours assigned to extramural clinical training by a practitioner under the supervision of academic staff (11th and 12th Rotation weeks).

Table I.- Hours of clinical practical training at FVETUM curriculum.

	Semester	Subject name in FVETUM curriculum	EU-listed subjects (SER Table 3.1.4)	Hours in 2017/2018	Hours in 2018/2019
INTRAMURAL	4, 5, 6	Diagnostic Pathology, special pathological anatomy	Diagnostic Pathology	43	43
	5	Propaedeutic	Propaedeutic of all common domestic animal species	30	30
	6,7,8,9	Clinical sciences (several subjects included)	Medicine and surgery including anaesthesiology (VTH)	205	205
	6,7,8,9	Diagnostic Imaging	Diagnostic Imaging	24	24
	7,8	Reproduction and obstetrics	Obstetrics, reproduction and reproductive disorders	82	82
	10	PRACTICUM	Clinical Practical Training *	246	**260**
EXTRAMURAL	10	PRACTICUM	Clinical Practical Training *	18	**182**
	5,6	Infectious Diseases and Parasitic Diseases	Medicine and surgery including anaesthesiology (Animal Health)	85	85

External Practical Training (EPT)	6-10	Elective	EPT	Up to 910 h/year (160 + 750)	Up to 750 h/year
TOTAL (excluding EPTs):				**733**	**911**

Table II.- Comparison of Clinical Practical Training in the PRACTICUM between 2017-18 and 2018-19

Intra/Extra	Week of rotation	PRACTICUM (Clinical Practical Training)	Days		Hours/day		Total Hours	
			2017 -18	**2018 -19**	**2017 -18**	**2018 -19**	**2017 -18**	**2018 -19**
INTRAMURAL	1	VTH- Equine Medicine, Surgery and Reproduction	5	5	5	5	25	25
		VTH- Emergency Care Equine Medicine, Surgery and Reproduction	1	1	20	20	20	20
	2	VTH- Pathological Anatomy Service	5	5	5	5	25	25
	3	VTH- Clinical Care	5	5	5	5	25	25
		VTH-Emergency Care	1	1	24	24	24	24
	4 & 5	VTH-Clinical Medicine Services (Imaging, Anesthesia, Internal Medicine, Cardiorespiratory, Reproduction, Surgery, Ethology, Ophthalmology and Clinical Pathology)	6	4	5	4	30	16
		VTH- Afternoon Clinic	3	5	4	4	12	20
		VTH- Dermatology	0	2	0	5	0	10
		VTH- Exotic service	0	2	0	5	0	10
		VTH- Ovariohysterectomy and/or orchiectomy dog or cat	1	1	5	5	5	5
	6 & 7	VTF- Rum and Pig Animal Clinic	10	10	8	8	80	80
	Total		**37**	**41**	**81**	**90**	**246**	**260**
EXTRAMURAL	8	Ambulatory Clinic: Cattle	3	5	6	6	18	30
	9	Ambulatory Clinic: Equine	0	2	0	8	0	16
		Ambulatory Clinic: Zoo	0	1	0	8	0	8
		Ambulatory Clinic: Small aa (shelter)	0	1	0	8	0	8
	10	Ambulatory Clinic: Small Ruminants and Pig	0	5	0	8	0	40
	11 & 12	Clinical training by a practitioner under the supervision of academic staff	0	10	0	8	0	80
	Total		**3**	**24**	**6**	**46**	**18**	**182**
	Full Total		**40**	**65**	**87**	**136**	**264**	**442**

It is important to consider the fact that no more EPT are included in the PRACTICUM. The 160 hours considered as EPT by the ESVET Committee have been moved into the core teaching as new rotations (80 hours) plus a period of clinical training by a practitioner under the supervision of academic staff (80 hours). The supervision of this extramural training

includes visiting the clinics by the academic staff as well as being in close contact with the practitioners through email, on-line portfolio and telephone (**Annex II**). In order to improve the evaluation process of the student's competences, practitioners and staff will be trained in teaching methodologies and competence based assessment, following a course on purpose.

Increase on the number of academic staff

To improve the supervision by academic staff the University Government has made an important effort to hire a total of 17 new part-time associate professors. New positions have been already occupied or are being announced. More precisely:

Table III.- New academic staff hired for PRACTICUM

Academic staff	Full Time Equivalent (FTE)	Status
2 New part-time associate professors for Animal Health and Clinics in the Veterinary Teaching Farm	0,250	Contracted
1 New part-time associate professor for the Ambulatory clinics of Small Ruminants and Pigs	0,375	Contracted
2 New part-time associate professor for Ambulatory clinics in Cattle	0,250	Contracted
1 New part-time associate professor for Ambulatory clinics in Equine	0,125	Contracted
1 New part-time associate professor for Exotics in the VTH	0,125	Announced 9th/10/2018 (**Annex IB**)
1 New part-time associate professor for Dermatology in the VTH	0,125	Announced 9th/10/2018 (**Annex IB**)
1 New part-time associate professor for Internal Medicine in the VTH	0,125	Announced 9th/10/2018 (**Annex IB**)
1 New part-time associate professor for Anaesthesia in the VTH	0,125	Announced 9th/10/2018 (**Annex IB**)
1 New part-time associate professor for Clinical Care in the VTH	0,125	Announced 9th/10/2018 (**Annex IB**)
2 New part-time associate professors for Equine medicine in the VTH	0,250	Announced 9th/10/2018 (**Annex IB**)
2 New part-time associate professors for Small animal surgery in the VTH	0,250	Announced 9th/10/2018 (**Annex IB**)
1 New part-time associate professor for Ambulatory Zoo medicine	0,125	Announced 9th/10/2018 (**Annex IB**)
1 New part-time associate professor for Small animal medicine and surgery in shelter	0,125	Announced 9th/10/2018 (**Annex IB**)
TOTAL: 17	**2,375**	

Table IV illustrates the impact of these new position on the total number of hours of Clinical Practical Training supervised by academic staff.

