

# **ERCIYES UNIVERSITY**

# FACULTY OF VETERINARY MEDICINE

**RE-VISITATION SELF-EVALUATION REPORT** 

EAEVE

**KAYSERİ 2021** 



### **Faculty of Veterinary Medicine**

### **Erciyes University**

### (FVMEU)

**Re-Visitation Self Evaluation Report 2021** 

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#### Introduction

Faculty of Veterinary Medicine of Erciyes University (FVMEU), Kayseri, Turkey has experienced a full visitation concerning the 2016 Uppsala SOP's during 16-21 September 2018.

The ESEVT team indicated some areas worthy of praise and 10 major and 13 minor deficiencies mainly focusing on biosecurity, insufficient practical training hours for the acquisition of DOC's, implementation of QA system, lack of equine cases and support staff. The team encouraged all academic, administrative and support staff and students and declared that they beleive in two or three years FVMEU will take its place in the leading position not only in Turkey but also in Europe.

The time following the visitation has been used for intense consultations with the related commissions, departments, administrative staff and all stakeholders resulting in a set of measures to mitigate the identified deficiencies that will be detailed in the following report.

In summary, even through the exhausting pandemic period, FVMEU has made great efforts to deal with the implementing measures that address every deficiency underlined in the visitation report in 2018.

The ECOVE issued a final report to FVMEU on 22 November 2018 identifying the following areas worthy of praise and deficiencies.

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

• The Anatomy department has state-of-the art installations for storage, manipulation and handling of the cadavers for dissection

- There is an excellent relationship between the Establishment and its parent University
- A good relationship developing between the Establishment and the community
- Well-funded and relevant research
- Ongoing financial support and then encouragement from University
- Impressive and growing caseload of small animals
- High ruminant caseload intramurally
- Excellent access to clinical cases for year 3-5 students
- An increasing potential for research collaboration within the wider University
- Motivated Staff
- High student morale

#### Items that are not compliant with the ESEVT Standards (i.e., Major Deficiencies):

• Non-compliance with substandard 3.5 because of insufficient time allocated to practical clinical training for the acquisition of Day One Competencies;

• Non-compliance with substandard 3.5 and 4.8 because students do not receive Day One Competence in emergency care on a compulsory basis;

• Non-compliance with Substandard 4.7 because of lack of compliance of the facilities with the appropriate legislation on biosecurity and EU animal welfare and care standards;

• Non-compliance with substandard 4.7 because of the need to embark on the planned development of the VTH for both large animals and companion animals;

• Non-compliance with Substandard 4.13 because of inappropriate management and procedures within the isolation facilities;

• Non-compliance with Substandard 5.1 and 5.2 because insufficient caseload of equine clinical cases and equine and companion animal necropsies for practical training;

• Non-compliance with Substandard 8.1 because there is no clearly identified management structure demonstrating the lines of responsibility for the assessment strategy;

• Non-compliance with Standard 9.2 because of insufficient number of support staff in both the technical and clinical areas;

• Non-compliance with Substandard 11.7 because of insufficient collection, analysis and use of relevant information for an effective management of its programmes and activities;

• Non-compliance with Substandard 11.9 because there is no monitoring and periodical review of the programmes to ensure that they achieve the objectives set for them and respond to the needs of the students and society.

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

• Ensuring the effective alignment of all content, teaching, learning and assessment activities of the degree programme

• Herd health management teaching should be improved for Day 1 Competence acquisition by students in this area

• Overseeing the QA of the curriculum, particularly in gathering and then evaluating feedback from students and other stakeholders

• EPT must complement and strengthen the academic education and have effective academic oversight for its efficacy

• Facilities must comply with all relevant health, safety and biosecurity standards

• Operational policies and procedures (including biosecurity, good laboratory practice and good clinical practice must be taught and posted for students, staff and visitors

• The VTH must meet the relevant National Practice Standards

• A need to monitor progression and the rate of attrition

• An absence of a process linking assessment design to programme learning outcomes and the assessment strategy does not ensure the achievement of learning objectives

• Insufficient quality control of the students' logbooks.

• Students should be trained in scientific and research techniques relevant to evidence-based veterinary medicine

• Delivery of the Programmes must ensure that students are encouraged to take an active role in creating the learning process

• 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

Immediately after the full visitation, FVMEU has committed to the correction of the deficiencies underlined by the EAEVE experts to be fully compliant with EAEVE requirements. Once being received by FVMEU, the final report was announced to all members of the establishment to take their part in action and respond. In order to address the determined deficiencies, series of meetings and working groups were arranged with the participation of all faculty members (academic and technical staff as well as student representatives) to develop recommendations that were than to be evaluated by the Faculty Council and related committees. The rectifying process was carried out by considering the reflections from all stakeholders. The result of these meetings and group works were considered and discussed in each committee and finally adopted by Dean's Office and Faculty Council.

The great number of measures have been implemented within the existing legal framework not to delay the process of improvement of teaching quality in accordance to EAEVE standards. The measures that need structural change in curriculum and formal adaption (radical revision of curriculum, emergency care on a compulsory basis, assessment strategies, QA implementation etc.) have been studied as regulations, evaluated, processed, and approved by Dean's Office and Faculty Council.

FVMEU is extremely grateful to the EAVE experts for their valuable suggestions. We all consider the report a good resource to improve the quality of education within the frame of ESEVT standards. This briefly summarized R-SER provides detailed and factual information mainly focussed on perceived major and minor deficiencies.

The actions carried out related to major and minor deficiencies considering the suggestions in the final report are briefly listed below

|--|

The national core education programme (VUCEP) has been prepared, processed and put into implementation by the leadership of FVMEU

**Radical revision process of the curriculum has been completed** (Theoretical versus practical training hours and electives versus compulsory courses were reorganised and balanced as suggested in the final report). The new curriculum promoted the integration between different subjects and departments.

**Internship training has been modified** into a new one with more integrative features comprising fully practical hours and composed of main practical disciplines.

Seminars and SSL were added to the course contents.

"Scientific research and presentation techniques, Professional communication, Diagnostic imaging, Preventive medicine and Herd health management" courses were added to the revised form of curriculum on a compulsory basis. Regulation studies were carried out, processed and completed for students to receive **Day One Competence** in emergency care on a compulsory basis

**Biosecurity operational policies and procedures were improved,** taught and posted to all stakeholders. Cleaning and disinfection facilities were incorporated in VTH units

Animal welfare and care standards in VTH were improved by appointing a responsible specialist academic staff and support staff.

Hospitalisation units for cats, dogs and birds (supported by a Project) are equipped to ensure animal welfare and care standards.

**Many constructural changes in VTH were recorded** including expanding and modernizing new units, rooms and registration systems (Isolation units for cats and dogs, student recreation rooms, expansion of triage, a kitchen for feed preparation, large animal examination rooms, Pathology Museum in Pathology Department)

**Constructional improvements were also made in main buildings** (canteen, conference hall, multipurpose meeting/seminar rooms, feed analysis unit, Salmonella diagnostic unit, cell culture lab, aquaculture lab, pathology student practice lab, student multi-purpose rooms, technician room, genetic and parasitology corridors, two clinical skills room in 2018)

**Remarkable improvements were recorded on the planned development of VTH** for both large animals and companion animals (Several funded projects are currently under construction or in the process of equipment installation; expansion and creation of hospitalisation, isolation, operation and reanimation units, 24/7 emergency clinic )

**Regarding the isolation units;** operational policies and procedures were instituted, taught and posted to all stakeholders. Cleaning and disinfection facilities were incorporated.

**Collaborations with municipalities, Equestrian sport clubs, Police and Gendarme Mounted forces were enhanced** to increase the caseload of equine clinical cases and equine and companion animal necropsies for practical training.

**Student assessment and evaluation strategies have been developed** to meet internationally recognised examination standards. **The assessment strategies** (aligned with the learning outcomes, VUCEP, EAEVE and VEDEK DOC lists) including lines of responsibilities were developed and announced on the webpage.

**Review of syllabuses** and organization of seminars for teaching and assessment methods have been undertaken.

Number of support staff in both the technical and clinical areas has been increased.

**QA was integrated into all activities of FVMEU** and was efficiently put into implementation especially for monitoring and periodical review of the programmes and assessment strategies.

Several QA training seminars and meetings for all academic staff were organised in order to ensure effective alignment of all content, teaching, learning and assessment activities of the degree programme.

**Herd health management teaching has been reorganised** as a single, compulsory, and multidisciplinary course in the revised form of curriculum for Day One Competence acquisition of students.

The number of EPT hours has been reorganised and increased in the revised form of the curriculum.

A detailed logbook was introduced in "vetopratik" data management software to boost student activity and guarantee the acquisition of DOCs for veterinary graduates.

**Operational policies including all analyses, processes and procedures** (including GLP and GCP) were instructed and announced on the webpage.

VTH of FVMEU hospital meets the national standards of the Ministry of Agriculture and Forestry.

Data management systems in the VTH has been expanded to include all small and large animal data, DOC monitoring, extramural and intramural caseloads and to monitor students' rate of attrition, progress

The Final graduation thesis was put into implementation relevant to evidence-based veterinary medicine.

ERUTAM plan has been reinstructed to be devoted to the accommodation of students EPT and afterhours training.

Simulation/training models were incorporated to consolidate students clinical skills and to encourage the students to take an active role in the learning process.

Online teaching methods have been incorporated. Centralized assessment systems were put into implementation during the pandemic period.

The webpage has been enriched and reorganised to be used simply and fully accessible for students, staff and other stakeholders.

E-learning platforms were strengthened and diversified to improve the self-learning opportunities for students.

Labs and clinical rooms were equipped with integrated smart cameras allowing examinations and operations to be broadcasted live to a large monitor located in the students' room.

Self-learning environments in the main building (student study and recreation rooms and clinical skills labs) have been increased.

New synergies and collaborations with external stakeholders were developed to ensure field experience and professional skills during internship and EPT.

Cooperations across all departments in FVMEU were also improved.

Relocating of vet cafeteria was completed to be a more accessible and efficient meeting point for students, patient owners and staff.

Along with a modern (approximately 110 people) seminar hall equipped with technological, and digital support, building of a multi-purpose amphitheater with a high ceiling, which allows the continuation of training seminars (complying with the mask and distance rule due to the pandemic conditions) has also been completed.

#### **1.**Correction of the Major Deficiencies

#### **1.1. Major Deficiency**

Non-compliance with substandard 3.5 because of insufficient time allocated to practical clinical training for the acquisition of Day One Competences;

#### **Factual information**

The Faculty Council early in 2018 decided to develop two-stage procedures to in order to address this issue, including short and long term strategies;

Within the frame of short-term measures after visit 2018, series of meetings were arranged (with the participation of academic staff and student representatives);

- a) to discuss the suggestion of increasing the clinical practice hours by transferring all theoretical hours of intern clinical rotation (during the 10<sup>th</sup> semester) into practice. This decision, which caused the total clinical practical hours to be increased from 638 to 722, was approved by the Education and Training Committee (ETC) and put into practice as of that date.
- b) to discuss and update all departments' course contents to ensure effective alingment of all content, teaching, learning and assessment activities.
- c) to increase the clinical practice hours, internship rotations have been restructured in favour of clinical practice hours by removing some of the basic sciences from the rotations (Annex 2.2).

After 2018 visit, ETC encouraged academic staff to enrich the e-learning platforms and to prepare videos for both extramural and intramural cases (clinic cases, lab practises, visited food processing plants, farms, slaughterhouses, necropsies, lab equipments etc.) as also needed especially during the pandemic period. Furthermore, the University supported the education and training process by providing free access to many educational materials to be used by teaching staff. Theorical course records and course notes were uploaded to the online course platforms for students to boost students' opportunities for self learning.

Series of internal and external training activities were organised to canalise the academic staff to implement innovative assessment and teaching-learning methods, along with learning outcomes and course contents. The course contents of the syllabus related to each course are available on https://dbp.erciyes.edu.tr/Program/P3.aspx .

As a first step for a long-term perspective; the most critical issue for FVMEU was the need for a radical review of the curriculum. FVMEU organized series of meetings with deans and academic staff of other VEE's in Turkey, to discuss and clarify how to improve Day One Competencies and harmonize the veterinary curricula in favouring increased practical training.

The curriculum of FVMEU is reorganized in a broader range of applied modules; the content of most modules was revised and more focussed towards hand on clinical work practice. Additionally, number of new multidisciplinary subjects addressing selected subjects of "Professional communication, Diagnostic imaging, Zoology, Medical botanic, Artificial intelligence and digital technologies in veterinary medicine, Clinical skill laboratory practises, Propaedeutics, Physiopathology, Swine disease, Scientific research and presentation techniques, Career planning, Forensic medicine and necropsy and Final graduation thesis were incorporated into the curriculum to be implemented in 2021 academic year as long term

measures. Considering the critical importance of disease prevention aspects in the role of farm animal veterinarians, "Herd Health Medicine" and "Preventive Medicine" were better defined and unified in one subject in the revised form of curriculum as multidisciplinary courses on a compulsory basis. The revised form of the curriculum is summarized in Annex 1.1 and Clinical skill laboratory practise modules are listed in Annex 1.2.

The renewing process of the curriculum, beside staff members, included representatives from students and stakeholders. The general conditions related to students' passing and failing have been documented in the Education and Examination Directive (https://veteriner.erciyes.edu.tr/Uploads/files/Egitim%20Ogretim%20ve%20Sinav%20Yonerg esi.pdf)

Regarding the revised form of the curriculum, the **total number of courses was reduced from 95 to 87** and **the percentage of the hours dedicated to clinical animal work in the curriculum markedly increased by reducing the percentage of theoretical training** as summarised below. This change is significant when considering that the clinical day-one skills learning process is a time-consuming activity.

After considering all the comments included in the final report, we decided to review and increase compulsory Clinical Practical Training in intramural (in VTH) and extramural rotation as EPT

The curriculum has been designed to focus on learning outcomes and be applied as studentoriented teaching and problem-based learning concepts. The curriculum is organized to include both subjects of study and species-oriented teaching concepts. It was rectified to support a more collaborative approach between departments to fit for the benefit of student learning.

After a detailed work-plan and as a result of series of meetings with academic staff,(and representatives from students and stakeholders) a **total of 45.7%** (638 to 930) of increase for intramural clinical training were agreed, processed, and finally a significant increase of hand-on clinical training hours has been introduced in the core curriculum as shown in Annex 1.

Therefore, the former 45/55 ratio for practical/ theoretical training has been reorganised in favour of practicals (57/43). To achieve an increase in live animal exposure of students, compulsory teaching practicals were introduced to the revised curriculum to replace the current voluntary attendance system.

The revised form of the curriculum is briefly summarized as follows:

- Total number of subjects: 87
- Total number of theorical (2400) + practical (3185) = **5585 Hours**
- Total of elective (theorical) subjects' hours: 18 x 15 = 270 Hours
- Total compulsory subject hours = Total subject hours (5585) total elective course hours (270) = **5315 Hours**
- Non-clinical practical course hours = Total weekly practical course hour 108 x 15 Week = **1620 Hours**
- Total non-clinical course hours = 1620 + EPT I (40 Hours) + EPT II (40 Hours)= **1700** Hours
- Clinical Practical course hours = Total weekly practical course hours 62 x 15 = 930 Hours

- Total Clinical practical course hours = 930 + EPT III (160 Hours) + Intern shift (180 Hours) + Clinic shift (200 Hours) = **1470 Hours**
- Total Practical Course Hours = Non-clinical Practical course hours **1700 Hours** + Clinical Practical course hours **1470 Hours** = **3170 Hours**

#### **Ratios**

- The ratio of total compulsory course hours to total course hours: 5315/5585 x 100 = 95%
- Ratio of theroical compulsory to elective hours: 270/2415x100=11%
- Ratio of theorical courses: 2415/5585 x 100= 43%
- Ratio of practical courses: 3170/5585 x 100= 57%
- Non-clinical practical hours: 1700 Hours
- The ratio of non-clinical practical courses to total practical course hours: 1700/3179 x 100= **54%**
- Total clinical practical course hours: 1470 Hours
- The ratio of clinical practical course hours to total practical course hours: 1470/3170 x100= **46%**
- The ratio of total elective course hours to total compulsory course hours: 270/5585 x 100= 5%

Academic Years	Å	<b>\</b>	В	*	C	<u>'</u> *	1	)	1	E	F			G
	2018	2021	2018	2021	2018	2021	2018	2021	2018	2021	2018	2021	2018	2021
YEAR-1	592	585	-	25	-	60	224	270	-	-	-	-	816	940
YEAR-2	480	480	-	11	-	60	384	420	-	90	-	-	864	1061
YEAR-3	512	495	-	17	-	60	352	360	32	15	128	120	1024	1067
YEAR-4	560	555	-	17	-	60	100	195	92	-	256	240	1008	1067
YEAR-5	480	285	-	11	-	60	238	75	20	120	254	570	992	1121
<b>OTHERS*</b>			-	76**	-	86								162
TOTAL	2624	2400		157		386	1298	1320	144	215	638/722	930***	4704	5418

Table 1: Curriculum hours in each academic year taken by each student (comparison of SER KAYSERİ 2018 and revised curriculum).

A: lectures; B: seminars; C: supervised self-learning; D: laboratory and desk-based work; E: nonclinical animal work; F: clinical animal work; G: total. \*Seminars and SSL are incorporated in the course contents of each course immediately after visit 2018.

\*\*Workshops, student congresses, presentations, conferences.

\*\*\*Clinical practical courses of EPT (160 hours), intern night shifts (180 hours) and clinic night shifts (200 hours) are not included in clinical animal work (F)

\*\*\*\* All theoretical clinical hours of the internship were transformed to practical hours immediately after the visit to rectify the insufficient time allocated to practical clinical training

The clinic instructors developed a detailed list of clinical competencies/ learning objectives for all relevant species to be accomplished by students and this list, containing 703 competencies in different categories, has been inroduced to automation system of VTH to be monitored by instructors. The draft version of the Clinical logbooks of Day One Competencies is described in Annex 3.

In this application, all students have a detailed list of activities to be carried out during the clinical rotations and afterhours. Each student must enter and record the activities they carried

out for each rotation, and each clinical supervisor directly supervises and approves the performance of the activities as monitored in vetopratik software. The monitorisation and evaluation of DOC's for clinical practises have been carried out by the responsible academic staff in charge of clinic rotations.

Clinical training runs from the 5th to the 10th semester, with special emphasis on the clinical rotations. Clinic rotations were prepared based on the students performances and observations. The clinic rotation plans for 3<sup>rd</sup> and 4<sup>th</sup> grade students and internships are described in Annex 2.1 and Annex 2.2

Two hundred forty hours of EPT were embedded in the curriculum which is 80 hours higher than the previous EPT hours.

Unfortunately there was insufficient information in our SER (2018) about the description of seminars and SSL's which was entirely our fault. Practical training of some subjects including food hygiene and technology consists of seminars and SSL's with the attendance of all students. Especially during an internship, some course practicals include supervised self-learning activities.

In a more practical approach, interactive seminar hours, where a small group of students get prepared on a specific topic or discuss on a case, were incorporated into the course contents to improve the decision-making process and a detailed work-plan for the management of cases. Communication skills are also developed during these interactive seminers and the oral and practical examinations of some departments. During the fifth year, some internship subjects include problem-solving teaching strategies for some cases. Moreover, there are some hours in the course contents of various disciplines devoted to teamwork seminars.

**Considering the suggestions of EAEVE experts, student centred learning such as seminars and supervised self-learning have been undertaken** as short-term improvements. Both are formally described in the subject descriptions (syllabus) on FVMEU degree programme. In the present form of the curriculum, a significant increase in the clinical animal work, seminars and SSL hours has been introduced, accounting for an increase of 292, 157, and 386 hours, respectively.

In addition to the teacher's initiatives, students themselves organize workshops and annual veterinary medical congress even at international level (Annex 11).

The course programme is designed to allow the students and staff to attend both intramural and extramural seminars they are interested in. FVMEU is highly responsive to organising seminars in every area for the students and staff who are interested in advancing their knowledge and skills.

Among the strategies to improve student Day One Competences acquisition, **student skill** rooms are enriched with animal models and simulators.

Following the suggestions of the EAEVE team, several diagnostic imaging hours has been integrated into and formally described in the subjects' description as short-term improvements. Diagnostic imaging hours have been included as compulsory for all the students prior to the clinical rotation to guarantee Day-One competence in the renewed curriculum. The hours

dedicated for diagnostic imaging have been increased and diversified to include different modern techniques such as radiology, ultrasound, CT, MRI and endoscopy for the clinical diagnosis.

Related to pathology, students are trained through 65 hours of core practical and theoretical courses including 45 hours (1 t and 2 p) during 15 weeks in the 7th semester (4th year). In addition, the competence related to clinical pathology is delivered as 8 theoretical and 12 practical hours on a compulsory basis during internship rotation.

During core course teaching hours in pathology, students are trained to evaluate diseased organs, learn necropsy techniques, collect data for determining animal death causes, write a report on lesions and necropsy, and collect, preserve and transport the biologic materials for pathological diagnosis. Annex 6 and Annex 1.1 summarise the DOCs and revised form of the curriculum for pathology respectively.

In order to promote the best clinical learning outcome, clinical skills in relation to **propaedeutics, diagnostic imaging, clinical laboratory skills** and **necropsy techniques** are **reorganised to be taught prior to the clinical rotation** in the revised form of the curriculum. Additionally clinical analysis such as **haematology and urine analysis is added** to basic day-one competence lists of courses to be presented to all students and included in the clinic logbook list (Annex 3).

The number of elective subjects has been reduced to canalise the workload of academic staff towards the core clinical learning process. Therefore, the revised form of the curriculum is strengthened concerning clinical and non clinical practical hours with intramural and extramural activities.

A new management software was acquired and is under implementation (Vetopratik and students affairs) to support and monitor teaching activities, to record all animal cases in VTH, for diagnostic services and clinical research and administration processes.

A new extracurricular orientation program was integrated into the course program during the registration week for newly enrolled students to familiarize them with the university and degree program's the scientific, academic, social and cultural life.

Parasitic Zoonosis has been inserted (compulsory) in the syllabus for all students to guarantee the day one skills related to veterinary public health.

#### Comments

The catalogue of competencies and objectives will support our students in meeting professional goals and gaining the Day One Competences according to EAEVE standards. Our future plan is to increase the availability of animal and organ models and dummies by regularly scheduled purchase

#### **Suggestions for Improvement**

In line with international recommendations governing the teaching of veterinary medicine, regular revison and updating of curriculum and syllabuses are needed for our degree programme to focus on a strong practical component, solid theoretical background, and prompt response to the needs of students, staff, and stakeholders.

#### **1.2. Major Deficiency**

Non-compliance with substandard 3.5 and 4.8 because students do not receive Day One Competence in emergency care on a compulsory basis;

#### **Factual information**

FVMEU has an innovative VTH providing high-level 24/7 emergency service for all species and this afterhour service is overseen by qualified vets and academic staff in shift rotation. After the visitation in 2018, students are actively involved in the workup groups, including physical examination and decision-making of emergency care patients in VTH.

Providing **Day One Competence in emergency care on a compulsory basis** for the students needed structural change in curriculum and a formal process adaption. Therefore, the clinic instructors and relevant committees studied the draft version of a new directive to implement emergency care on a compulsory basis. The draft version has been **evaluated**, **processed and approved by Faculty Council to be submitted to Rectorate**, **Senate and finally were put into implementation**. Directive of Clinical Courses and Clinical Night Shift Practice is available

https://veteriner.erciyes.edu.tr/Uploads/files/Klinik%20Dersleri%20ve%20Klinik%20Nobeti %20Uygulama%20Esaslari.pdf

In the revised form of THE curriculum, new clinic rotation plans (Annex 2.1) and Day One Competence of emergency care (Annex 4.1) have been created. A total of 380 shift hours as Intern shifts (180 Hours) + Clinic shifts (200 Hours) has been incorporated in related areas of clinical training. Students were divided into 16 groups and placed on emergency clinical service shifts (Annex 4.2) to ensure them the opportunity to see emergency cases.

First Response Instructions in Emergency Cases are available at https://veteriner.erciyes.edu.tr/Uploads/files/ACIL%20MUDAHALE%20TALIMATI.pdf

#### **1.3. Major Deficiency**

Non-compliance with Substandard 4.7 because of lack of compliance of the facilities with the appropriate legislation on biosecurity and EU animal welfare and care standards;

#### 2.5. Major Deficiency

Facilities must comply with all relevant health safety and biosecurity standards

#### 2.6. Major Deficiency

Operational policies and procedures (including biosecurity, good laboratory practice and good clinical practice must be taught and posted for students, staff and visitors

#### **Factual information:**

After 2018 visit by EAEVE experts, greater attention was paid to biosecurity and biocontainment throughout the VTH and other laboratories.

A new Vice Dean for QA has been appointed to deal with all aspects of biosecurity throughout FVMEU.

**The Biosecurity Committee of FVMEU set up a series of meetings, discussed and developed a biosecurity manual** to be evaluated and approved by Faculty Council. Once approved by the Faculty Council, the new protocol has been incorporated into the Biosafety Plan of FVMEU and made available to all stakeholders on the Faculty's website. The final version of the detailed biosecurity manuel, posted to students and staff is available on:

https://veteriner.erciyes.edu.tr/erciyesUniversitesi.aspx?veterinerFakultesi=17,

includes the following operational policies and procedures;

- General Biosafety Rules and Definitions
- Biosafety Guidelines for Equine Clinic
- Biosafety Guidelines for Farm Animals Clinic
- Biosafety Rules for the Companion Clinics
- Medical and Biological Waste Management
- Biosafety Rules for Poultry and Exotic Animal Clinic
- Biosafety Rules for Application Trainings in Abattoirs and Slaughterhouses, Food Hygiene and Technology laboratories, and Dairy Product Facilities,
- Biosafety Rules to be Followed During Farm Visits
- Biosafety Rules for The Department of Anatomy
- Biosafety Guidelines for Diagnostic Laboratories

To act fast for biosafety needs, biosafety issues (during visits to farms, slaughterhouses, shelters, clinics and the laboratories) were added to the course contents of relevant departments in the first week of every semester and periodic trainings was carried out on clinical biosecurity measures for students who started clinical rotation. Specifically, for students in the first semester, the "Occupational health and safety" course was added to the revised form of the curriculum on a compulsory basis (Annex 1).

FVMEU has also planned, documented, and implemented QA aspects, including GCP and GLP, and the principles are made available to all students, employees, and visitors on a webpage (see https://veteriner.erciyes.edu.tr/erciyesUniversitesi.aspx?veterinerFakultesi=18 and https://veteriner.erciyes.edu.tr/erciyesUniversitesi.aspx?veterinerFakultesi=19).

A Biosecurity course (compulsory) was programmed within the frame of university central education programme for all academic and administrative staff and students.

**Specific biosecurity seminars for all students and staff** were given by the academic staff of the Biosecurity Committee of the FVMEU. These seminars include training about biosecurity and the specific protocols of action for the different facilities (laboratories, VTH, FPU and the Teaching Farm).

**Disinfection facilities were incorporated** in the main building, VTH, and isolation units. Particular focus was placed on the comfort and security of the hospitalized animals and hospitalization units to fit for purpose. Regarding the isolation units, new facilities for protective clothing or washing facility for the staff were built (Annex 5), and dedicated feeding utensils were supplied. The infectious flow chart has been virtualized in Annex 7.1.

**Cleaning and disinfection regimes were instituted and shared** with students and staff in VTH. Appropriate clothing and washing facilities for personnel were supplied. Measures were taken for the facility to have the ability for the personnel to move from clean to infected areas and move back to clean areas without risk of contamination.

Medical and biological waste management protocols were instituted to deal with potentially infected clothing and equipment disposal. VTH and some laboratories of FVMEU were licensed after being approved to be compliant with the national practice standards.

In order to improve the biosecurity culture in the Establishment, Biosecurity Committee organised number of periodic random visits to VTH and department laboratories and reported the inappropriate situations to be considered by clinic instructors and administrative staff.

Regarding the availability of information; many explanatory charts (including infectious flow chart, basic rules of biosecurity) signages and labelings are exhibited all around VTH and other facilities where appropriate:



Figure 1: Examples of waste management signages



Figure 2: Examples of hazard signages



Figure 3: Example of an emergency case flow chart in VTH



Figure 4: Examples of warnings and cleaning, and disinfection directives.



Figure 5: Examples of informing signages

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Figure 6: Examples of informing signages in VTH

**The webpage** has been enriched and reorganised to make it simpler and be fully accessible for students, staff, and all other stakeholders (https://veteriner.erciyes.edu.tr/).

To ensure continuity, uniformity, application, and periodic review of standards, two academic staff from the related departments and a nursing staff were appointed to regularly monitor, report and guarantee the welfare and care of hospitalised and treated patients in VTH.

**VTH was re-structured to promote the best husbandry, welfare, and management** practices by adding well-equipped hospitalisation units for companion animals, supported by a project from the Scientific Research Projects Supporting Unit of Erciyes University (Project No: EUBAP TSG 2021-10968). Facilities were provided with disposable heating peds, washable/disposable beddings and food/water utensils, oxygen support unit, data logger devices to record temperature and humidity and ventilation systems, ICU for cats and dogs, infusion pumps, monitoring devices, coagulation analyses device, etc. Also, adequate means of perching and cages were designed for housing avian species (Annex 5).

**Regulations on the welfare of farm animals and animals used for experimentation** and other scientific purposes are taught and posted for students, staff, and visitors and are available on https://hayvanhast.erciyes.edu.tr/Yonetmelikler.aspx. Moreover, research-based practices in the livestock species are subject to ethics committee approval ensuring that the welfare issues are considered.

A welfare checklist is prepared and engaged for the welfare of hospitalised and isolated patients (Annex 9.1).

As suggested by the ESEVT team, the clinical staff consulted and decided for diversifying the use of major pain relief drugs (including Analgesics; butorphanol, fentanyl, ketoprophen, meloxicam, flunixin, metamisol) to provide better patient pain control and management in VTH.

**Hospitalisation rooms were outfitted with informing signs and forms** to note daily clinical findings, pharmacy dispensing, critical treatments, diagnostic procedures and epicrisis of the patients. Additionally, the instructions showing the nutritional requirements and energy needs as well as welfare standards of hospitalized animals in VTH were visualized at the entrances of the hospitalization units

#### Comment

The Biosecurity Committee will continue to close follow-up of implementation of biosecurity aspects by training activities, regular visits and reports.

#### 1.4. Major Deficiency

Non-compliance with substandard 4.7 because of the need to embark on the planned development of the VTH for both large animals and companion animals

#### 1.8. Major Deficiency

Non-compliance with substandard 9.2 because of insufficient number of support staff in both the technical and clinical areas;

As the EAEVE visitation team underlined as areas worthy of praise, VHT has ongoing financial support and encouragement from the university with an impressive and growing case load of small animals, high ruminant caseload intramurally, and excellent access to clinical cases for year 3-5 students. VTH provides huge support for the teaching/learning process for our students (Annex 5).

VTH provides a high level of clinical services, 24 h/day, to respond to the growing client population, representing a reference unit to solve complex cases. VTH of FVMEU has recently undergone renovation and is still developing with some planned and completed projects. The infrastructure and equipmentof VTH have been rationalized by the merging of previous departments. Despite the pandemic period, renovation studies still go on.

Rector has already been alerted and is highly sensitive to the needs of FVMEU to provide the necessary financial support to make constructive changes. Funding of the large animal VTH Project (regarding the expansion of the VTH to include new facilities for operation, reanimation, hospitalization and isolation units for ruminant, equine, and wild animals) has been approved by the General budget of the Turkish Presidential Strategy and Budget department. Some investments have already been made for the construction and the planned development of VTH.

Hospitalisation units of VTH for cats and dogs have been re-constructed as supported by another project from the Scientific Research Projects Supporting Unit of Erciyes University (Project No: EUBAP TSG 2021-10968).