Table IV.- Comparison between academic year 2017-18 vs 2018-19 for hours of practical clinical training and academic staff (as FTE)

					Increase between 2017-18 vs 2018-19	
	Total hours 2017-18	**Total FTE 2017-18**	**Total hours 2018-19**	**Total FTE 2018-19**	**Hours**	**FTE**
Obstetrics, reproduction and reproductive disorders	972,00	4,05	972,00	4,05	0,00	0,00
Diagnostic pathology	567,00	2,36	567,00	2,36	0,00	0,00

Medicine and surgery including anaesthesiology	3490,60	14,54	3490,60	14,54	0,00	0,00
Imaging Diagnosis	270,00	1,13	270,00	1,13	0,00	0,00
Propaedeutic	378,00	1,58	378,00	1,58	0,00	0,00
Farm animal clinics	187,00	0,78	187,00	0,78	0,00	0,00
PRACTICUM: Medicine & surgery	557,00	2,32	917,00	3,82	**360,00**	**1,50**
PRACTICUM: Farm animal's clinic	111,48	0,46	321,48	1,34	**210,00**	**0,88**
PRACTICUM: Diagnostic pathology	106,00	0,44	106,00	0,44	0,00	0,00
TOTAL	**6639,08**	**27,66**	**7209,08**	**30,04**	**570,00**	**2,37**

FTE: Full Time Equivalent

To assure that all the new hired staff is properly trained in teaching methodologies and competence based assessment, all of them will accomplish a course on purpose (**Annex III**)

Portfolios and rubrics.

In addition to the previous actions and to endure the full acquisition of the core Day-One Competences, during the academic year 2017-18 a new portfolio on-line with rubrics has been implement for the PRACTICUM. In the portfolio, all students have a detailed list of activities to be carried out during the rotations. Each student must detail the activities carried out in a written report, for each rotation, and upload it into the on-line campus portal. On the other hand, each supervisor (academic staff) directly supervises the performance of the activities and assesses the accomplishment of the competences and the written reports (**Annex IV**).

Comments

A broad number of changes have been made in the PRACTICUM to increase the number of hours devoted to Clinical Practical Training and the number of academic staff involved in the direct supervision of students. This is the result of a big effort carried out in just a few months by the Faculty Board and the University Government. As the PRACTICUM is a subject which fully occupies 15 weeks of the 10th semester of the degree, we are sure all the scheduled changes will be in full operation by January 2019.

2. CORRECTION of the MINOR DEFICIENCIES

Introduction

The listed number of Minor Deficiencies are 14, coming from 5 different standards. The actions taken in each one, are presented with regards to each particular standard.

Standard 2

- *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.)*

Factual information.

- The autonomy of the Faculty to use the available resources to implement its strategic plan is defined in the University Statutes. The Dean and the Heads of Departments meet regularly to decide how to invest their own resources.
- The Rector Team has supported the Establishment with the necessary investments to meet the ESEVT Standards. Examples of this cooperation are the new animal simulation models for Animal Medicine and Surgery Department, the improvement of the Establishment's biosecurity and investments in necropsy and dissection rooms for large animals.

Standard 3

*The **learning outcomes** for the programme must be explicitly articulated to form a cohesive framework (Standard 3.2.)*

Factual information

- During academic year 2017-18 all the learning outcomes of the curriculum and their matching with each specific competence were thoroughly reviewed in a series of meetings with the subjects´ coordinators of each area of knowledge (i.e, basics, clinical, animal health).

*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.)*

Factual information

- The reviewing of learning outcomes resulted in a more comprehensive and effective alignment of all content, teaching methods and assessment activities. The results were communicated and approved by the staff, students and stake holders of the Academic (Teaching Affairs) and Quality Assurance Committees, and are now waiting the ANECA (National Agency for Evaluation and Quality) approval for application in the official curriculum programme.

*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.)*

Factual information

- The Establishment has 11 formally constituted committees. The Academic (Teaching Affairs) Committee meets on a regular basis to discuss the curriculum and the different parts of it (mentioned above). As it works as an

effective curriculum committee and to accomplish the ESVET requirements, it is going to be named as Academic and Curriculum Affairs Committee.

Standard 4

Facilities *must comply with all relevant legislation including health, safety, biosecurity and EU animal welfare and care standards (Standard 4.6.)*

Factual information

- A new Vice Dean for security-biosecurity has recently been appointed. The Faculty has reviewed all aspects of biosecurity across the Establishment in the past few months. All students follow the necessary instruction for the appropriate biosecurity measures required on each rotation and must sign a form to show they have read, understood and agreed the information provided. New students are taken through specific instruction on biosecurity, health, safety and animal welfare during the welcome week activities.

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.)*

Factual information

- The VTH offers 24/7 emergency service in small animal and equine. The equine rotation includes one over-night rotation in the equine hospital for in-hospital and emergency cases work (20 hours). Besides, every student expends one full day on duty on a weekend in the emergency care service. These compulsory activities are part of the core teaching rotations and full supervision is guaranteed with the new contracts of academic staff in the VTH (**Annex IB**).

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.)*

Factual information

- The Establishment has employed 5 practitioners as academic staff who work in ambulatory clinic for production animals, equivalent to 0.875 FTE (see **Table IV**). The new rotations in the Practicum (see **Table II**) include spending one week with these practitioners visiting farms and conducting examinations on animals, accompanying the vets on all their calls, as well as taking samples and analysing the results in the Establishment labs.

Standard 5

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.)*

Factual information

- The number of animals seen and used for teaching purposes have been reported in the updated indicators (attached) and most of them fall within the EAEVE parameters. To increase the access of students to a higher number and variety of cases, new practicum rotations have been included (dermatology, exotics, small

ruminants and pigs, zoo animals, small animal shelter) (See **Table II**). Other efforts have been made to increase the case load, as the employment of a marketing professional at the VTH.