All activities carried out in VTH has been fixed up to conform to several procedures regarding biosecurity, care, and welfare standards which are announced to students and

staff by explanatory charts in place and are also made available online on: https://veteriner.erciyes.edu.tr/erciyesUniversitesi.aspx?veterinerFakultesi=17

The patient data management system in the VTH has been expanded to include all small and large animal data, extramural and intramural caseloads, and student's DOC monitoring and is still in the development period to be expanded to monitor students' life cycles, rate of attrition, progress and course overlaps.

A qualified pharmacist staff was appointed to the VTH services, as recommended by the ESEVT team. A separate locked room, opened only by a responsible pharmacist appointed to the VTH services, has been prepared and activated to storage and administer narcotics and psychotropic drugs.

**Many changes have been recorded in the VTH** during the past 3 years, including the pandemic period. The management of existing spaces was improved and adapted to be used more efficiently, while new areas and units were added to theVTH. To avoid over duplication of the information, the main changes in the VTH are briefly listed as follows:

- A clinical room was built for first opinion cases;
- Patient data management information recording system and patient examination forms were produced;
- Hospital service flow charts, rotations and descriptions of lines of responsibilities have been identified;
- Biosecurity operational policies and procedures within the VTH were **developed**, taught, and posted to all stakeholders on: https://veteriner.erciyes.edu.tr/erciyesUniversitesi.aspx?veterinerFakultesi=17
- The triage unit was expanded. A veterinarian staff was assigned to this area;
- Hospitalization units for companion animals and were equipped (supported by a Project) to ensure animal welfare and care standards;
- Isolation units for cats, dogs, and equine animals were built and integrated into the teaching-learning model of the VTH;
- Constructural changes were done for isolation and necropsy units in order to manage the infectious wastes;
- Animal welfare and care standards in all services of VTH were improved by appointing two specialist academic staff and a responsible support staff;
- Large and small animal examination units were requalified;
- An examination place was created for the horse on an open area;
- New diagnostic equipments were acquired including modern imaging units (USG, ECG, ECO, and Endoscopy);
- Intensive care units for companion animals have been opened and equipped;
- Dermatology, cardiology and orthopaedic examination rooms were created and equipped;
- A new surgical operating room was established and equipped;
- An ophthalmology examination room was redesigned and adapted;
- Clinical skill rooms were opened and enriched with a new set of full-sized, realistic, advanced simulators and animal models. Clinical Skills Laboratory Course Practice Principles are available on:

https://veteriner.erciyes.edu.tr/Uploads/files/Klinik%20Beceri%20Lab\_%20Dersi%20Uyg\_%20Esaslari.pdf

- A total of 43 support staff (27 added after 2018) and five veterinarians in both the technical and clinical areas in the main building and the VTH have been recruited to respond to the increasing patient population of 7/24 hospital services (Annex 10);
- Reception, waiting, resting and locker rooms in VTH were remodelled in line with the needs of owners and students;
- Cleaning and disinfection facilities were incorporated into the enterances;
- A kennel kitchen was established within the VTH where food for patients can be prepared and feeding utensils cleaned;
- VTH of FVMEU meets the national animal hospital standards of Ministry of Agriculture and Forestry;

All newly generated units were fully integrated into the clinical training of students.

#### **Comments:**

It is expected that in the coming years, FVMEU will carry out expanding, remodelling, and construction works of the VTH and main buildings, as well as the acquisition of models and simulators to be used in clinical training.

#### **1.5. Major Deficiency**

Non-compliance with Substandard 4.13 because of inappropriate management and procedures within the isolation facilities;

The biosecurity and management protocols related to isolation units including the Infection Control Programme, were studied, evaluated, prepared, and instituted by the Biosecurity Committee and published on the Establishment's webpage for students and staff

https://veteriner.erciyes.edu.tr/erciyesUniversitesi.aspx?veterinerFakultesi=17.

Relevant biosecurity and biocontainment measures were put in force by appropriate notices and protocols made available in place for staff and students.

New isolation units for cats, dogs, and equines were recently added to strengthen the VTH capacity (Annex 5). These units, including calf hospitalisation units, were separated from the VTH and clearly marked by specific signs. Devices for clinical examination and medical procedures were acquired in these facilities. Appropriate clothing and washing facilities were supplied in intensive care and isolation units for personnel or students. The clean and infected areas were demarche. Instructions for the cleaning and disinfection of all facilities of FVMEU were instituted and announced in:

https://veteriner.erciyes.edu.tr/Uploads/files/HASTANE%20TEMIZLIK%20KURALLARI%20TALIMATI.pdf

Infectious case management protocol and guide for common suspect disease have been prepared and visualized, as shown in Annex 7.1.

As stated before, all students and staff were made aware of biosecurity procedures (included in the biosecurity manual) especially in relation to infective patient isolation and handling of biohazard material. Infectious suspected patients are immediately transferred to the isolation rooms according to biosecurity rules and entrance to isolation units was provided by the use of disposable and disinfection materials. Disposal of potentially infected clothing, equipment and waste was also assured.

#### **1.6.Major Deficiency**

# Non-compliance with Substandard 5.1 and 5.2 because insufficient caseload of equine clinical cases and equine and companion animal necropsies for practical training;

Related to Rubrics 5.1 and 5.2; the number of companions, equine necropsies and equine cases were suboptimal at the moment of the visit mainly due to owners who are not willing to donate the bodies of their pets (for emotional reasons) and to pay for the costs of necropsy process and reports. Equine intramural cases were also under the desired number due to owners' economic and transportion inadequacies bringing their horses to the VTH.

Increasing the numbers of equine clinical cases and equine and companion animal necropsies for student training has been a major aim of FVMEU after the visit 2018. Dean's Office and the VTH Administrative Unit decided (beyond gaining revenues from equine and companion animal and equine cases) to cover the expenses related to these deficiencies.

Together with administrative support, the Pathology Department and VTH academic staff invested considerable efforts. They recorded a significant increase in the case loads and necropsies in equine and companion animal through the protocols with main institutions in Kayseri despite fewer donations from owners and related government agencies.

Raw data from the last two academic years	2018	2019
n° of equine necropsies	3	9
n° of equine patients seen intra-murally	74	96
n° of equine patients seen extra-murally	22	74
n° of companion animal necropsies	37	121

Table 2: Number of total equine necropsies and cases during 2018-2019

Within the measures taken after the visit 2018, cadavers from municipalities, shelters and private clinics were included in student necropsy practices. Cadavers of pets sent by owners (with owner's allowance) for diagnostic necropsy purposes are also examined with students during practicals.

Special facilities are planned for large animal necropsy practices in the future development of the VTH (Annex 5).

The current caseload of equine and companion animal necropsies for practical training has been increased to provide sufficient practical training for the number of students involved.

#### Comments

The development of new agreements with other public and private stakeholders will further increase the number of cases and will also help to achieve a better balance especially **for equine cases.** 

#### Suggestions for improvement

The Department of Pathology may invest more effort to provide materials and to overcome the deficiencies.

#### 1.7. Major Deficiency

Non-compliance with Substandard 8.1 because there is no clearly identified management structure demonstrating the lines of responsibility for the assessment strategy;

#### 2.9. Minor Deficiency

An absence of a process linking assessment design to programme learning outcomes and the assessment strategy does not ensure the achievement of learning objectives

Within the frame of short-term measures to mitigate the student assessment strategy deficiency of FVMEU;

i) **Series of comprehensive meetings were arranged** (with the participation of academic staff and student representatives) to discuss and update all departments' course contents and ensure effective alignment of all content, teaching, learning, and assessment activities.

ii)**The curriculum committee reviewed the horizontal and vertical coordination** between different subjects in the curriculum considering the pedagogical basis, design, delivery and assessment methods (See section 1.1).

iii) The assessment strategy structure including lines of responsibilities and basic guidelines for the assessment system a barrier system, has been studied by working group considering the feedbacks from students, staff, and external stakeholders. Relevant feedback is received through surveys and meetings. Draft regulations are evaluated, processed, approved by Faculty Council and finally announced on the website (https://veteriner.erciyes.edu.tr/Uploads/files/Olçme%20ve%20Degerl\_%20Esaslari.pdf).

iv) Series of training activities were organised to encourage the academic staff to implement **innovative assessment and teaching-learning methods** and link assessment design to learning outcomes and course contents.

Curriculum management, in terms of learning outcomes, courses and assessment, is the task of the Curriculum Committee in close cooperation with ETC, Assessment and Evaluation Committee (AEC) and teaching staff. The AEC has the power to manage the assessment. The teaching staff of related subjects makes the proposals for the assessing each subject to the AEC, which includes student representative. After discussion and approval process by the AEC, the Faculty Council approves the final version. Monitoring of the assessment process is done through the evaluation meetings at the end of each semester considering the student surveys by the individual teaching staff and AEC.

The announcements of assessment schedules are published online at the beginning of each semester. Clinical assessments made during clinical practices are also part of the assessment strategy. The examination formats used may vary as described in the written document of Assessment and Evaluation available on https://veteriner.erciyes.edu.tr/Uploads/files/Olçme%20ve%20Degerl\_%20Esaslari.pdf.

Academic staff from the Faculty of Education (for external guidance and for providing input from pedagogy experts and assessment strategy experts) were included in the Commissions of "Assessment and Evaluation" and "Education and Examination" to; i)develop study programmes, ii) bring together the curriculum iii) to have a more aligned programme between different departments and courses.

With the new regulations and improvements made, the effective alignment of all content, teaching, learning and assessment activities of the degree programme was ensured with a the special focus on the assessment strategies; including the description of the specific methodologies for assessing theoretical knowledge, pre-clinical and clinical practical skills, evaluation of exams, diversifying the structure and type of questions to cover learning outcomes, DOC's, course contents etc.

**AEC conducted questionnaires to students** to ensure that the methodologies applied for assessment are appropriate to verify the gathering of clinical skills and Day One Competencies.

#### Comments

The success of QA, Biosecurity and educational and assessment strategies in veterinary education in FVMEU will affect in the coming years. They will continue by constantly monitoring and optimizing the process, as summarized in this report.

#### **1.9. Major Deficiency**

Non-compliance with Substandard 11.7 because of insufficient collection, analysis and use of relevant information for an effective management of its programmes and activities;

#### 1.10. Major Deficiency

Non-compliance with Substandard 11.9 because there is no monitoring and periodical review of the programmes to ensure that they achieve the objectives set for them and respond to the needs of the students and society.

#### 2.3. Minor Deficiency

The Establishment is partially compliant with sub-standard 3.1 because of: Overseeing the QA of the curriculum, particularly in gathering and then evaluating feedback from students and other stakeholders

#### **2.7. Minor Deficiency**

The Establishment is partially compliant with sub-standard 4.9 because of the VTH must meet the relevant National Practice Standards

#### 2.8. Minor Deficiency

The Establishment is partially compliant with sub-standard 7.9 because of: a need to monitor progression and rate of attrition.

#### **2.13. Minor Deficiency**

The Establishment is partially compliant with sub-standard 11.4 because of: 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.

In this section we have drafted all deficiencies (direct or indirect) related to QA, to avoid duplicating the information.

### Factual Information (Brief description of the specific QA processes for each ESEVT Standards)

The roles and responsibilities of the QA Committee (QC) are carried out in accordance with the Quality Assurance Directive of ERU in line with Article 9 of the Internal and External Quality Assurance System in Higher Education Institutions, which was initiated within the scope of the Higher Education Quality Assurance Regulation.

Within the scope of the BIDR (Internal Assessment Report covering all Strengths, Weaknesses, Opportunities, Threats of FVMEU), external (stakeholders) and internal (academic and administrative staff and student) online surveys were conducted for teaching, research, and other services of FVMEU that contribute to the regulation of the institutional operations. In addition, ERU QC conducts regular centralised surveys for academic and administrative staff and students, and shares the findings with FVMEU.

The QC, Faculty Council, Faculty Administrative Board, and other commissions of FVMEU focus and deal with all input and measures to be assessed, revised, and/or planned (with PDCA cycle) and share the results with the Dean's Office.

The relevant accreditation committees carry out the national (VEDEK) and international (EAEVE) accreditation studies of FVMEU. They also conduct regular meetings and reviews, ensuring that the criteria are followed and met.

In December 2018, the functions and missions of QC were re-organised and strengthened in FVMEU in line with the opinions and recommendations of the ESEVT team and ERU QC. Directives governing the QC tasks and the main study programme were established for QC (see *https://veteriner.erciyes.edu.tr/Uploads/files/KALITE%20GUVENCE%20SISTEMI%20KOMI SYONU.pdf*). The QC was composed of heads of departments, academic staff, and representatives of students and stakeholders in order to better organise and coordinate quality aspects. The QC (accepted as the umbrella unit of the boards, committees, and commissions) comprises high soft power enforcement; with dynamic, idea-generating, and broad-minded members of high academic and administrative experience. To support the QC work in our faculty, working groups have been established to carry out effective studies. The mission and objectives of QC were determined as improving; i) teaching efficiency and assessment strategies, ii) quality of facilities and services iii) QA culture and safety policies.

The QA strategies of FVMEU are also externally supported by monitoring/guidance mechanisms of ERU and YOK. ERU QC handled in-service training for the members of the QC of FVMEU. Vice Dean responsible for QA, attends the Quality Educations of YOK. In addition, EAEVE board member Philipp Duffus was invited by FVMEU to support the recognition of academic staff on "QA in Modern Veterinary Establishments." The QC of FVMEU organised a number of training seminars on biosecurity and professional communication for all staff (teaching, research, veterinarians, and support) of our faculty.

The QC works in coordination with the Dean and Faculty Council; i) to carry out the task of preparing and presenting BIDR (Annual Faculty Report (see https://veteriner.erciyes.edu.tr/Uploads/files/2020%20BIRIM%20IÇ%20DEĞERLENDIRME %20EAEVE%20ICIN%20WEBE%20KONULAN.pdf) ii) to inform the academic and administrative staff iii) to prepare the action plans (short, medium, and long term). The proposals and decisions and the related PDCA cycles are currently discussed in the QA working

group, to be forwarded to Dean's Office and the Faculty Council for approval and implementation. All workflows and procedures related to education and facilities are available on *https://veteriner.erciyes.edu.tr/erciyesUniversitesi.aspx?veterinerFakultesi=4* 

Documents related to quality aspects (BIDR, Annual Report, Strategic Plan, survey results, etc.) are available on the weblinks listed in Annex 8.3.

The overall QA strategy is discussed first in QC regular meetings. The QC analyses and discusses data from external (collaborating institutions) and internal stakeholders (students, academic and administrative staff) to ensure that objectives are met, including quality of curriculum, teaching and assessment methods, acquisition of skills and academic success. The results of the analysis were made available on the website of FVMEU (Figure 7).

Figure 7: PDCA Cycle on QA Implementation



Within the determined QA loop, all instructions, principles, protocols, and procedures were defined regarding "Education and Examination (curriculum), Clinical Skills Laboratory Course Practice, Clinical Courses, and Clinical Night Shift Practice, Assessment and Evaluation Strategies, EPT, Veterinary Medicine Internship Training and Final Project and Cleaning and Disinfection activities of All Facilities in FVMEU. Further information on instructions principles and function/responsibilities is available on the FVMEU website (or Annex 8.1)

Student surveys and stakeholders' feedback plays a vital role in the teaching QA process. Stakeholders can make their opinions, suggestions, and satisfactions about the faculty by the "visitor book" link on the Faculty webpage (*see:* https://veteriner.erciyes.edu.tr/ziyaretciDefteri.aspx). Personnel and external stakeholder service satisfaction surveys (including VTH services) and internal student surveys (related to DOC acquisition, courses, exams and internship) are conducted annually.

To mitigate the deficiencies related to QA of educational provisions and teaching, the following measures are taken as quick responses;

- i) **Course contents and curriculum were revised** and assessment strategies have been determined in line with the EAEVE, VEDEK, VUCEP DOC lists, core education programme contents and learning outcomes of courses. (*see https://dbp.erciyes.edu.tr/Program/Learn.aspx?Learn=%7c%2fxP1Rzf7GQ%3d*)
- ii) **Students and academic staff were trained** on, to access and attend education (including distance education during the pandemic) and exams. At the same time a series of seminars were given to all academic staff to support teaching activities and to improve the quality of education, examination methods, and assessment criteria (*see https://veteriner.erciyes.edu.tr/etkinlik.aspx?tnm=83*).
- iii) **VETOPRATIC and ERUVETO-Student Affairs software automation programs are developed** to monitor students' rate of attrition, progression, clinical skills and Day One Competence acquisition.

Monitoring and periodic review of the programme are carried out by related committees composed of students and stakeholder representatives to ensure they achieve the objectives and to respond to students' and society's needs. All processes, decisions, and approved corrective actions are communicated to the internal and external stakeholders on webpage.

**Student and stakeholder representatives** and administrative staff were included in the Faculty Council and QC. Academic staff from the Faculty of Education (for external guidance and for providing input from pedagogy experts and assessment strategy experts) were included in the Commissions of "Assessment and Evaluation" and "Education and Examination" to; i) develop study programmes, ii) bring together the curriculum iii) to have a more aligned programme between different departments and courses.

At the end of each semester, department meetings are held with the attendance of all academic staff and head of departments where issues related to education, research and quality are discussed and reported to the QC and Dean's Office. Student status follow-ups were guaranteed through the automation system by assigning one academic staff from each departments. Any changes in progressions, and the rate of attritions, feedbacks from the Student Affairs Office are identified and discussed through regular meetings at the departmental level and submitted to the Dean's Office. The results are evaluated and shared on the website of the Establishment.

ETC meets with student representatives during and at the end of the semester to evaluate the teaching programme including assessment methods. The outcomes of the meetings are reported and subsequently discussed in the QC and Faculty Council for revision studies.

In line with the obtained data; focus group meetings were held with external stakeholders to create improvement strategies for the areas to be developed and the findings were reported to the relevant departments and Dean's Office.

Along with newly developed ERUVETO-Student Affairs (covering; list of courses to identify overlaps, redundancies and omisions of the selected courses) and VETOPRATIC automation programs; the students' progress, rate of attrition were also monitored by additional web-based management programmes, including; INSTRUCTOR (covering; student's rate of attrition,

number of passed exams, all courses taken and chosen by the student, status of passing or failing the course, communication opportunities with the student) ADVISOR (covering; attended and failed courses for each student, progression, certification and recognition, communication platforms with the students) and OBISIS (covering OSYM score, admission courses taken during the academic year, identity, address and telephone and accuracy and completeness of EPT and Internship) programmes.

The students life cycle are followed by their advisors by the data management programmes mentioned above. Lines of responsibilities were clearly identified for advisor academic staff who monitor progression and the rate of attrition and provide consultancy for the students, including implementation of corrective actions and career planning. At the end of each semester, advisors are asked to submit evaluation reports about each student they mentor. Introductions covering (from admission to certification) all phases of veterinary studies, educational facilities **FVMEU** requirements. and of are available at https://veteriner.erciyes.edu.tr/duyuruDetay.aspx?duyuru=3294. FVMEU added to its strategic plan to implement measures to monitor and consistently apply pre-defined and published regulations covering all phases of the student "life cycle", e.g. admission, progression, recognition and certification.

In addition to the mentioned databases, during the pandemic period, online platforms including ERUDM (used to share all education materials and course contents, follow-up of assignments, direct messaging with the student and to perform exams), ERUDEPO (used for uploading and storing course materials), ERUZEM (used to carry out distance education, to conduct exams and remote follow-up of the courses), ZOOM (used for performing online courses and exams, sharing course materials) and GOOGLE MEETINGS (for online courses, exams and for sharing course materials) were also used.

As internal and external feedbacks are the most important sources of effective management and development, student and stakeholder's presence in processes and committees is highly valued. Students can convey their needs and queries through their representatives in the related commissions and they can provide their suggestions, comments and complaints via surveys conducted, social media comments, requests and complaint data boxes, that will be evaluated by the QC. Findings from surveys and social media comments, request, and complaint data are evaluated by the QC by taking the reports of internal and external stakeholder focus meetings, commissions decisions, departmental board decisions, and advisor opinions into account. The options are discussed and corrective actions are determined by QC, and the results and recommendations are submitted to the Dean's Office. The Dean's Office is responsible for forwarding information to stakeholders and for ensuring the implementation of those decisions

The stakeholders' and students' feedback and suggestions related to revised form of curriculum, teaching and assessment methods have been regularly collected, analysed and used to improve indicators. Several commissions also comprise student representatives to express their point of views on the topics regarding curriculum, course programmes, assessment strategies, etc. FVMEU collects student views by organising regular student meetings and questionnaires about curriculum, teaching and assessment, and the findings are evaluated, analysed and discussed with stakeholders and corrective actions have been drafted by the QC. All processes are made published on the webpage as listed in Annex 8.3. The curriculum is also analysed at the departmental level annually. In line with the data obtained, corrective actions are planned, strategies are created, and draft proposals and results were sent to the relevant units and the Dean's Office.

Guided by the VTH clients' feedback (obtained from client satisfaction surveys), critical changes were handled in VTH (addition of patient WC, canteen, dressing room, restrooms). Likewise, the selection criteria of EPT facilities were determined considering the reflections from EPT surveys.

**Having completed the clearly defining process of rules, protocols, and procedures** for the implementation of QA, FVMEU ensures that objectives arising from QA process are linked to all its actions and targets as also reflected in the updating process of Strategic Plan, Internal Evaluation Report, Activity Report annually. Whole reports are prepared by the relevant commissions.

All guidelines and principles, course and exam schedules, clinic and intern rotation plans, and programmed visits are announced on the web and the bulletin boards of FVMEU. Beyond the announcements related to course programmes, professional activities are also announced to students on the website, social media, e-mail, and posters. Delivering of announcements related to programmed course activities are followed by the Vice Deans and the Faculty Secretariat.

Several laboratories of FVMEU were accredited by the National Assessment Institutions ("veterinary diagnosis and analysis laboratories working license" by TÜRKAK, Ministry of Agriculture and Forestry, General Directorate of Food and Control).

**The VTH meets the relevant National Practice Standards** of the Ministry of Agriculture and Forestry (https://www.resmigazete.gov.tr/eskiler/2011/12/20111221-8.htm). The Veterinary Education at FVMEU, also evaluated at a national level by a competent organization (VEDEK, the national accreditation agency) and received conditional accreditation (2019). This certification, along with the "Disability-Friendly Campus" certificate given by YOK (2021) contributed to the preference rate of FVMEU in order of choice of students.

It is noteworthy that **our faculty ranked first** among the other Veterinary Faculties in Turkey in respect to teaching, research, and industrial income in the 2021 Times Higher Education Ranking.

#### Comments

Since visit 2018, significant progress on the development and implementation of the QA system has been achieved by FVMEU. The QC has contributed to raise awareness of teaching staff on teaching quality issues and to guide appropriate units and commissions to improve quality. One of the primary objectives of the QA system is to follow the continual improvement of QA processes.

Supported by ERU, FVMEU developed its own QA flow to address fundamental requirements and needs to follow its routine QA procedures and monitoring consistantly. The revising and updating process of the quality issues and related documents will be continued.

The VETOPRATIC and ERUVETO Student Affairs software programs developed by our faculty will be constantly updated, and it will be kept permanently available for students to become a crucial source of information to monitor their attrition, progress and Day One Competence Acquisition. VETOPRATIC and ERUVETO Student Affairs software programs

will be enhanced to cover and ensure a healthier follow-up of student rate of attrition and progression

We are aware of the fact that we are at the beginning to introduce lines of procedures, responsibilities, and roles that are considered directly related to QA procedures. Further efforts are needed to simplify and efficiently implement the currently well-defined QA system and strategies and gradually embed QA culture for all activities of FVMEU.

Although we have very limited experience spent on this topic, so far, high-level outcomes have been obtained by the collaboration and support of all the staff, students, stakeholders and the QA unit of ERU. It is evident that the introduction of the QA system of ERU contributed alot, to consolidating, developing, and implementing QA strategies in FVMEU.

#### **Suggestions for improvements**

Erciyes University puts QA aspects on the top of priority strategic lines of action and supports internal QA activities and documentation of FVMEU by external monitor/guidance and by providing regular training activities with experts. Supervised and supported by the experienced and devoted QA team of ERU, FVMEU will continue to simplify and embed the QA culture for all of its activities and services.

Collection of data and monitoring measurable indicators for student's attrition, progression and exam outcomes are currently traced by separate data management softwares that should be merged in a single umbrella programme in FVMEU.

A number of improvements remain to be taken in the near future by i) strengthening of cooperation with stakeholders, ii) continuing development of QA processes, iii) reviewing and communication of findings and decisions iv) simplifying and more clearly defining the roles, responsibilities and action flows.

FVMEU aims to have a broad range of internal and external stakeholders to improve data collection structure. There are ongoing efforts to link data from diverse sources more effectively and to enhance the cooperation with external stakeholders in education, research and social affairs. The use of different social media platforms (YouTube, WhatsApp, Facebook, Instagram, Twitter, etc.) will be encouraged to receive internal and external feedback more effectively as they are the most critical sources of effective management and development.

**2.** Correction of the Minor Deficiencies:

#### **2.1. Minor Deficiency**

Ensuring the effective alignment of all content, teaching, learning and assessment activities of the degree programme

#### **Factual Information**

After considering all comments included in the final report, all learning outcomes of the curriculum and their matching with each specific competence were thoroughly reviewed in a series of meetings with the heads of departments and the academic staff of each area of knowledge.

All subjects have been addressed and updated to identify their theoretical and practical outcomes in meetings of the working groups. This review of competences and outcomes was immediately reflected in the course contents of each subject. Course contents, along with learning outcomes, and teaching hours for each course are set out in the syllabus available on website (https://veteriner.erciyes.edu.tr/Uploads/files/Olcme%20ve%20Degerl %20Esaslari.pdf).

The curriculum committee reviewed the horizontal and vertical coordination between different subjects in the revised curriculum, considering the pedagogical basis, design, delivery methods and assessment methods.

### Pedagogy and assessment strategy experts were invited to the series of meetings and seminars;

- i) to aware the academic staff to bring together the curriculum,
- ii) to have a more aligned programme between different departments and courses
- iii) to ensure the effective alignment of all content, teaching, learning and assessment of the degree programme.

**Educational and assessment strategies were revised** as guided by programme learning outcomes, VUCEP and DOCs in SOP 2016 ESEVT.

The curriculum and administration committees, where curriculum design, development and evaluation were carried out, were re-structured **to include student representatives.** 

AEC and ETC encourage teaching staff to inform students (at the first day of course) about the course contents, learning outcomes, and assessment methods that will be applied.

#### **2.2. Minor Deficiency**

## Herd health management teaching should be improved for Day 1 Competence acquisition by students in this area

#### **Factual Information**

During 2018 visitation, "herd health management" was not a single course in the curriculum however we informed the ESEVT Team about the already available herd health management course contents of related departments.

"Herd health management" has been introduced to the revised form of curriculum as a single compulsory and multidisciplinary course that will be implemented in the 2021-2022 academic year.

Until the approval and implementation process of the revised form of curriculum (including herd health management as a single multidisciplinary course), we provided the equivalence by renewing and enriching the course contents. Table 3 shows the selected course contents and DOCs of different departments related to herd health management.

Table 3: Course contents and DOC's related to herd health management

Course	DOC's and Course Contents related to Herd Health Management
REPRODUCTION, ARTIFICIAL INSEMINATION AND ANDROLOGY	*Apply the knowledge of the reproduction, artificial insemination, and andrology to animal breeding and improvement.
ZOOTECHNICS - II	*Be able to know basic herd health management principles in farm animal husbandry *Understand breeding and selection methods *Develop new strategies on the herd health management *Be able to know the methods of monitoring the nutritional status of the herd *Use their knowledge of the udder system and animal breeding to manage herd health effectively. *Inspect herd record data concerning lactation, reproduction, diseases, milk yields and meat yields.
	*Create a biosecurity and hygiene program
OBSTETRIC AND GYNAECOLOGY-II	<ul> <li>*Be able to evaluate the herd health parameters related to <ul> <li>the reproductive efficiency in herds</li> <li>the scoring system for diagnosis of infertility, and</li> <li>udder health associated with the puerperal period physiology and disorders.</li> </ul> </li> <li>*Understand and apply the basic rules of preventive medicine in terms of individual and herd health.</li> <li>*Analyse and manage infertility on the herd level.</li> <li>*Create registration systems and analyse herd health records</li> <li>*Selection and culling criteria in the herd</li> </ul>
LIVESTOCK ECOMOMICS	*Cost components and calculation of; milk cost in dairy cattle meat costs in cattle fattening meat costs in broiler production egg in layer hen production *Health economics and herd management *Economic losses due to livestock diseases and calculation methods *Comparison of livestock in Turkey and Europe *Student seminar presentation

Students in clinical rotations are taken to ERUTAM where herd management hands-on work practical courses are carried out. Moreover, with the protocols made with the SARAY farm; intern students are lectured on herd health management and related practical skills, e.g. transrectal palpation, pregnancy diagnosis as well as herd data analysis during their visits with the participation of the responsible veterinarian under the academic supervision of related Departments.

To avoid duplication of information;

\*Minor deficiencies of 2.3, 2.7, 2.8 and 2.13 are detailed in the major deficiencies section together with 1.9 and 1.10 (regarding QA aspects)

\*Minor deficiency of 2.5 and 2.6 were combined to major 1.3 (regarding biosecurity standards);

\*Minor deficiency of 2.9 to was combined to major 1.7 (Regarding assessment strategy)

#### 2.4 Minor Deficiency

EPT must complement and strengthen the academic education and have effective academic oversight for its efficacy

#### 2.10 Minor Deficiency

Insufficient quality control of the student logbooks

#### **Factual Information**

As the veterinary degree is a professional qualification with DOCs, academic education of FVMEU (intra-mural and extra-mural) has been strengthened and enhanced by increasing EPT hours. Therefore 240 hours of EPT were distributed to 4-6 and 8<sup>th</sup> semesters in the revised form of curriculum (see Annex 1.1.) which is 80 hours higher than the previous EPT hours, to guarantee the Day One Competence acquisition of students.

Moreover, student accommodation opportunities in ERUTAM were improved and expanded for the student handling of all common domestic animal species afterhours.

**Collaborations with internal and external stakeholders were diversified and increased** for EPT traineeship, providing real-life experience, hands-on practical and clinical training.

EPT is a mandatory part of FVMEU curriculum. Students can accomplish their EPT practices in external public or private institutions (areas linked to the veterinary profession) listed in the EPT document. The EPT Commisson is responsible for the EPT traineeship, coordinating all related procedures through FVMEU https://veteriner.erciyes.edu.tr/Uploads/files/Staj%20Esaslari.pdf. The description of the organisation, selection criteria of EPT facilities and supervision of EPT were prepared by EPT Commission working group, evaluated and approved by Dean's Office and Faculty Council and finally communicated to all stakeholders in the webpage.

The Regulations of EPT include a list of recognised facilities (agreed from the reflections of student satisfactions resulted from questionnaires) and students are free to choose their EPT area and the location from predefined and listed facilities in the EPT document. Students who can not find a location for their EPT should ask the EPT Committee to facilitate placement. EPT activities are carried out under the guidance of the external supervisor and recorded in the logbook.

At the end of the EPT practice, students and the external supervisor of the EPT facility are asked to fill the online questionnaire forms to be evaluated and reported by the EPT Committee. The EPT Committee is also responsible for evaluating the quality control of EPT logbooks and reporting the findings to Dean's Office and Faculty Council for final approval. As logbook records the achievements of the DOCs in all the requested areas of competence, compulsory logbooks for clinical case follow-up were implemented to improve the evaluation of the clinical learning of our students. The quality control of the logbooks was given under the responsibility of the teaching staff of the rotation plan in VTH. All core clinical activities by students are assessed by the responsible teacher and when satisfactorily completed, marked in the logbook.

The monitoring of Day One Competence acquisition is also carried out by newly developed web-based management programmes (VETOPRATIK and ERUVETO Student Affairs). The acquisition of practical clinical skills is evaluated through practical exams as detailed in the document of Assessment and Evaluation.