- Besides, the VTH is working on a protocol to get the agreement from owners to allow all their animals to have a post mortem study, especially in the equine service (**Annex V**).

*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.)*

Factual information

- As mentioned above, new rotations have been included in the Practicum, with ambulatory clinic of small ruminants, pigs, zoo and small animals (**Table II**). Since the beginning of 2018 the VTH has introduced exotic animal medicine service, and students are scheduled for 10 hour in this service.

*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.)*

Factual information

- The new design of the Practicum includes 164 additional hours of extramural clinical training (**Table II**).
- All training will be directly supervised by academic appointed staff, mainly on part-time contracts (**Table IV**), and full-time academic staff based in the Faculty.
- On the other hand, all the new appointed staff as well as the practitioners are scheduled for a training course on teaching methodology and competence based assessment, which is based on a rubric (as seen in **Annexes III & IV**).

*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.)*

Factual information

- During practical training at the VTH, all the students are involved in greeting clients, taking histories and deciding on tests, diagnosis and further treatments. This hands-on work was particularly highlighted in the student's report about the teaching process of the last semester. These activities are under direct supervision of academic staff.

***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.)*

Factual information

- The VTH has an electronic record of client information and medical records. Students have access to the records while in rotation within the VTH. However, due to legal issues, they are not allowed to access the owners´ details. When not in VTH rotation, students can access to hardcopies of medical records when needed, under request.

- The VTH is actively working with the University Information Technology service to merge the student's on-line platform with the patient records.

Standard 9

*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.)*

Factual information

- Academic staff is trained internally by the Establishment about good teaching and evaluation practices, learning and e-learning resources, biosecurity and QA procedures. This training is based on personal or group meetings (workshops), usually conducted by Vice-Deans. The University also provides voluntary teaching training and personal skills development to all academic staff at the Establishment (see **Annex V**).

*Staff who participate in teaching must have received the **relevant training** and qualifications (Standard 9.3.)*

Factual information

- There are no formal courses considered compulsory for staff. However, the reality is that it is not possible to accomplish the academic career without accrediting a continuous and broad training on teaching and assessment methodologies.
- Academic staff with a civil servant position (full professors) are not required to demonstrate further training accreditations, however they are always called to workshops on educational topics which are organized by the Establishment on a regular basis.

3. SUGGESTIONS STATUS.

Factual information

All suggestions are listed and briefly explained the actions taken till July 2018 and those to be carried out or under way after this date (ECOVE meeting). Some of them are very close and the effect depends on the same action taken and some are also linked to the Major deficiency solutions already taken. It is not exhaustive to make this document concise and clear for ACREDITATION.

Suggestions	Actions to be carried out or under way
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.	The former and new Rector have been informed about this suggestion but the national and University legislation and rules provide limited capacity to the Dean, although a good relationship and coordination with the Departments and Rector Office are aligned for the same goals. We are working on the new Strategic Plan with a Master Plan of infrastructures and resources (human and equipment) that will be agreed by all actors and will help in future development of the FVETUM.
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.	Different meetings have been held with the Dean's Team and Direction Team of the VTH to study the possibilities of integration of VTH staff to improve the supervision of students by academic staff. As mention in Table III (page 6) the University has made a big effort to hire part-time associated professors.
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.	The different Committees have been renovated and activated those with transversal functions. Other Committees are also under review for a more efficient performance. A new University Statutes are waiting to be approved and that will affect to the Faculty Regulation and Committees will be redefined.
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).	As mention in Suggestion # 1 the Dean activities are listed in the regulations and limited in some senses. The steps followed may help to empower the Dean position.
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.	Services fees are under review and waiting for the new Patronage meeting of the VTH Foundation with the new Rector for new proposal. Expected to increase the Spanish Rent.
6. A strong, transparent and well planned strategy for the FVETUM financial situation should be constructed and implemented.	The Strategic Plan of the VTH is under review by the VTH Board to implement actions to strength the economic situation of the VTH. Patronage needs to review the economic aid for student practical training every academic year, and it is based on the new requests for the academic year 2018-19, and dependent on the budget of the University. It will be requested a significant increase.
7. The Curriculum Committee should be revitalized to increase QA and horizontal and vertical coordination between different subjects in the curriculum.	The Curriculum Committee has been very active these months to review the horizontal and vertical coordination between different subjects in the curriculum. Also, some coordination between preclinical subjects (anatomy, histology and physiology) have put in place and the outcomes are under evaluation. Extend the model carryout in preclinical subjects to clinical ones. Also, some seminars are planned to aware academic staff of other curricula models.
8. Ownership and control of the curriculum should move from departmental level to Faculty level.	The ownership and control of the curriculum has been always under control of the Faculty Board previous approval of the Curriculum Committee. During this months: 2 actions have been carried out: the mapping of the competences by subjects to identify overlap or gaps, and the survey to the students for a new curriculum to increase the Veterinary Degree from 300 to 330 ECTS at national level. The Internal Quality Assurance Committee supported by the Academic Committee will evaluate the outcomes of the mapping and the 330 ECTS to propose to the Faculty Board the modifications or not of the curriculum. This action may lead to a minor change in the curriculum or a new one.
9. Disciplines should work with learning outcomes to build more cohesiveness and to streamline them to a pedagogically high level.	All subjects have been addressed to identify their theoretical and practical outcomes the to share with colleagues in different *ex-profess* meetings of the Coordination Working Group of the FVETUM. This review of competences and outcomes is reflected in the 2018-19 academic guides and also in the Rotations portfolio. See Standard 3, page 21).
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.**	There is no written protocol for this cooperation and it is carried out *de facto*. There is some formal review of the possibilities of a service open to the Veterinary Clinics that is under study. The possibility of opening a new service to reinforce the collaboration between the mentioned units with the participation of students.

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.	The reviewed Portfolio and Rubrics include these professional skills that the students have to achieve. Some simulation environment is under study to get the students exposed to different professional situations. (See Standard 5, page 23).
12. Students should have increased time in the VTH.	The night shift at the intensive care unit has been reinforced to allow the students on rotations and internships to increase their time at the VTH. This is an important issue that need to be addressed with the Academic Committee of the VTH for the next academic year increasing the number of hours at 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.	With the new EPT Portfolio academic and non-academic are in contact and both, as well as the students, have been trained by the Vice-Dean with the competences in Rotations coordination. This is a pilot program that will be analysed for the academic year 2018-19. After the implementation of the EPT Portfolio-Rubrics, it will be analysed and considered all suggestions for improvement in 2018-19 academic year. All new part time associated professor will have to follow a mandatory course at the Centre for Training and Professional Development (CTPD). See Annex III.
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.	Actions are oriented to close collaboration with the Veterinarian clinics as a reference establishment. Some formal and informal meetings have been carried out with the association representative to identify their needs and potential service of the public clinics. MoU are under study for a closer cooperation with the local practitioners and from other nearby areas. Expected to be signed before the next academic year.
15. EPT should not be used as part of the core clinical rotations.	To ensure that EPT do not replace the core clinical rotation several actions have been taken and explained in detail in the previous section of the Major deficiency. Essentially new Associated professors have been hired to ensure that at any medical act there is an academic, specially in large animal's rotations. Also, the exotic service has been open to the public service with a new VTH contract. To complete the system, it is under debate the implementation of Associate professor to all possible VTH employed. See Table III, page 16.
16. **Include herd health management (applied epidemiology) in the bovine ambulatory rotation.**	With the 2 new Farm Associates professors for ruminants and non- ruminants it is also included herd health management (applied epidemiology) in the bovine ambulatory rotation. Evaluate the impact of the Associate professors on the students training and requests an increase of the dedication of the Associate professors.
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.**	New approaches have been taken to be at the board of the College of Veterinarians of Murcia. Is it expected to be invited by the Board of the College of Veterinarians of Murcia to all their assemblies. Other agreements are under way with other Official Veterinarian Colleges of the 3 surrounding provinces: Alicante, Almería an Albacete.
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.	For the reason that's why it has been taken a step forward to promote the Associate professor for the VTH staff (non-academic) to ensure to cover any time at the VTH with students. To consolidate this position and to follow all the administrative internal procedures. See Table III, page 16.
19. **Routine herd health planning should be introduced into the teaching through the field ambulatory service.**	With the 2 new Farm Associates professors for ruminants and non- ruminants it is also included herd health management (applied epidemiology) in the bovine ambulatory rotation. Evaluate the impact of the Associate professors on the students training and requests an increase of the dedication of the Associate professors.
20. **Evaluate the inclusion of herd health management (fertility performance, udder health, lameness) when on ambulatory clinics.**	With the 2 new Farm Associates professors for ruminants and non-ruminants it is also included herd health management and their pathologies (fertility performance, udder health, lameness). Evaluate the impact of the Associate professors on the students training and requests an increase of the dedication of the Associate professors.
21. All drugs should be stored following the legal requirements of the country within properly locked cupboards.	Biosecurity protocols have been reviewed and aware staff (academic and support) as well as students to follow the protocols with the supervision of the head of service. Reinforce the message in the training and biosecurity day.
22. Food and drink should be removed from areas with drugs.	Biosecurity protocols have been reviewed and aware staff (academic and support) as well as students to follow the protocols with the supervision of the head of service. Reinforce the message in the training and biosecurity day.
23. Consider building more kennel space to allow for expansion of the services offered in the VTH.	Four new kennels have been purchased specially for exotic animals. Increase the number based on the case load.
24. A replacement system for drugs should be put into place.	Biosecurity protocols have been reviewed and aware staff (academic and support) as well as students to follow the protocols with the supervision of the head of service. Reinforce the message in the training and biosecurity day.
25. The number and variety of animals for clinical training, cadavers for anatomy and pathology should be increased.	The Faculty is in contact with practitioner's associations, charities, farmers… to find the source and mechanism (donations mainly) to ensure the flow of the proper number or animals and specimens for training.

	The VTH has hired a Professional on PR and Marketing to identify the strategies and techniques to increase the number of clinical cases for training (contact and agreements with practitioners, ONG, farmers, and interact with clients). VTF is also collecting deceased animals (cadavers) at the farm for necropsies and other teaching purposes. The transportation and legal destruction of cadavers and specimens (animal by-products not intended for human consumption, ABPs) will be improved with a new vehicle, and also the University will assume the expenses of the legal withdrawal and incineration.
26. Practical training at external sites should be under direct academic supervision.	See factual information and comments on major deficiency section.
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.	The reviewed Portfolio and Rubrics include these professional skills that the students have to achieve. Some simulation environment is under study to get the students exposed to different professional situations. See Standard 5, page 23..
28. Evaluate the most efficient way to use the caseload to provide more actual hands-on experience.	With the new PRATICUM rotations a significant increase of hand-on experience is planned. See factual information and comments on major deficiency section.
29. The patient record system should be effective in retrieval of data to support teaching, research or service programmes.	The patient record system of the VTH has been fully implemented and is under test to be available next academic year on a pilot to all potential Faculty users. The VTH patient record system will be used as a model for other services at the FVETUM and the project is to manage all them together at the same electronic platform keeping the privacy of the owners and patient's sensible data.
30. Formal training should be in place for all staff involved with teaching.	Several meetings have been carried out to identify the topic and to organise some common and specific training. Biosecurity and laboratory management are two transversal topics to be address this academic year. This training will be supported by the CTDP (see Annex III).
31. Review the status of the VTH teachers within the context of providers of much of the teaching of undergraduates.	See factual information and comments on major deficiency section.
32. Consider promoting professional development among the SS and organising a plan of professional education for the SS.	Support staff needs to identify their priorities on training and define an action plan to be submitted to the Centre for Permanent training of the University. Some professional training has been identified as mention in Suggestion # 30, specially for Support staff.
33. Training for all teachers whether academics or not should be available at equal terms.	As part of the training, all teachers are informed. With the new Associate professor figure, all them will have the same opportunities. See comments on minor deficiencies section. See Standard 9, page 24.
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.	The mentioned Committee is active and the number of meetings have been scheduled in advance for the whole year to at least 5. Currently (march 2018) the Quality Assurance System (QAS) has been audit and the outcomes was just a minor deficiency that will be solved before May will end (to publish an Annual Quality Plan). We are waiting the final results of the QAS accreditation in May with just this minor deficiency solved. The QAS and their Committees will reinforce their activities based on an Action Plan already defined.