All logbooks (especially for clinical practises, emergency care, pathology and herd health management) were updated to be compliant with the Day One Competencies required by ESEVT 2016 (Annexes 3, 4, 6 and see section 2.2) VUCEP and VEDEK and were introduced to the automation system, "Vetopratik." After students complete the relevant competencies and enter automation, their practices are approved by the relevant instructor to guarantee the clinical skills of the students. Moreover, within the scope of renewed assessment policy; process-based assessment tools; project and performance assignments, portfolio (homework, presentations, experiments, review submission, case study, case discussion, consultation, patient examination), logbooks, performance during field visits (farm, slaughterhouse, public and private institutions and organizations) and scientific events could be involved in the assessment and evaluation process to contribute to the student's grade by 20% and the student will not be able to graduate before the DOCs are completed.

#### Comments

As a result of a great effort carried out by the EPT Committee and the Faculty Council, a broad number of changes have been made in the curriculum comprehending the increased number of EPT hours. The new VTH electronic data management system has been expanded for better monitoring of logbooks and all professional skills of students.

#### 2.11. Minor Deficiency

Students should be trained in scientific and research techniques relevant to evidence-based veterinary medicine

#### **Factual Information**

The final graduation thesis has been incorporated (on a compulsory basis) into the degree programme and detailed in the document available in https://veteriner.erciyes.edu.tr/Uploads/files/Vet\_%20Hek\_%20Intornluk%20Egit\_%20ve%2 0Bitirme%20Odevi%20Esaslari.pdf

The compulsory graduation thesis includes an experimental work or a critical review of a specific topic during an internship under the supervision of their advisor in order to improve the student's ability to carry out scientific research and presentation in the field of veterinary medicine and to gain the concept of evidence-based medicine. By writing their thesis, under the supervision of their mentoring academic staff, students gain skills in discussing and applying scientific methods and take the latest research results into account.

**Every year two student congress organisations (IVSA and VetEBA) are held** during 8 days of scientific meetings (including social programmes) with keynote speakers and scientific presentations open to all staff and students (undergraduates and graduates).

All departmental seminars and conferences are open to undergraduate students. During their internship students are assigned in some departments to prepare (with or without presenting) a paper on a scientific topic suggested by teaching staff (voluntarily). Students may also attend the Ph.D. and senior journal clubs.

Evidence-based medicine and research are highly valued in FVMEU that a single course of "Scientific Research and Presentation Techniques" **has been added** to the revised form of the curriculum.

The academic staff was encouraged to engage the undergraduate students in the scientific and research-based projects relevant to evidence-based veterinary medicine. There is a number of possibilities for students to participate in research projects on a noncompulsory basis. Currently 6 undergraduate students are formally taking place in national scientific projects of FVMEU.

FVMEU is also a part of a number of exchange programmes (Mevlana, Farabi, Erasmus) for undergraduate students to experience research-based veterinary education at other universities.

The teaching staff are made aware of the importance of evidence-based medicine, scientific research, and lifelong learning within the frame of internal and external training activities.

Through the periodic events organised by FVMEU on trend topics, scientists are invited to give seminars on their scientific activity with the participation of all academic staff and students.

FVMEU has well-equipped research laboratories and high scientific qualifications of academic staff which provide appropriate environments for evidence-based training for the students on a voluntary basis. FVMEU encourages and supports the participation of students in national and international scientific conferences.

#### 2.12. Minor Deficiency

Delivery of the Programmes must ensure that students are encouraged to take an active role in creating the learning process

#### **Factual Information**

The teaching staff received training seminars on innovative teaching/learning and assessment methods and were encouraged to focus on student-centred learning: such as problem-solving, exploratory learning, critical thinking, and self-directed learning. The teaching staff are encouraged to enable students to participate and take an active role in the learning process.

The total increase in EPT hours and compulsory emergency care practices as well as the weekend and night shifts in the revised curriculum will contribute to the active role taking process of students.
Students are involved in all processes from anamnesis to treatment (including case discussions and consultations) of clinical cases. This allows students to become aware of the continuing need to update their knowledge and take an active role in the learning process.

Undergraduates are encouraged to join and experience research activities especially during their last year of the degree program therefore a significant number of our graduates (currently 343 students enrolled) attend postgraduate programmes. Undergraduate students are also encouraged to participate in continuing education events organised by the University and other external (public and private) scientific organisations.

FVMEU made a great effort to encourage and support student-centred learning; by adding new environments for student self-learning (Annex 5) and fully exploiting the potential benefits of digital technologies for learning and teaching.

### 3. ESEVT Indicators

	Name of the Establishment:	Faculty of Veterinary Medicine, Erc	ciyes Univ	ersity	
	Name & mail of the Head:	Prof. Dr. Abdullah INCI, ainci@erciy	yes.edu.t	r	
	Date of the form filling:	02.07.2021			
	Raw data from the	e 2 full academic years preceding AY 2018-2019	2018	2019	Mean
1	n° of FTE academic	staff involved in veterinary training	82	83	82,50
2	n° of undergraduate	students	392	392	392
3	n° of FTE veterinaria	ans involved in veterinary training	77	78	77,50
4	n° of students gradua	ating annually	61	50	55,5
5	n° of FTE support st	aff involved in veterinary training	36	38	37
6	n° of hours of practic	1442	1442	1442	
7	n° of hours of clinica	722	722	722	
8	n° of hours of FSQ &	n° of hours of FSQ & VPH training			
9	n° of hours of extra- VPH	30	34	32	
10	n° of companion ani	mal patients seen intra-murally	8091	10057	9074
11	n° of ruminant and p	ig patients seen intra-murally	2202	1976	2089
12	n° of equine patients	seen intra-murally	74	96	85
13	n° of rabbit, rodent, murally	bird and exotic patients seen intra-	518	516	517
14	n° of companion ani	mal patients seen extra-murally	106	504	305
15	n° of individual rum murally	inants and pig patients seen extra-	435	556	495,5
16	n° of equine patients	seen extra-murally	22	74	48
17	n° of visits to rumina	ant and pig herds	48	50	49
18	n° of visits of poultry	y and farmed rabbit units	8	8	8
19	n° of companion ani	mal necropsies	37	121	79
20	n° of ruminant and p	ig necropsies	60	51	55,5
21	n° of equine necrops	ies	3	9	6,0
22	n° of rabbit, rodent,	bird and exotic pet necropsies	76	52	64
23	n° of FTE specialise veterinary training	d veterinarians involved in	76	77	76,5
24	n° of PhD graduating	g annually	4	5	4,5

Name of the Establ	lishment: Facu	Faculty of Veterinary Medicine, Erciyes University					
Date of the form fi	lling: Prof	. Dr. Abdullah ING	CI, ainci@erciyes.edu	ı.tr			
Calculated Indicat	ors from raw data		Establishment	Median	Minimal	Balance <sup>3</sup>	
			values	values <sup>1</sup>	values <sup>2</sup>		
11	n° of FTE academic staff inv veterinary training / n° of und students	olved in lergraduate	0,210	0,15	0,13	0,084	
12	n° of FTE veterinarians invol veterinary training / n° of stu- annually	ved in dents graduating	1,396	0,84	0,63	0,766	
13	n° of FTE support staff invol veterinary training / n° of stu annually	ved in dents graduating	0,667	0,88	0,54	0,127	
I4	n° of hours of practical (non-	clinical) training	1442	953,50	700,59	741,410	
15	n° of hours of clinical trainin	g	722	941,58	704,80	17,200	
16	n° of hours of FSQ & VPH tr	aining	280	293,50	191,80	88,200	
17	n° of hours of extra-mural pro in FSQ & VPH	actical training	32	75,00	31,80	0,200	
18	n° of companion animal patie murally / n° of students gradu	ents seen intra- ating annually	163,495	62,31	43,58	119,915	
19	n° of ruminant and pig patien murally / n° of students gradu	ts seen intra- ating annually	37,640	2,49	0,89	36,750	
I10	n° of equine patients seen int of students graduating annual	ra-murally / n°	1,532	4,16	1,53	0,002	
111	n° of rabbit, rodent, bird and intra-murally / n° of students annually	exotic seen graduating	9,315	3,11	1,16	8,155	
I12	n° of companion animal patie murally / n° of students gradu	ents seen extra- ating annually	5,495	5,06	0,43	5,065	
I13	n° of individual ruminants an seen extra-murally / n° of stu annually	d pig patients dents graduating	8,928	16,26	8,85	0,078	
I14	n° of equine patients seen ext of students graduating annual	ra-murally / n°	0,865	1,80	0,62	0,245	
I15	n° of visits to ruminant and p students graduating annually	ig herds / n° of	0,883	1,29	0,54	0,343	
I16	$n^{\circ}$ of visits of poultry and far / $n^{\circ}$ of students graduating an	med rabbit units	0,144	0,11	0,04	0,099	
I17	n° of companion animal necr students graduating annually	opsies / n° of	1,423	2,11	1,40	0,023	
I18	n° of ruminant and pig necro students graduating annually	psies / n° of	1,000	1,36	0,90	0,100	
I19	n° of equine necropsies / n° of graduating annually	of students	0,108	0,18	0,10	0,008	
120	n° of rabbit, rodent, bird and necropsies / n° of students gr annually	exotic pet aduating	1,153	2,65	0,88	0,273	
I21*	n° of FTE specialised veterin in veterinary training / n° of s graduating annually	arians involved students	1,378	0,27	0,06	1,318	
I22*	n° of PhD graduating annuall students graduating annually	y/n° of	0,081	0,15	0,07	0,011	
1	Median values defined by dat	ta from Establishme	nts with Accreditation	Approval sta	tus in May 201	19	
2	Recommended minimal value Accreditation/Approval statu	es calculated as the 2 s in May 2019	20th percentile of data	from Establis	shments with		
3	A negative balance indicates	that the Indicator is	below the recommend	led minimal v	alue		

#### 4. Addendum

After being declared a pandemic by the World Health Organization on March 11, 2020, the COVID-19 crisis hit all the universities around the world.

On March 16, the universities in Turkey suspended face-to-face teaching and education which was rapidly replaced by online digital formats and necessary precautions were taken to pay attention to hand cleaning and hygiene rules in common areas of all universities.

Due to the Covid-19 pandemic, within the scope of the epidemic prevention measures taken by the Council of Higher Education (YOK), (in line with the opinions of the Ministry of Health Coronavirus Scientific Committee) the Spring Semester of the 2019-2020 Academic Year and the Fall Semester of the 2021 Academic Year courses were carried out with online education in 1st, 2nd, 3rd and 4th grades, and online + hybrid education model including face-to-face practices for interns in 5th grades.

From the beginning of the pandemic, thanks to our university that ERU put all its opportinities into force to respond to all kinds of needs of academic staff and students by switching the education firstly to hybrid and then to a fully digital online system as prepared and defined by the related units of Ercives University.

**Erciyes University was the first in Turkey to organise a workshop on online education** including many detailed training seminars and education programs for academic staff (concerning preparation and use of online education materials and presentation techniques, effective teaching and learning methods, assessment strategies etc.) by using digital technologies. These training programmes were continued periodically throughout the pandemic process in line with the demands of the academic staff. Meanwhile, we have incorporated a **single course on the use of artificial intelligence and digital technologies** in veterinary medicine education and practice into our revised curriculum.

From the outbreak of COVID-19, our approach has been based on strong coordination, flexible decision-making and quick response to innovation studies. All modifications and decisions on the pandemic are communicated to all our stakeholders through publication on the website.

Within the scope of theoretical courses, zoom links and sharing platforms were defined for academic staff to upload their lecture notes and educational materials.

All theoretical training programs were simultanously shared and uploaded to the system for students self-learning.

The camera systems in all faculty units were activated for the teaching staff who were informed and supported to create their own videos both in the faculty labs and in the field for practical courses. They were also directed to use open-access educational materials provided to increase the variety and scope of educational materials.

The student's assessment was mainly caried out by online education centre of ERU which provides the most possible safe way of student assessment. A computer-based examination system was used for the quality control of the online education program and assessment methods. During the pandemic period, FVMEU also focused on the correction of major and minor deficiencies to get ready for the revisitation process, in addition to;

• Overall improvement and creation of educational materials

- Creation of database containing cases (virtual interactive cases) for distance learning
- Improved training of teaching staff for the use of online teaching/learning tools
- Improvement of communication and coordination between teachers and students

<u>At the beginning of the pandemic,</u> YOK activated the YOK COURSES PLATFORM (https://yokdersleri.yok.gov.tr/#lesson) where course materials, lecture videos, and various course contents are shared and made available for all students. This platform, which is constantly updated, and enriched by new resources, has provided a great convenience to students in accessing digital course contents (Fig 1).

	Y//K	YÖK DERSLER (YÜKSEKÖĞRET	İ PLATFORMU İM KURUMLARI DERSLER	i)
ANIMAL BEHAVIOR	R AND WELLNESS (Anadolu University)	Book		
ANIMAL BEHAVIOR	R AND WELLNESS (Atatūrk University)	200k		
LIVESTOCK ECON	OMY (Anadolu University) (Book)			
HYGIENE AND SAM	NTATION (Anadolu University) Book			
CELL CHEMISTRY	(Anadolu University) (Book			
OCCUPATIONAL H	HYGIENE (Ataturk University) Book			
BREEDING AND HE	ALTH OF LABORATORY ANIMALS (Anado	olu University) (Book		
LABORATORY TEC	HNIQUES AND PRINCIPLES (Atatürk Unive	ersity) (BOOK)		
LEGISLATION, ETH	ICS AND ANIMAL RIGHTS (Istanbul Unive	ersity) Book		
INTRODUCTION T	O PATHOGENS (Istanbul University)	yk)		

Figure 1: YOK courses platform (https://yokdersleri.yok.gov.tr/#lesson)

Within the framework of YOK decisions, ERU decided to switch to the online education process as of March 23, 2020, and started this process on March 30, 2020, after a week of preparation.

The online education process was structured in both **synchronous and asynchronous formats**; online course and exam process was conducted by **ERUZEM** in synchronous format while course and assignment process was carried out as asynchronous format by the Information Technologies Department over the **ERUDM** portal in FVMEU.

Additionally, the **ERUDEPO** portal has been put into implementation where lecture notes, videos, and live lecture recordings are uploaded. About 500 licenses of the ZOOM program have been provided by ERU for all faculty members to be used to execute synchronous courses.

In this process, the academic staff of FVMEU made a great effort to continue the education process and managed the course follow-up processes in the most efficient way, by preparing and uploading materials (including course videos) to the system.

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4.Courses and Opportunities <u>During the Pandemic</u>
4.1. Erciyes University in the Pandemic Process
4.1.1. Course and Exam Platforms
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With the transition to online education, **ERUDM** (Fig 2), which was made available by ERU, has been actively used (https://erudm.erciyes.edu.tr/) by academic staff to share their course notes and videos weekly, and students' access to these uploaded materials was monitored.

ERÜDM Eng	lish (en) 👻	IMDAT ORHAN
ि 8934_ANATOMI- I_1_1.1.01	ANATOMİ-I	Q -
Participants	Dashboard / My courses / 8934_ANATOMI-I_1_1.1.01	Turn editing on
Competencies		
I Grades		
🗅 General	N Duyurular	
🗅 Topic 1	Topic 1	
🗅 Topic 2	(B) ders notu	
C Topic 3		
🗅 Topic 4	Topic 2	
🗅 Topic 5	🔠 ders notu 2	
Ch. Topic 6	•	

Figure 2: ERUDM Portal

Communication between students and academic staff (questions and answers about courses) were also provided through this platform (Fig 3).