4. INDICATORS.

Factual information

Raw data has been added for the academic year 2017-18. One mistake was identified on indicator number 12 and therefore corrected. Those indicators with negative values are commented below. Additional information is provided in **Clarification on the 2018-19 indicators** based on Standard 5 of SER.

ESEVT Indicators

	Name of the Establishment:	**Facultad de Veterinaria de Murcia (FVETUM)**				
	Name & mail of the Head:	**Gaspar Ros Berruezo, gros@um.es**				
	Date of the form filling:	**September 19th, 2018**				
	Raw data from the last 3 full academic years	**2015-16**	**2016-17**	**2017-18**	**Mean**	
1	n° of FTE academic staff involved in veterinary training	136	140	138	138,0	
2	n° of undergraduate students	569	564	582	571,7	
3	n° of FTE veterinarians involved in veterinary training	110	110	117	112,3	
4	n° of students graduating annually	70	90	87	82,3	
5	n° of FTE support staff involved in veterinary training	58	58	58	58,0	
6	n° of hours of practical (non-clinical) training	900	900	900	900,0	
7	n° of hours of clinical training	900	900	900	900,0	
8	n° of hours of FSQ & VPH training	300	300	300	300,0	
9	n° of hours of extra-mural practical training in FSQ & VPH	90	90	90	90,0	
10	n° of companion animal patients seen intra-murally	5594	6699	5687	5993,3	
11	n° of ruminant and pig patients seen intra-murally	396	432	239	355,7	
12	n° of equine patients seen intra-murally	338	297	280	305,0	
13	n° of rabbit, rodent, bird and exotic patients seen intra-murally	2	4	62	22,7	
14	n° of companion animal patients seen extra-murally	710	925	495	710,0	
15	n° of individual ruminants and pig patients seen extra-murally	3124	5586	3042	3917,3	
16	n° of equine patients seen extra-murally	9	11	43	21,0	
17	n° of visits to ruminant and pig herds	276	301	361	312,7	
18	n° of visits of poultry and farmed rabbit units	63	62	77	67,3	
19	n° of companion animal necropsies	122	98	97	105,7	
20	n° of ruminant and pig necropsies	124	86	213	141,0	
21	n° of equine necropsies	2	1	3	2,0	
22	n° of rabbit, rodent, bird and exotic pet necropsies	233	165	131	176,3	
23	n° of FTE specialised veterinarians involved in veterinary training	15	23	23	20,3	
24	n° of PhD graduating annually	24	25	16	21,7	

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

ESEVT Indicators

Name of the Establishment:					
Date of the form filling:					
Calculated Indicators from raw data	**Establishment values**	**Median values[1]**	**Minimal values[2]**	**Balance[3]**	
I1	n° of FTE academic staff involved in veterinary training / n° of undergraduate students	0,241	0,16	0,13	0,115
I2	n° of FTE veterinarians involved in veterinary training / n° of students graduating annually	1,364	0,87	0,59	0,775
I3	n° of FTE support staff involved in veterinary training / n° of students graduating annually	0,704	0,94	0,57	0,138
I4	n° of hours of practical (non-clinical) training	900,000	905,67	595,00	305,000
I5	n° of hours of clinical training	900,000	932,92	670,00	230,000
I6	n° of hours of FSQ & VPH training	300,000	287,00	174,40	125,600
I7	n° of hours of extra-mural practical training in FSQ & VPH	90,000	68,00	28,80	61,200
I8	n° of companion animal patients seen intra-murally / n° of students graduating annually	72,794	70,48	42,01	30,784
I9	n° of ruminant and pig patients seen intra-murally / n° of students graduating annually	4,320	2,69	0,46	3,856
I10	n° of equine patients seen intra-murally / n° of students graduating annually	3,704	5,05	1,30	2,406
I11	n° of rabbit, rodent, bird and exotic seen intra-murally / n° of students graduating annually	0,275	3,35	1,55	-1,270
I12	n° of companion animal patients seen extra-murally / n° of students graduating annually	8,623	6,80	0,22	8,400
I13	n° of individual ruminants and pig patients seen extra-murally / n° of students graduating an	47,579	15,95	6,29	41,284
I14	n° of equine patients seen extra-murally / n° of students graduating annually	0,255	2,11	0,60	-0,340
I15	n° of visits to ruminant and pig herds / n° of students graduating annually	3,798	1,33	0,55	3,250
I16	n° of visits of poultry and farmed rabbit units / n° of students graduating annually	0,818	0,12	0,04	0,773
I17	n° of companion animal necropsies / n° of students graduating annually	1,283	2,07	1,40	-0,117
I18	n° of ruminant and pig necropsies / n° of students graduating annually	1,713	2,32	0,97	0,742
I19	n° of equine necropsies / n° of students graduating annually	0,024	0,30	0,09	-0,069
I20	n° of rabbit, rodent, bird and exotic pet necropsies / n° of students graduating annually	2,142	2,05	0,69	1,449
I21*	n° of FTE specialised veterinarians involved in veterinary training / n° of students graduatin	0,247	0,20	0,06	0,184
I22*	n° of PhD graduating annually / n° of students graduating annually	0,263	0,15	0,09	0,175

Comments regarding negative indicators:

General statement: 4 indicators are negative this academic year. The main reason is related to the fact that although the number have been improved in 2017-18, the mean obtained based on the previous 2 years lead to and average number that provide these negative indicators. Comments for each indicator (I) are below.

I11. n° of rabbit, rodent, bird and exotic seen intra-murally / n° of students graduating annually.
As seen in Table 5.1.3 the number has been increased to 62 cases (comparing with 2016-17 with only 4 cases), due to the re-opening of the exotic service at VTH. With this opening and the new rotation of Animal Health for 2018-19 the number of cases also in poultry and rabbits will increase to the goal number for a positive indicator and we expect to reach more than 124 cases/year.

I14. n° of equine patients seen extra-murally / n° of students graduating annually
Last April a new veterinarian has been hired for extramural equine clinics. Since then, in only 3 months, the number of cases have increased to 43 cases (Table 5.1.4), which is a positive trend, expecting to reach 48 cases per year in 2018-19, and in 2019-2020 this indicator will become positive.

I17. n° of companion animal necropsies / n° of students graduating annually
The Veterinary Anatomy and Anatomopathology Department is making efforts to reach the reference number, but there are new issues such as less donations from Municipality Zoonotic Services, and less animals donated. The Faculty is increasing the agreements with the clinics and charities for companion animal's cadaver donation (see Standard 5, Annex, V).

I19. n° of equine necropsies / n° of students graduating annually
In this case, the number is still low. The provision of animals is linked partially to the VTH horse deceases that, unfortunately has been decreased, and owner donations. Also, some technical problems of Animal By-products Not Destined for Human Consumption (based on EU Regulation (CE) nº 1069/2009 of the European Parliament) management have been identified and are under addressing to help to increase the number of equine necropsies.

Clarification on the 2018-19 indicators

Description of how and by who 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 are decided, communicated to staff, students and stakeholders, implemented, assessed and revised.

The teachers responsible for each preclinical and clinical subject of the Degree design a teaching programme on the basis of the syllabus contents. The approximate number and variety of animals and animal materials to be used for optimal training is defined. This programming is done five to six months before the academic year starts. The programming is raised for discussion and approval to different governing bodies such as the Department Council, the VTH Board and the Faculty Council. These schedules are made public on the FVETUM website. All the information is evaluated annually by the Committee for Assessment and Improvement of the Curriculum, which is responsible for preparing a report that is submitted for the approval of the Faculty Council. All the Faculty collectives (academic staff, support staff and students) are represented in the governing bodies.

Table 5.1.1. Cadavers and material of animal origin used in practical anatomical training

Species	2017-18	2016-17	2015-16
Equine			
	• 1 complete embalmed cadaver	• 1 complete embalmed cadaver	• 3 complete skeletons
	• 3 complete skeletons	• 3 complete skeletons	• 22 skulls
	• 27 skulls	• 25 skulls	• 9 collections of isolated bones
	• 9 collections of isolated bones	• 9 collections of isolated bones	• 26 Joint collections (20 wet and 6 plastinated)
	• 32 Joint collections (22 wet and 10 plastinated)	• 30 Joint collections (20 wet and 10 plastinated)	• 14 collections of locomotor neuromuscular prossections (6 wet and
	• 14 collections of locomotor neuromuscular prossections (6 wet and 8 plastinated)	• 14 collections of locomotor neuromuscular prossections (6 wet and 8 plastinated)	• 28 collections of head dissections (18 wet and 10 plastinated)
	• 34 collections of head dissections (22 wet and 12 plastinated)	• 32 collections of head dissections (20 wet and 12 plastinated)	• 1 complete plastinated foal with dissections of corporal cavities
	• 1 complete plastinated foal with dissections of corporal cavities	• 1 complete plastinated foal with dissections of corporal cavities	• 18 hearts (13 wet, 5 plastinated)
	• 20 hearts (13 wet, 7 plastinated)	• 19 hearts (13 wet, 6 plastinated)	• 6 lungs (4 wet, 2 plastinated)
	• 6 lungs (4 wet, 2 plastinated)	• 6 lungs (4 wet, 2 plastinated)	• 4 livers (3 wet, 1 plastinated)
	• 4 livers (3 wet, 1 plastinated)	• 4 livers (3 wet, 1 plastinated)	• 6 stomachs (3 wet, 3 plastinated)
	• 9 stomachs (5 wet, 4 plastinated)	• 9 stomachs (5 wet, 4 plastinated)	• 16 kidneys (13 wet, 3 plastinated)
	• 16 kidneys (10 wet, 6 plastinated)	• 16 kidneys (10 wet, 6 plastinated)	• 5 spleens (5 wet)
	• 5 spleens (5 wet)	• 5 spleens (5 wet)	• 10 uterus (6 wet, 4 plastinated)
	• 13 uterus (7 wet, 6 plastinated)	• 12 uterus (6 wet, 6 plastinated)	• 6 penises (5 wet, 1 plastinated)
	• 7 penises (5 wet, 2 plastinated)	• 6 penises (4 wet, 2 plastinated)	• 14 brains (10 wet, 4 plastinated)
	• 19 brains (13 wet, 6 plastinated)	• 18 brains (12 wet, 6 plastinated)	• 6 fetuses of different ages with placenta (5 wet, 1 plastinated)
	• 6 fetuses of different ages with placenta (5 wet, 1 plastinated)	• 6 fetuses of different ages with placenta (5 wet, 1 plastinated)	•
Companion Animal			
	• 12 live dogs	• 12 live dogs	• 10 live dogs
	• 50 dogs and 10 cats complete embalmed cadavers	• 50 dog complete embalmed cadavers	• 50 dog complete embalmed cadavers
	• 6 complete skeletons (4 dogs, 2 cats)	• 6 complete skeletons (4 dogs, 2 cats)	• 6 complete skeletons (4 dogs, 2 cats)
	• 5 skulls	• 5 skulls	• 15 skulls
	• 12 collections of isolated bones	• 12 collections of isolated bones	• 12 collections of isolated bones
	• 3 Dog joint collections (wet and plastinated)	• 3 Dog joint collections (wet and plastinated)	• 3 Dog joint collections (wet and plastinated)
	• 5 collections of dog locomotor neuromuscular prossections (wet and	• 5 collections of dog locomotor neuromuscular prossections (wet and	• 5 collections of dog locomotor neuromuscular prossections (wet and plastinated)
	• 12 collections of dog head cavities dissections (wet and plastinated)	• 10 collections of dog head cavities dissections (wet and plastinated)	• 10 collections of dog head cavities dissections (wet and plastinated)
	• 6 complete plastinated dogs with dissections of body cavities	• 6 complete plastinated dogs with dissections of body cavities	• 6 complete plastinated dogs with dissections of body cavities
	• 1 complete vascular injected plastinated dog, horizontally sectioned	• 1 complete vascular injected plastinated dog, horizontally sectioned	• 1 complete vascular injected plastinated dog, horizontally sectioned
	• 26 dog thoracic cavities (18 wet, 8plastinated)	• 24 dog thoracic cavities (16 wet, 8	• 18 dog thoracic cavities (12 wet, 4 plastinated)
	• 12 dog hearts (8 wet, 4 plastinated)	• 12 dog hearts (8 wet, 4 plastinated)	• 12 dog hearts (8 wet, 4 plastinated)
	• 2 sets of dog echocardiographic plastinated heart	• 2 sets of dog echocardiographic plastinated heart	• 2 sets of dog echocardiographic plastinated heart
	• 23 dog abdominal and pelvic cavities (17 wet, 6 plastinated)	• 21 dog abdominal and pelvic cavities (15 wet, 6 plastinated)	• 18 dog abdominal and pelvic cavities (15 wet, 3 plastinated)
	• 13 lungs (5 wet, 8 plastinated)	• 12 lungs (4 wet, 8 plastinated)	• 10 lungs (4 wet, 6 plastinated)
	• 10 livers (8 wet, 2 plastinated)	• 10 livers (8 wet, 2 plastinated)	• 10 livers (8 wet, 2 plastinated)
	• 13 stomachs (6 wet, 7 plastinated)	• 12 stomachs (5 wet, 7 plastinated)	• 10 stomachs (5 wet, 5 plastinated)
	• 12 kidneys (8 wet, 4 plastinated)	• 10 kidneys (6 wet, 4 plastinated)	• 10 kidneys (6 wet, 4 plastinated)
	• 7 spleens (2 wet, 5 plastinated)	• 5 spleens (5 plastinated)	• 5 spleens (5 plastinated)
	• 6 uterus (1 wet, 5 plastinated)	• 5 uterus (5 plastinated)	• 4 uterus (4 plastinated))