ERÜDM E	English (en)							•	IMDAT OR	HAN	n
			AYŞE ADIGÜZEL	1080111721@erciyes.edu.tr	Student 🖋	No groups	169 days 23 hours		Active 1	0	Û
8934_ANATOMI- I_1_1.1.01		0 🕻	DUYGU AKAR	1080111677@erciyes.edu.tr	Student 🖋	No groups	174 days <mark>2 hours</mark>		Active 1	0	۵
曫 Participants		0 8	AKIF AKARSU	1080111403@erciyes.edu.tr	Student 🖋	No groups	136 days 2 hours		Active 1	0	Û
Competencies		•	RECEP TAYYİP AKÇA	1080111354@erciyes.edu.tr	Student 🖋	No groups	136 days 7 hours		Active 1	٥	Û
I Grades		0	NADIDE AKGÜL	1080111724@erciyes.edu.tr	Student 🖋	No groups	154 days 9 hours		Active 1	0	Û
		0 (	TUANA ALAN	1080111727@erciyes.edu.tr	Student 🖋	No groups	181 days 9 hours		Active 1	0	Û
		0	IREM NUR ALTUN	1080111703@erciyes.edu.tr	Student 🖋	No groups	199 days 12 hours		Active 1	•	Û
🗅 Topic 1		0 (	SERDAR ALTUNER	1080111545@erciyes.edu.tr	Student 🖋	No groups	Never		Active 1	0	Û
🗅 Topic 2		0	AHMET APACIK	ahmetapacik72@gmail.com	Student 🖋	No groups	139 days 9 hours		Active 1	0	Û
🗅 Topic 3		0 6	BEYZA ARSLAN	1080111660@erciyes.edu.tr	Student 🖋	No groups	145 days 7 hours		Active 1	•	Û
🗅 Topic 4		0 0	MESUT ARTIKARSLAN	1080111776@erciyes.edu.tr	Student 🖋	No groups	146 days 10 hours		Active 1	0	Û
🗅 Topic 5		0 (	AHMET ASLAN	1080111502@erciyes.edu.tr	Student 🖋	No groups	97 days 13 hours		Active 1	0	Û
Ch Topic 6	-	n (	ELIF SINEM AYDAN	1080111668@ercives.edu.tr	Student 🖋	No groups	128 days 2 hours		Active G	8	m

Figure 3: Communication via ERUDM

Another for within ERU is the **ERUDEPO** system opened use portal (https://depo.erciyes.edu.tr/index.php/login) (Fig 4), providing a large storage area for uploading video recordings of online courses. All course materials were successfully uploaded on this portal and functionally used by students. Thanks to this system, students who could not attend online courses or those who want to listen and watch the course repeatedly had no problems accessing the course videos.

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٩	Etiketler								
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			Topografik Anatomi		🔗 Paylaşıları		1,3 GB	3 ay önce	
			klasör				3,7 GB		
Ŷ	Silinmiş dosyalar								
0	3.7 GB / 10 GB kullanıldı								
¢	Ayarlar								

Figure 4: ERUDEPO

For online education, ZOOM program licenses have been allocated to faculty members under the coordination of ERUZEM, and live courses were held efficiently without any limitations (subjects, course duration, number of participants, and course records) (Fig 4.5)



Figure 5: Online theoretical courses via ZOOM



Figure 6: Online practical courses via ZOOM

At the beginning of the pandemic, student exams were decided (by the Rectorate) to be carried out as assignments that were evaluated as course notes. After the arrangement process, the exams have been decided to be conducted and supervised online, for which the ERUZEM unit of our University was used. A transparent and successful exam schedule was implemented, which allowed the use of all question types and the evaluation of assessment methods.

In addition to this platform, other instruments such as Google forms, ERUDM, ZOOM were also used for student assessment.

Online exams were supervised i) by dividing the whole class into groups via ZOOM, ii) assigning a supervisor for each group, and iii) inspecting the exam period by the cameras with online examination rules. During the exams, the students were also controlled by the ERUZEM system whether they used other applications or screens.

The results and the exam statistics were automatically sent to those who are responsible for the related courses. During the online education process, the statistics and feedbacks from both the courses and the exams were discussed, evaluated and necessary arrangements were made in the related committees of our faculty.

### 4.1.2. Training Seminars for Academic Staff

Numerous meetings and seminars have been organized by ERU on the promotion and use of all programs actively used in the online education process since the beginning of the pandemic process. Furthermore, an IT team was formed (24/7 service) to respond quickly to the problems faced by all academic staff using ERUZEM.

The education seminars are listed below;

An Online Education Workshop was held for the first time in Turkey, where many topics such as "The Effects of the Pandemic Process on Higher Education and the New Normal Education and Learning Process", "Online Education in Higher Education" were discussed (Fig 7).



Figure 7: Online education workshop

A conference on "Effective Communication in the Online Education Process" was organized by the Faculty of Economics and Administrative Sciences of our university (Fig 8).



Figure 8: "Effective Communication" Conference in the online education process

To improve the online education competence of university lecturers, the Quality Commission of our university organized online training series (with the participation of 500 academicians) including "Introduction to E-Learning; Trainer Training," "Fundamentals of E-Learning", "E-Learning and Technology", "Online Course Design", "Digital Competencies and Course Material Design", "Assessment and Evaluation Design in E-learning" (Fig. 9).



Figure 9: Introduction to E-Learning "Trainer Training I"

"E-Learning Training II" was organized by our university to support the more effective delivery of online education and increase the instructors' practical competencies in this field (Fig 10).



Figure 10: E-Learning Training II

### 4.2. FVMEU in the Pandemic Process 4.2.1. Course and Exam Platforms

FVMEU has carried out education and training in the most successful way during the pandemic process by using all capabilities and by gaining new skills and experiences in all fields deemed necessary in line with the decisions taken by both YOK and our University. The number of individuals in the groups of intern students, receiving face-to-face education, has been reduced to include 2 or 3 per groups in clinical rotations. During internship training, maximum attention was paid to social distance by using meeting rooms, laboratories, and large clinical halls instead of small-scale indoor areas.

Regarding the online education of other students, all portals offered by YOK and ERU were actively used and all variations and modifications required by the internal dynamics of FVMEU were handled on time to make the courses easy to flow and to increase apprehensibility.

Within this context; digital improvements and innovation studies were carried out in the individual offices, the classrooms and the laboratories.

Innovations;

The systems of pre-existing computer televisions in all classrooms were integrated to the ZOOM program, enabling the lecturer to lecture in the classroom and the student to attend the course as if they were in the classroom (Fig 11).



Figure 11: Online course in the classroom on ZOOM.

The existing imaging systems of the teaching laboratories have been integrated into the online courses, allowing the practice courses to be conducted via ZOOM (Fig 12). Some practicals in Anatomy, Histology, Biochemistry, Pathology, Parasitology, Food Hygiene Laboratories were given live via ZOOM.





Figure12: Online courses in teaching lab on ZOOM.

During the pandemic process, Topographic Anatomy, Internal Medicine, Surgery, and Obstetrics were held online on Clinical Skill Lab Simulators with full-sized, realistic and advanced anatomical features (Fig 13).





Figure 13: Online training on the simulators

- Students' self-learning opportunities were increased by broadcasting clinical cases via ZOOM by mobile camera systems in the VTH clinics and by recording and uploading the operation images to the platforms.
- Interactive courses were taught to discuss of case reports, treatment procedures and recommendations (Fig 14,15,16).



Figure 14: Surgery Department online course.



Figure 15: Internal Medicine Department online course and video record



Figure 16: Online education synchronous courses in Obstetrics and Surgery Departments

All academic staff was encouraged to participate in all informatic seminars and meetings held by ERU related to online education. Additionally, 2 representatives from each department were assigned; to provide coordination with ERUZEM and to solve the problems faced by teaching staff in FVMEU. Therefore, the procedures such as planning and coordination of exams, establishing ZOOM meetings, and appointing the supervisors to inspect the exams were carried out without any grievances. During pandemic, students who have had Covid-19 or were in contact, have been given the right to attend make-up exams, and they have been granted leave for their absences.

In addition to the training seminars held by ERU during the pandemic process, FVMEU also organized various meetings and seminars to inform the academic staff and to manage the pandemic process correctly (Fig 17).



Figure 17: Information meeting on online education

Informatic meetings were held concerning online education, the use of the ZOOM applications, the features of the devices and the activities (Fig 18).



Figure 18: Meeting concerning the use of online systems.

FVMEU meets all needs and requirements of both face-to-face and online education with its facilities, physical infrastructure, equipment, digital imaging systems, innovative and

realistic clinical skill simulators, mobile camera and imaging systems, data management systems, laboratories and seminar halls equipped with the latest technology materials.

In the next process, all the capabilities gained during the pandemic process will be used and all useful systems will further be developed and fully integrated into the training programmes of FVMEU students whether online or face-to-face.

Some activities during pandemic period are listed in Table 4 and available on webpage.

able 4: Some activities during pandemic period in FVMEU (via zoom)							
Determination of Assessment Methods in line with	11 02 2020	82					
Cognitive Level	11.02.2020	02					
Biosecurity Measures in VTH	23.02.2020	35					
ESEVT Visitation Experience of FVMEU	3.06.2020	25					
Obstetrics Gynaecology and Calf Care Workshop	5.03.2020	50					
National Poet Mehmet Akif Ersoy	12.03.2020	150					
Instructions for the use of New Web-based Informatic							
Software in FVMEU	25.09.2020	45					
How to use Online Education Methods?	2.10.2020	15					
Quality Assurance (QA) In A Modern Veterinary							
School	7.10.2020	20					
Instructions for the use of Vetopratik: A Web-based							
Informatic Software	18.10.2020	82					
Orientation training Seminars	27.10.2020	80					
One Health Seminar	13.11.2020	40					
Seminar (Antibiotic / Drug Applications in Fish)	17.11.2020	25					
Veterinary Disaster Management	18.11.2020	30					
Strategies to Improve Biosecurity as a Traditional							
Strength of FVMEU	23.12.2020	30					

activities during pendemic period in EVMEU (vie zoom) Table 4. Same

	Name of the Establishment:	Faculty of Veterinary Medicine, Erciye	s University
	Name & mail of the Head:	Prof. Dr. Abdullah INCI, ainci@erciyes	s.edu.tr
	Date of the form filling:	02.07.2021	
	Raw data from the full acade	emic year preceding AY 2020	2020
1	n° of FTE academic staff inv	olved in veterinary training	85
2	n° of undergraduate students	3	412
3	n° of FTE veterinarians invo	lved in veterinary training	77
4	n° of students graduating and	nually	72
5	n° of FTE support staff invol	ved in veterinary training	48
6	$\mathbf{n}^{\circ}$ of hours of practical (non-	clinical) training	1442
7	n° of hours of clinical trainin	g	722
8	n° of hours of FSQ & VPH tr	280	
9	n° of hours of extra-mural pr	21	
10	$\mathbf{n}^\circ$ of companion animal patie	ents seen intra-murally	11235
11	$\mathbf{n}^{\circ}$ of ruminant and pig paties	nts seen intra-murally	1282
12	n° of equine patients seen int	ra-murally	37
13	$\mathbf{n}^{\circ}$ of rabbit, rodent, bird and	l exotic patients seen intra-murally	573
14	$\mathbf{n}^{\circ}$ of companion animal patie	ents seen extra-murally	259
15	$\mathbf{n}^{\circ}$ of individual ruminants an	nd pig patients seen extra-murally	38
16	n° of equine patients seen ext	ra-murally	15
17	$\mathbf{n}^{\circ}$ of visits to ruminant and p	big herds	0
18	$\mathbf{n}^{\circ}$ of visits of poultry and far	med rabbit units	5
19	$\mathbf{n}^\circ$ of companion animal necr	opsies	3
20	$\mathbf{n}^\circ$ of ruminant and pig necro	ppsies	50
21	$\mathbf{n}^{\circ}$ of equine necropsies		5
22	$\mathbf{n}^\circ$ of rabbit, rodent, bird and	l exotic pet necropsies	0
23	$\mathbf{n}^\circ$ of FTE specialised veterin	arians involved in veterinary training	77
24	$\mathbf{n}^\circ$ of PhD graduating annual	ly	5
L			

### ESEVT Indicators during Pandemic Period(2020)

# 5. Annexes

# Annex 1.1: Revised form of FVMEU Curriculum

ERCIY	ERCIYES UNIVERSTY FACULTY of VETERINARY MEDICINE CURICULUM PLAN								
Subject	Course	Course name		1st S	emester				
No	unit		Т	Р	Total	ECTS			
	code					credits			
		Compulsory courses							
1	1.1.01	ANATOMY I	3	4	7	6			
2	1.1.02	HISTOLOGY I	2	2	4	4			
3	1.1.03	HISTORY OF VETERINARY	2	1	3	4			
		MEDICINE,							
		PROFESSIONAL ETHICS,							
		DEONTOLOGY AND							
		VETERINARY MEDICINE							
		LEGISLATION							
4	1.1.04	BIOPHYSICS	1	0	1	1			
5	1.1.05	ZOOLOGY	1	1	2	2			
6	1.1.06	MEDICAL CHEMISTRY	1	1	2	2			
7	1.1.07	OCCUPATIONAL ENGLISH	0	2	2	1			
8	1.1.08	OCCUPATIONAL HEALTH	1	1	2	2			
		AND SAFETY							
9	1.1.09	TURKISH LANGUAGE	2	0	2	2			
10	1.1.10	ATATURK'S PRINCIPLES	2	0	2	2			
		AND HISTORY OF							
		REVOLUTION							
11	1.1.11	FOREIGN LANGUAGE	2	0	2	2			
12	1.1.12	OPTIONAL COURSES	2	0	2	2			
		TOTAL	19	12	31	30			

Subject	Course	Course name		2nd 8	Semester	
No	unit		Т	Р	Total	ECTS
	code					credits
		Compulsory courses				
13	1.2.01	ANATOMY II	3	4	7	6
14	1.2.02	HISTOLOGY II	2	2	4	4
15	1.2.03	GENETIC	2	1	3	3
16	1.2.04	ETHOLOGY (ANIMAL	1	1	2	2
		BEHAVIOR AND				
		WELFARE) <sup>1</sup>				
17	1.2.05	MEDICAL BOTANIC <sup>2</sup>	1	1	2	1
18	1.2.06	BIOSTATISTICS	1	2	3	2
19	1.2.07	OCCUPATIONAL ENGLISH	0	2	2	1
20	1.2.08	SCIENTIFIC RESEARCH	1	0	1	1
		AND PRESENTATION				
		TECHNIQUES				

21	1.2.09	TURKISH LANGUAGE	2	0	2	2
22	1.2.10	ATATURK'S PRINCIPLES	2	0	2	2
		AND HISTORY OF				
		REVOLUTION				
23	1.2.11	FOREIGN LANGUAGE	2	0	2	2
24	1.2.12	CAREER PLANNING	1	0	1	2
25	1.2.13	OPTIONAL COURSES	2	0	2	2
		TOTAL	20	13	33	30

1: It is given as a multidisciplinary by the Deontology; Physiology; Zootechnic. This course is coordinated by the Department of Zootechnics

2. It is given multidisciplinary by the Departments of Pharmacology and Toxicology; Animal Nutrition and Nutritional Diseases. This course is coordinated by the Department of Pharmacology and Toxicology. T: Theoretical, P: Practical, ECTS (ECTS): European Credit Transfer System

Subject	Course	Course name		3rd S	Semester	
No	unit		Т	Р	Total	ECTS
	code					credits
	(	Compulsory courses				
26	2.1.01	PHYSIOLOGY	4	5	9	8
27	2.1.02	BIOCHEMISTRY	4	5	9	8
28	2.1.03	EMBRYOLOGY	1	1	2	2
29	2.1.04	TOPOGRAPHIC	1	2	3	2
		ANATOMY				
30	2.1.05	ZOOTECHNICS	4	4	8	8
31	2.1.06	OPTIONAL COURSES	2	0	2	2
		TOTAL	16	17	33	30

Subject	Course	Course name		4th S	lemester	
No	unit		Т	Р	Total	ECTS
	code					credits
		Compulsory courses				
32	2.2.01	PARASITOLOGY	5	5	10	7
33	2.2.02	MICROBIOLOGY	4	4	8	6
34	2.2.03	VIROLOGY	2	2	4	4
35	2.2.04	ANIMAL NUTRITION AND	4	4	8	6
		NUTRITIONAL DISEASES				
36	2.2.05	CLINICAL SKILLS	0	2	2	2
		LABORATORY COURSE <sup>3</sup>				
37	2.2.06	OPTIONAL COURSES	2	0	2	2
38	2.2.07	EPT I (Supervised Study, Extra	-	-	-	3
		Practical Training) <sup>4</sup>				
		TOTAL	17	17	34	30

3: Clinical Skills Laboratory course is given by the departments specified in the principles in rotation. This course is coordinated by the Department of Internal Medicine.

4: Summer EPT I: 3 ECTS at the end of the 4th semester, 5 working days/40 hours of supervised work.

Subject	Course	Course name		5th S	emester				
No	unit		Т	Р	Total	ECTS			
	code					credits			
		Compulsory courses							
39	3.1.01	CLINIC I <sup>5</sup>	0	4	4	4			
40	3.1.02	PROPEADEUTIC I <sup>6</sup>	3	0	3	3			
41	3.1.03	PHYSIOPATOLOGY	1	1	2	2			
42	3.1.04	POULTRY DISEASES <sup>7</sup>	2	4	6	5			
43	3.1.05	FISH DISEASES <sup>8</sup>	2	4	6	5			
44	3.1.06	LABORATORY ANIMAL	2	4	6	5			
		DISEASES <sup>9</sup>							
45	3.1.07	BEE DISEASES <sup>10</sup>	2	2	4	4			
46	3.1.08	OPTIONAL COURSES	2	0	2	2			
		TOTAL	14	19	33	30			

5: It is given multidisciplinary by the Departments of Internal Medicine; Surgery; Obstetrics, and Gynaecology; Wild Animal Diseases. This course is coordinated by the Department of Surgery.

6: It is given multidisciplinary by the Departments of Internal Medicine; Surgery; Obstetrics, and Gynaecology; Wild Animal Diseases. This course is coordinated by the Department of Internal Medicine.

7: It is given as a multidisciplinary by the Departments of Microbiology; Virology; Pathology. The department of Virology is the coordinator of this course.

8: It is given multidisciplinary by the Fisheries; Pathology. The Department of Fisheries is the coordinator of this course.

9: It is given multidisciplinary by the Departments of Laboratory Animals; Pathology. The Coordinator of this course is carried out by the Department of Laboratory Animal Science.

10: It is given by the departments of Parasitology, Microbiology, Virology in a multidisciplinary manner. This course is coordinated by the Department of Parasitology.

Subject	Course	Course name		6th Sen	nester	
No	unit code		Т	Р	Total	ECTS
						credits
		Compulsory courses				
47	3.2.01	CLINIC II <sup>11</sup>	0	4	4	4
48	3.2.02	PROPAEDEUTIC II <sup>12</sup>	3	0	3	3
49	3.2.03	PHARMACOLOGY	4	4	8	6
50	3.2.04	GENERAL PATHOLOGY	3	3	6	4
51	3.2.05	IMMUNOLOGY	1	2	3	3
52	3.2.06	IMAGING TECHNIQUES	2	0	2	2
		RADIODIAGNOSTIC				
53	3.2.07	ANIMAL HUSBANDRY	1	1	2	1
54	3.2.08	LIVESTOCK ECONOMY	2	0	2	2
55	3.2.09	OPTIONAL COURSES	2	0	2	2
56	3.2.10	EPT II (Supervised Study,	-	-	-	3
		Extra Practical Training) <sup>13</sup>				
		TOTAL	18	14	32	30

11: It is given multidisciplinary by the Departments of Internal Medicine; Surgery; Obstetrics, and Gynaecology; Reproduction, Artificial Insemination And Andrology; Wild Animal Diseases. This course is coordinated by the Department of Obstetrics, and Gynaecology
12: It is given multidisciplinary by the Departments of Internal Medicine; Surgery; Obstetrics, and Gynaecology; Reproduction, Artificial Insemination And Andrology; Wild Animal Diseases. This course is coordinated by the Department of Surgery. Reproduction, Artificial Insemination And Andrology; Wild Animal Diseases. This course is coordinated by the Department of Surgery.
13: Summer EPT II: 3 ECTS at the end of the 6th semester, 5 working days/40 hours of supervised work.

Subject	Course	Course name		7th	Semester	
No	unit		Т	P	Total	ECTS
	code					credits
		Compulsory courses				
57	4.1.01	CLINIC III <sup>15</sup>	0	8	8	4
58	4.1.02	INTERNAL DISEASES OF THE	3	0	3	3
		DOG AND CATS				
59	4.1.03	EPIDEMIOLOGY	1	0	1	1
60	4.1.04	PATHOLOGY	5	4	9	8
61	4.1.05	TOXICOLOGY AND	2	2	4	4
		ENVIRONMENTAL SCIENCE				
62	4.1.06	FOOD HYGIENE AND	2	2	4	4
		CONTROL				
63	4.1.07	ANESTHESIOLOGY AND	1	0	1	1
		REANİMATİON				
64	4.1.08	REPRODUCTION, ARTIFICIAL	2	0	2	3
		INSEMINATION AND				
		ANDROLOGY				
65	4.1.09	OPTIONAL COURSES	2	0	2	2
		TOTAL	18	16	34	30

14: It is given multidisciplinary by the Departments of Internal Medicine; Surgery; Obstetrics, and Gynaecology; Reproduction, Artificial Insemination And Andrology; Wild Animal Diseases. This course is coordinated by the Department of Obstetrics, and Gynaecology.

Subject	Cours	Course name		8tł	n Semester	
No	e unit code		Т	Р	Total	ECTS credits
		Compulsory courses				
66	4.2.01	CLINIC IV <sup>15</sup>	0	8	8	4
67	4.2.02	SURGICAL	5	0	5	5
68	4.2.03	OBSTETRIC AND	6	0	6	6
		GYNAECOLOGY				
69	4.2.04	EQUINE INTERNAL MEDICINE	1	0	1	1
70	4.2.05	INTERNAL DISEASES OF THE	3	0	3	3
		CATTLES				
71	4.2.06	MILK HYGIENE AND	2	5	7	4
		TECHNOLOGY				
72	4.2.07	SWINE DISEASES	1	0	1	1
73	4.2.08	OPTIONAL COURSES	2	0	2	2
74	4.2.09	EPT III (Supervised Study , Extra	-	-	-	4
		Practical Training) <sup>16</sup>				
		TOTAL	20	13	33	30

15: It is given multidisciplinary by the Departments of Internal Medicine; Surgery; Obstetrics, and Gynaecology; Reproduction, Artificial Insemination And Andrology; Wild Animal Diseases. This course is coordinated by the Department of Internal Medicine.16: Summer Internship III: 4 ECTS at the end of the 8th semester, 20 working days/160 hours of supervised work.

Lesson	Cours	Course name		9th	Semester	
No	e unit		Т	Р	Total	ECTS
	code					credits
		Compulsory courses			1	
75	5.1.01	CLINIC V <sup>17</sup>	0	8	8	4
76	5.1.02	INFORMATION	1	1	2	2
		TECHNOLOGIES AND				
		ARTIFICIAL INTELLIGENCE				
77	5.1.03	PREVENTIVE MEDICINE <sup>18</sup>	2	0	2	2
78	5.1.04	PROFESSIONAL	0	2	2	2
		COMMUNICATION				
79	5.1.05	HERD HEALTH AND	1	2	3	4
		MANAGEMENT <sup>29</sup>				
80	5.1.06	ORTHOPEDICS AND FOOT	3	0	3	3
		DISEASES				
81	5.1.07	VETERINARY MEDICINE	2	0	2	2
		PUBLIC HEALTH				
82	5.1.08	NECROPSY AND FORENSIC	2	0	2	2
		MEDICINE <sup>20</sup>				
83	5.1.09	MEAT HYGIENE,	2	4	6	5
		EXAMINATION AND				
		TECHNOLOGY				
84	5.1.10	WILD ANIMAL DISEASES <sup>21</sup>	2	0	2	2
85	5.1.11	OPTIONAL COURSES	2	0	2	2
		TOTAL	17	17	34	30

17: It is given multidisciplinary by the Departments of Internal Medicine; Surgery; Obstetrics, and Gynaecology; Reproduction, Artificial Insemination And Andrology; Wild Animal Diseases; Pathology. This course is coordinated by the Department of Surgery.18: It is given multidisciplinary by the Departments of Internal Medicine; Surgery; Obstetrics, and Gynaecology; Microbiology; Virology; Parasitology. This course is coordinated by the Department of Internal Medicine.

19: It is given in a multidisciplinary manner by the Departments of Obstetrics and Gynaecology; Internal Medicine; Surgery; Livestock Business Economics; Zootechnics; Reproductive Artificial Insemination, and Andrology. This course is coordinated by the Department of Obstetrics and Gynaecology.

20: It is given multidisciplinary by the Departments of Pathology; Internal Medicine; Pharmacology and Toxicolocy. This course is coordinated by the Department of Pathology.

21: It is given multidisciplinary by the Departments of Internal Medicine; Surgery; Obstetrics, and Gynaecology; Pathology. This course is coordinated by the Department of Wild Animal Diseases.

Lesson	Cours	Course name		10	th Semester	
No	e unit code		Т	Р	Total	ECTS credits
		Compulsory courses				
86	5.2.01	VETERINARY MEDICINE INTERNSHIP EDUCATION <sup>22</sup>	0	30	30	26
87	5.2.02	FINAL PROJECT <sup>23</sup>	2	2	4	4
		TOTAL	2	32	34	30

22: Coordinated by the Regulations of Veterinary Medicine Internship Training and Final Project

23: Coordinated by the Regulations of Veterinary Medicine Internship Training and Final Project

Academic Year	Semester	Theoretical Hours	Practical Hours	Total	Total Theoretical Hours x 15 Week	Total Practical Hours x 15 Week
1	1	19	12	31	285	180
1	2	20	13	33	300	195
n	3	16	17	33	240	255
2 4		17	17	34	255	255
3 5		14	19	33	210	285
5	6	18	14	32	270	210
4 7		18	16	34	270	240
4	8	20	13	33	300	195
5	9	17	17	34	255	255
5	10 (Intern)	2	32	34	30	483
ТО	TAL	161	170	331	2415	2550
	EPT I	-	40x1 Week			40
EPT	EPT II	-	40x1 Week			40
	EPT III	-	40x4 Week			160
Intern N	Night shift					180
Clinical	Night shift					200
T	otal	2415	3170		5585	

Education Term	Obligatory Courses ECTS	Elective Courses ECTS	EPT ECTS	Intern Education ECTS	Final Project ECTS	Total ECTS
1. (1-4 Semester)	109	8	3			120
2. (5-9 Semester)	133	10	7			150
3. (10. Semester)	-	-		26	4	30
TOTAL	242	18	10	26	4	300

Seminars and SSL both are formally described in the subjects description (syllabus) on FVMEU degree programme,

# Annex 1.2: Clinical Skill Laboratory Practise Modules

Module		Related	
No	Module Name	Department	Instructor
1.	-Clinical Skills Laboratory Introduction -Clinical Skills Laboratory Rules -General Laboratory Rules and Laboratory Tools -Automatic Pipette Use -Recognition of Units and Equipment	Biochemistry	Related Instructor
2.	-Communication with the Patient Owner -Animal Welfare Practices -Clinical Ethics and Euthanasia Practices	Veterinary History and Deontology	<b>Related Instructor</b>
3.	-Topographic Anatomy Operation Regions Anaesthesia Places Blood Collection, Drug Delivery Areas	Anatomy	<b>Related Instructor</b>
4.	<ul> <li>-Injection Locations (Horse, Cattle, Sheep, Dog, Cat) (IM, SC, IV)</li> <li>- Taking Blood Sample (Horse, Cattle, Sheep, Dog, Cat)</li> <li>- Taking Skin Scraping Samples</li> <li>- Use of Tape Strip (Skin Examination)</li> <li>- Safe Use of Needles,</li> <li>- Open a Glass Vial</li> </ul>	Internal Medicine	Related Instructor
5.	<ul> <li>Vascular Tract Opening and Intracet</li> <li>Placement</li> <li>Serum Set Preparation</li> <li>Drug Dose Calculation</li> <li>Using 3-Way Cannula</li> </ul>	Internal Medicine	Related Instructor
6.	<ul> <li>-Installation of Halter (Cattle, Horse)</li> <li>-Restraining of Cattle</li> <li>-Using Collar (Dog)</li> <li>-Using Muzzle (Dog)</li> <li>-Tooth Scaling</li> <li>-Otoscopic Examination</li> <li>-Restraining of Companion Animals</li> <li>-Dog Prostate Examination</li> </ul>	Surgery	Related Instructor
7.	-Aseptic Sampling for Bacteriology	Microbiology	<b>Related Instructor</b>
8.	Exotic Animals - Rat Holding, Gender Determination, Injection Sites (SC, IP, IM)	Laboratory Animals	Related Instructor

9.	<ul> <li>-Hematocrit-PCV Determination</li> <li>-Microhematocrit Tube</li> <li>-Using Total Protein Measurement- Refractometer</li> <li>-Blood Frotis Preparation</li> <li>-Urine Analysis: Dip-Stick</li> <li>-Urine Analysis: Specific Gravity</li> <li>-Preparing Urine Sediment</li> <li>-Diff-Quik Painting</li> <li>-Using a Microscope</li> </ul>	Internal Medicine	Related Instructor
10.	-Application of Horse Balance and Exercise Bandages -Blanket Placement (Horse) - Horseshoe Removal -Castration (Lamb)	Surgery	<b>Related Instructor</b>
11.	<ul> <li>Simple Cut-out Suture (Using a Cloth)</li> <li>Simple Incision Suture (Using Silicone Skin Pad)</li> <li>Surgical Knot</li> <li>Cross Stitching</li> <li>Suture from Cassette or Package</li> <li>Removing the Material</li> </ul>	Surgery	Related Instructor
12.	<ul> <li>-Hand Washing for Surgery</li> <li>-Surgical-Sterile Glove Opening</li> <li>-Wearing Surgical Sterile Gloves, Gowns</li> <li>-Preparing Four Corner Covers</li> <li>-Introduction of Surgical Instruments</li> <li>-Installing a Scalpel Blade and</li> <li>Removal</li> <li>-Surgical Dexterity Practice</li> <li>- Introduction of Anaesthesia Device,</li> <li>Anaesthesia and Fluid Therapy</li> </ul>	Surgery	Related Instructor
13.	-Pregnancy Examination	Obstetrics and	<b>Related Instructor</b>
14.	-Difficult Delivery and Birth Assistance Applications (Cattle, Sheep) -Using a Birthing Line -Using a Birthing Jack - Using Eye Hook	Obstetrics and Gynaecology	Related Instructor