• 20 brains (15 wet, 5 plastinated)	• 17 brains (12 wet, 5 plastinated)	• 15 brains (12 wet, 3 plastinated)
• 15 fetuses of different ages with placenta (11 wet, 4 plastinated)	• 15 fetuses of different ages with placenta (11 wet, 4 plastinated)	• 11 fetuses of different ages with placenta (9 wet, 2 plastinated)
Cattle		
• 1 complete skeleton	• 1 complete skeleton	• 1 complete skeleton
• 15 skulls	• 15 skulls	• 15 skulls
• 4 collections of isolated bones	• 4 collections of isolated bones	• 4 collections of isolated bones
• 5 Cow joint collections (wet and plastinated)	• 5 Cow joint collections (wet and plastinated)	• 4 Cow joint collections (wet and plastinated)
• 1 collection of head neuromuscular prossections (wet and plastinated)	• 1 collection of head neuromuscular prossections (wet and plastinated)	• 1 collection of head neuromuscular prossections (wet and plastinated)
• 1 collection of head cavities (wet and plastinated)	• 1 collection of head cavities (wet and plastinated)	• 1 collection of head cavities (wet and plastinated)
• 7 hearts (5 wet, 2 plastinated)	• 6 hearts (4 wet, 2 plastinated)	• 5 hearts (4 wet, 1 plastinated)
• 3 livers (3 wet)	• 3 livers (3 wet)	• 3 livers (3 wet)
• 1 stomachs (1 plastinated)	• 1 stomachs (1 plastinated)	• 1 stomachs (1 plastinated)
• 9 kidneys (6 wet, 3 plastinated)	• 9 kidneys (6 wet, 3 plastinated)	• 9 kidneys (6 wet, 3 plastinated)
• 5 spleens (5 wet)	• 5 spleens (5 wet)	• 5 spleens (5 wet)
• 15 uterus (10, wet, 5 plastinated)	• 15 uterus (10, wet, 5 plastinated)	• 14 uterus (10, wet, 4 plastinated)
• 7 brains (5 wet, 2 plastinated)	• 7 brains (5 wet, 2 plastinated)	• 7 brains (5 wet, 2 plastinated)
• 18 fetuses of different ages with placenta (9 wet, 9 plastinated)	• 18 fetuses of different ages with placenta (9 wet, 9 plastinated)	• 18 fetuses of different ages with placenta (11 wet, 7 plastinated)
Small Ruminants		
• 4 complete skeletons	• 4 complete skeletons	• 4 complete skeletons
• 10 skulls	• 10 skulls	• 10 skulls
• 2 collections of isolated bones	• 2 collections of isolated bones	• 2 collections of isolated bones
• 6 hearts (4 wet, 2 plastinated)	• 6 hearts (4 wet, 2 plastinated)	• 5 hearts (4 wet, 1 plastinated)
• 15 brains (10 wet, 5 plastinated)	• 15 brains (10 wet, 5 plastinated)	• 12 brains (10 wet, 2 plastinated)
• 5 lungs (2 wet, 3 plastinated)	• 5 lungs (2 wet, 3 plastinated)	• 5 lungs (2 wet, 3 plastinated)
• 4 livers (wet)	• 4 livers (wet)	• 4 livers (wet)
• 7 stomachs (3 wet, 4 plastinated)	• 6 stomachs (2 wet, 4 plastinated)	• 5 stomachs (2 wet, 3 plastinated)
• 8 kidneys (6 wet, 2 plastinated)	• 7 kidneys (5 wet, 2 plastinated)	• 5 kidneys (5 wet)
• 6 spleens (6 wet)	• 5 spleens (5 wet)	• 5 spleens (5 wet)
• 8 uterus (3 wet, 5 plastinated)	• 5 uterus (5 plastinated)	• 5 uterus (5 plastinated)
• 17 brains (12 wet, 5 plastinated)	• 17 brains (12 wet, 5 plastinated)	• 19 brains (15 wet, 4 plastinated)
• 14 fetuses of different ages with placenta (9 wet, 5 plastinated)	• 14 fetuses of different ages with placenta (9 wet, 5 plastinated)	• 14 fetuses of different ages with placenta (9 wet, 5 plastinated)
Pigs		
• 1 complete Skeleton	• 1 complete Skeleton	• 1 complete Skeleton
• 5 skulls	• 5 skulls	• 5 skulls
• 3 collections of isolated bones	• 3 collections of isolated bones	• 3 collections of isolated bones
• 5 Joint collections (wet and plastinated)	• 5 Joint collections (wet and plastinated)	• 5 Joint collections (wet and plastinated)
• 28 hearts (11 wet, 17 plastinated)	• 25 hearts (10 wet, 15 plastinated)	• 20 hearts (10 wet, 10 plastinated)
• 6 lungs (3 wet, 3 plastinated)	• 6 lungs (3 wet, 3 plastinated)	• 5 lungs (3 wet, 2 plastinated)
• 4 livers (wet)	• 4 livers (wet)	• 4 livers (wet)
• 11 stomachs (6 wet, 5 plastinated)	• 10 stomachs (5 wet, 5 plastinated)	• 13 stomachs (5 wet, 3 plastinated)
• 11 kidneys (6 wet, 5 plastinated)	• 10 kidneys (5 wet, 5 plastinated)	• 9 kidneys (5 wet, 4 plastinated)
• 5 spleens (5 wet)	• 5 spleens (5 wet)	• 5 spleens (5 wet)
• 13 uterus (7 wet, 6 plastinated)	• 12 uterus (6 wet, 6 plastinated)	• 10 uterus (6 wet, 4 plastinated)
• 15 brains (10 wet, 5 plastinated)	• 15 brains (10 wet, 5 plastinated)	• 15 brains (10 wet, 5 plastinated)
• 35 fetuses of different ages with placenta (12 wet, 23 plastinated)	• 35 fetuses of different ages with placenta (12 wet, 23 plastinated)	• 18 fetuses of different ages with placenta (9 wet, 9 plastinated)
Poultry and Rabbits		
• 50 poultry fresh complete cadavers	• 50 poultry fresh complete cadavers	• 50 poultry fresh complete cadavers
• 3 complete skeletons	• 3 complete skeletons	• 3 complete skeletons
• 6 skulls	• 6 skulls	• 5 skulls
Exotic pets		
• 4 collections of isolated bones	• 4 collections of isolated bones	• 4 collections of isolated bones
• 3 complete skeletons	• 3 complete skeletons	• 3 complete skeletons
• 6 skulls	• 6 skulls	• 6 skulls

Table 5.1.1.a Material of animal origin used in practical anatomical training from abattoir (2017/18)

	Cattle	Small ruminants	Swine	Equine
Respiratory	77	249	92	10
Hearts	20	14	63	
Digestive	6	8	16	2
Liver	75	175	36	4
Urogenital	30	75	55	7
Skin	14	3	18	
Muscular join	4	8	7	1
Spleen	6	2	4	
Thoracic cavity		2	1	

Table 5.1.2. Healthy live animals used for pre-clinical training (at VTF).

Species	2017/18	2016/17	2015/16	Mean
Cattle	129	175	37	114
Small Ruminants	145	157	122	141
Swine	2200	2200	2200	2200
Companion Animals*	100	100	60	87
Equine	5	6	6	6
Poultry	10840	10840	10840	10840
Rabbits	350	350	350	350
Exotics pets (primates Papio hamadryas)	60	50	50	53
Bee (hives)	50	50	50	50
Others (Canarius serinus)	20	20	20	20

*Dogs used for propaedeutic training at VTH.

Table 5.1.3. Number of patients seen intra-mural.

Species	2017/18	2016/17	2015/16	Mean
Cattle		-	-	-
Small Ruminants*	80	92	90	87
Swine*	159	340	306	268
Companion Animals**	5687	6699	5594	5993
Equine**	280	297	338	305
Poultry & Rabbits		-	-	
Exotics pets	62	4	2	23

* Numbers referred to reproductive management practices in VTF

**Estimated numbers. Our data system does not differentiate if a visit is due to the same or to a different condition.

Table 5.1.4. *Number of patients seen extra-mural.*

Species	*2017/18*	*2016/17*	*2015/16*	Mean
CASES				
Cattle	210	287	210	233
Small Ruminants	168	135	230	322
Pigs**	2664	5164	2684	3504
Companion Animals*	495	925	710	710
Equine	43	11*	9*	21
Exotics pets*	119	123	101	114
Poultry & Rabbits**		7200	82800	45000
Nº VISITS (totales)	1035	13845	86744	34016

*Estimated numbers obtained from the EPT practicum reports.

** Data corresponding to the total census of the farms visited by the students. Due to the intensive production system for these species in our area, work only includes sporadic care of individual animals.