		1st W	eek	2nd W	Veek	3rd V	Veek	4th W	Veek	5th W	Veek	6th W	/eek	7th V	Veek	8th W	Veek	9th W	/eek	10th V	Veek	11th V	Veek	121 We	h ek
DEP	ARTMENT/SCHEDULE	Mon.	Fri.	Mon.	Fri.	Mon.	Fri.	Mon.	Fri.	Mon.	Fri.	Mon.	Fri.	Mon.	Fri.	Mon.	Fri.	Mon.	Fri.	Mon.	Fri.	Mon.	Fri.	Mon.	Fri.
	Patient admission/Registration/Triage	G 1	G 2	G 3	G 4	G 5	G 6	G 7	G 8	G 9	G 10	G 11	G 12	G 13	G 14	G 15	G 16	G 17	G 18	G 19	G 20	G 21	G 22	G 23	G 24
edicine ogram	Vaccination Unit	G 8	G 1	G 2	G 3	G 4	G 5	G 6	G 7	G 16	G 9	G 10	G 11	G 12	G 13	G 14	G 15	G 24	G 17	G 18	G 19	G 20	G 21	G 22	G 23
	Pharmacy	G 7	G 8	G 1	G 2	G 3	G 4	G 5	G 6	G 15	G 16	G 9	G 10	G 11	G 12	G 13	G 14	G 23	G 24	G 17	G 18	G 19	G 20	G 21	G 22
Pr	Small Animal	G 6	G 7	G 8	G 1	G 2	G 3	G 4	G 5	G 14	G 15	G 16	G 9	G 10	G 11	G 12	G 13	G 22	G 23	G 24	G 17	G 18	G 19	G 20	G 21
al on	Farm Animal	G 5	G 6	G 7	G 8	G 1	G 2	G 3	G 4	G 13	G 14	G 15	G 16	G 9	G 10	G 11	G 12	G 21	G 22	G 23	G 24	G 17	G 18	G 19	G 20
ntern otati	Biochemistry and Haematology Laboratory	G 4	G 5	G 6	G 7	G 8	G 1	G 2	G 3	G 12	G 13	G 14	G 15	G 16	G 9	G 10	G 11	G 20	G 21	G 22	G 23	G 24	G 17	G 18	G 19
L N	Hospitalization	G 3	G 4	G 5	G 6	G 7	G 8	G 1	G 2	G 11	G 12	G 13	G 14	G 15	G 16	G 9	G 10	G 19	G 20	G 21	G 22	G 23	G 24	G 17	G 18
	Infectious Examination Room	G 2	G 3	G 4	G 5	G 6	G 7	G 8	G 1	G 10	G 11	G 12	G 13	G 14	G 15	G 16	G 9	G 18	G 19	G 20	G 21	G 22	G 23	G 24	G 17
	Patient Admission/Registration	G 17	G 18	G 19	G 20	G 21	G 22	G 23	G 24	G 1	G 2	G 3	G 4	G 5	G 6	G 7	G 8	G 9	G 10	G 11	G 12	G 13	G 14	G 15	G 16
	Small Animal Inspection	G 24	G 17	G 18	G 19	G 20	G 21	G 22	G 23	G 8	G 1	G 2	G 3	G 4	G 5	G 6	G 7	G 16	G 9	G 10	G 11	G 12	G 13	G 14	G 15
OG.	Small Animal (Anaesthesia- Operation)	G 23	G 24	G 17	G 18	G 19	G 20	G 21	G 22	G 7	G 8	G 1	G 2	G 3	G 4	G 5	G 6	G 15	G 16	G 9	G 10	G 11	G 12	G 13	G 14
OL	Large Animal Inspection	G 22	G 23	G 24	G 17	G 18	G 19	G 20	G 21	G 6	G 7	G 8	G 1	G 2	G 3	G 4	G 5	G 14	G 15	G 16	G 9	G 10	G 11	G 12	G 13
ETR AEC	Large Animal (Anaesthesia- Operation)	G 21	G 22	G 23	G 24	G 17	G 18	G 19	G 20	G 5	G 6	G 7	G 8	G 1	G 2	G 3	G 4	G 13	G 14	G 15	G 16	G 9	G 10	G 11	G 12
BST VN/	Biochemistry and Haematology Laboratory	G 20	G 21	G 22	G 23	G 24	G 17	G 18	G 19	G 4	G 5	G 6	G 7	G 8	G 1	G 2	G 3	G 12	G 13	G 14	G 15	G 16	G 9	G 10	G 11
00	Pharmacy	G 19	G 20	G 21	G 22	G 23	G 24	G 17	G 18	G 3	G 4	G 5	G 6	G 7	G 8	G 1	G 2	G 11	G 12	G 13	G 14	G 15	G 16	G 9	G 10
1	Hospitalization	G 18	G 19	G 20	G 21	G 22	G 23	G 24	G 17	G 2	G 3	G 4	G 5	G 6	G 7	G 8	G 1	G 10	G 11	G 12	G 13	G 14	G 15	G 16	G 9
	Small Animal Inspection	G 9	G 10	G 11	G 12	G 13	G 14	G 15	G 16	G 17	G 18	G 19	G 20	G 21	G 22	G 23	G 24	G 1	G 2	G 3	G 4	G 5	G 6	G 7	G 8
IION	Small Animal Anaesthesia	G 16	G 9	G 10	G 11	G 12	G 13	G 14	G 15	G 24	G 17	G 18	G 19	G 20	G 21	G 22	G 23	G 8	G 1	G 2	G 3	G 4	G 5	G 6	G 7
M	Small Animal Operation	G 15	G 16	G 9	G 10	G 11	G 12	G 13	G 14	G 23	G 24	G 17	G 18	G 19	G 20	G 21	G 22	G 7	G 8	G 1	G 2	G 3	G 4	G 5	G 6
KO RA	Large Animal Inspection	G 14	G 15	G 16	G 9	G 10	G 11	G 12	G 13	G 22	G 23	G 24	G 17	G 18	G 19	G 20	G 21	G 6	G 7	G 8	G 1	G 2	G 3	G 4	G 5
ERY F PROG	Large Animal Anaesthesia	G 13	G 14	G 15	G 16	G 9	G 10	G 11	G 12	G 21	G 22	G 23	G 24	G 17	G 18	G 19	G 20	G 5	G 6	G 7	G 8	G 1	G 2	G 3	G 4
ßG	Large Animal Operation	G 12	G 13	G 14	G 15	G 16	G 9	G 10	G 11	G 20	G 21	G 22	G 23	G 24	G 17	G 18	G 19	G 4	G 5	G 6	G 7	G 8	G 1	G 2	G 3
<b>5</b>	Diagnostic Imaging	G 11	G 12	G 13	G 14	G 15	G 16	G 9	G 10	G 19	G 20	G 21	G 22	G 23	G 24	G 17	G 18	G 3	G 4	G 5	G 6	G 7	G 8	G 1	G 2
•1	Hospitalisation	G 10	G 11	G 12	G 13	G 14	G 15	G 16	G 9	G 18	G 19	G 20	G 21	G 22	G 23	G 24	G 17	G 2	G 3	G 4	G 5	G 6	G 7	G 8	G 1

# Annex 2.1: Clinical Rotation Plan for 3<sup>rd</sup> and 4<sup>th</sup> Grade Students

G: Group; Mon.: Monday; Fri.: Friday; 24 Rotation Group, Each Contains 2-3 Students; Approx.: Total 60 Students

# **Annex 2.2: Clinical Rotation Plan for Internship**

Clinical Rotation Plan 2020/2021 II. Semester , Intern Rotations

#### 15 rotation groups (with 6 students per group)

Small Animals Internal Medicine	Farm Ar	Farm Animals Internal Medicine				Pathology		crobiology	& Clinical F	hysiology	Clinical F	Clinical Pharmacology-Toxicology & Clinical Biochemistr					
Small Animals Surgery		Farm Ar	nimals Surg	ery		Reprod	uction		Virology &	Clinical Ge	netics	l l	Animal Nutr	ition & Eco	nomics		
Small Animals Obstetrics and Gy	necology	Farm Ar	nimals Obst	tetrics and (	Gynecology	/ Meat H	lygine	Para	sitology & Aquatic A	nimal & Laboratory (	Animals Diseases						
WEEK																	
GROUP 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15			
										TIPLHIC	CE X A O H	TLPOHIC	TIPLVHIC	CE X A O H			
2 CE X A O H <mark>I</mark> CE I	LAOHIC										TIPLHIC	CE X A O H	TLPOHIC	TIPLVHIC			
3 TIPLVHIC CE	E X A O H <mark>ce</mark>	ELAOHIC										TIPLHIC	CE X A O H	TLPOHIC			
4 TLPOHIC TI	plvhic <mark>C</mark>	ЕХАОН	CELAOHIC										TIPLHIC	CE X A O H			
5 CE X A O H TL	РОНІС ТІ	IPLVHIC	<b>CE X A O H</b>	CELAOHIC										TIPLHIC			
6 TIPLHIC CE	ХАОНТІ	LPOHIC	TIPLVHIC	CE X A O H	CELAOHIC												
7 <mark>71</mark> 1	PLHIC C	EXAOH	TLPOHIC	TIPLVHIC	CE X A O H	CELAOHIC											
8	TI	IPLHIC	CE X A O H	тероніс	TIPLVHIC	СЕХАОН	CELAOHIC										
9			TIPLHIC	CE X A O H	TLPOHIC	TIPLVHIC	CE X A O H	CELAOHIC									
10				TIPLHIC	CE X A O H	тіроніс	TIPLVHIC	CE X A O H	CELAOHIC								
11					TIPLHIC	СЕХАОН	тероніс	TIPLVHIC	CE X A O H	CELAOHIC							
12						TIPLHIC	СЕХАОН	тероніс	TIPLVHIC	СЕХАОН	CELAOHIC						
13							TIPLHIC	СЕХАОН	TLPOHIC	TIPLVHIC	CE X A O H	CE L A O H IC					
14								TIPLHIC	СЕХАОН	тіроніс	TIPLVHIC	СЕХАОН	CELAOHIC				
15									TIPLHIC	CE X A O H	тероніс	TIPLVHIC	CE X A O H	CELAOHIC			

Small Animals Surgery	Small Animals Internal Medicine	Small Animals Obstetrics and Gynecology	Farm Animals Obstetrics and Gynecology
Farm Animals Surgery	Farm Animals Internal Medicine	Clinical Examination (CE)	Triage (T)
Clinical Examination (CE)	Triage (T)	Laboratory (L)	Laboratory (L)
X-ray (X)	Infectious (I)	Anesthesia (A)	Pharmacy (P)
Anesthesia (A)	Pharmacy (P)	Operation (O)	Operation (O)
Operation (O)	Laboratory (L)	Hospitilization (H)	Hospitilization (H)
Hospitilization (H)	Vaccine (V)	Intensive Care (IC)	Intensive Care (IC)
	Hospitilization (H)		
	Intensive Care (IC)		

# **Annex 3: Draft Version of Clinical Logbook**

First and last name of student S	tudent numb	er										
* In each practice listed helper, students are marited by supervised and helper's state (Charlies Mathematiles C												
* In each practice listed below, students are monitored b	y supervised a	Small	aff by using Equine	g Vetopra	atik software Ruminant	Ruminant						
	Animal Have observed it	Animal Performed under	- Have observed it	Performed under	and Swine Have observed it	and Swine						
Obtain a full and accurate case history		supervision®		supervision®		supervision®						
Communication with clients												
Hondling and rectraint of animals												
Examination of conjunctival mucosa and lymph nodes												
Chect augustation and narcussion												
Assessment of dehydration status												
Obtain and evaluate vital measurements (TPR) (Temperature, Pulse, Respiration)												
Collecting sample (blood, urine, etc) and IV catheter insertion												
Fecal examinations												
Drug and fluid administration												
P.O, S.C., I.M., I.V.												
Acquiring the skill of using ultrasound				-								
Preparation of the animal for echocardiography and ECG reading and interpretation												
Examination of the skin (inspection, skin scraping, biopsy)												
Using lab equipment and tests (rapid test kits, derma kit, microhematocrit	t,											
etc) Laboratory diagnostics: Storage and transfer of samples												
Laboratory diagnostics: Haematology and urine analysis (dip-stick,												
sedimentation)												
Biosafety Practices (Using gowns/aprons, latex gloves and classification of used needles, syringes and medical material and wastes)	s											
Assess the depth of anaesthesia												
Place a nasogastric feeding tube in dogs and cats												
Perform a complete clinical examination												
Emergency care and treatment												
Diagnostic imaging (X-Ray, MRI, CT) and evaluating findings												
Perform intubation												
Wound intervention including bandages												
Tooth restorations												
Abdominal surgery												
Orthopedia practices												
Soft tissue surgery												
Opthalmology												
Perform Euthanasia (in line with animal welfare) when neccesary				-								
rrovide general care; during pregnancy, post partum period and for newborn												
Have sufficient clinical and laboratory knowledge and skills for an accurat diagnosis and the interpretation of data.	te											
Perform a complete clinical examination of female genital organs and mammary gland												
Cytological examination												
Pregnancy diagnosis (USG/Rectal/Laboratory)												
Control of cyclical reproductive activity												
Assistance for parturition/dystocia												
Assistance for reproductive/obstetric/gynecologic surgery												
Medical treatment of diseases of genital organs												
Treatment of mammary diseases												
Treatment of metabolic diseases												
Treatment of infertility												
Management of infertility and economic losses on herd level.												
Apply the basic rules of preventive medicine in terms of individual and her health	ď											
Clinical skill room practices												
Case Reports /Case Discussion												

# **Annex 4.1: Emergency Care Logbook**

First and last name of student	Student number

\* In each practice listed below, students are monitored by supervised academic staff and monitored by web-based automation system.

Content	Small Animal Have observed it	Small Animal Performed under supervision*	Large Animal Have observed it	Large Animal Performed under supervision*
Medical Treatment of Vomiting				
Medical Treatment of Diarrhea				
Medical and Surgical Treatment of Trauma				
Medical and Surgical Treatment of Traffic Accidents				
Medical and Surgical Treatment of Falls from Height				
Medical and Surgical Treatment of Collapse				
Medical and Surgical Treatment of Respiratory Difficulty				
Medical Treatment of Cystitis and Urinary Tract Obstruction				
Medical Treatment of Poisoning				
Abdominal Tension, Gastric Dilation/Volvulus Medical Treatment				
Dystocia /Caesarean				
Medical Treatment of Seizures, Crises				
Neurological Problems-Medical Treatment of Adjustment and Coordination Disorder				
Fluid Supply				
Medical and Surgical Treatment of Bleeding				
Shock (Diagnosis, Diagnosis, Treatment)				
Relief of Allergy and Hypersensitivity Reactions				
Sepsis (Pyometra, etc) treatment				
Medical Treatment of Hypovolemia, Hypothermia, Hypoglycaemia				

Annex 4.2: Emergency Care Rotations Students are distributed to emergency care for each clinic as 16 groups equally. First day for introduction and main topics (MTx; interactive presentations) G: Group

Small Animal Clinic	We	ek 1				W	eek 2			
Time	М	Т	W	Т	F	М	Т	W	Т	F
8:00-08:45	Íntro	G1	G2	G1	G2	İntro	G3	G4	G3	G4
09:00-09:45	Íntro	G1	G2	G1	G2	İntro	G3	G4	G3	G4
10:00-10:45	MT1	G1	G2	G2	G1	MT1	G3	G4	G4	G3
11:00-11:45		G1	G2	G2	G1		G3	G4	G4	G3
Pause										
13:00-13:45	MT2	G2	G1	G1	G2	MT2	G4	G3	G3	G4
14:00-14:45		G2	G1	G1	G2		G4	G3	G3	G4
15:00-15:45	MT3	G2	G1	G2	G1	MT3	G4	G3	G4	G3
16:00-16:45		G2	G1	G2	G1		G4	G3	G4	G3

Equine Clinic	Y	Week 1				Week 2								
Time	М	Т	w	Т	F	М	Т	W	Т	F				
8:00 - 08:45	İntro	G5	G6	G5	G6	İntro	G7	G8	G7	G8				
09:00 - 9:45	İntro	G5	G6	G5	G6	İntro	G7	G8	G7	G8				
10:00-10:45	MT1	G5	G6	G6	G5	MT1	G7	G8	G8	G7				
11:00-11:45		G5	G6	G6	G5		G7	G8	G8	G7				
Pause														
13:00-13:45	MT2	G6	G5	G5	G6	MT2	G8	G7	G7	G8				
14:00-14:45		G6	G5	G5	G6		G8	G7	G7	G8				
15:00-15:45	MT3	G6	G5	G6 G5		MT3	G8	G7	G8	G7				
16:00-16:45	G6 G5 G6 G5		G5		G8	G7	G8	G7						

Ruminant and Swine Clinic	W	eek 1				W	eek 2			
Time	М	Т	w	Т	F	М	Т	w	Т	F
8:00-08:45	İntro	G9	G10	G9	G10	İntro	G11	G12	G11	G12
09:00-09:45	İntro	G9	G10	G9 G10		İntro	G11	G12	G11	G12
10:00-10:45	MT1	G9	G10	G10	G9	MT1	G11	G12	G12	G11
11:00-11:45		G9	G10	G10	G9		G11	G12	G12	G11
Pause										
13:00-13:45	MT2	G10	G9	G9	G10	MT2	G12	G11	G11	G12
14:00-14:45		G10	G9	G9	G10		G12	G11	G11	G12
15:00-15:45	MT3	G10	G9	G10	G9	MT3	G12	G11	G12	G11
16:00-16:45		G10	G9	G10	G9		G12	G11	G12	G11

Animal Reproductions Clinic	We	eek 1				W	eek 2			
Time	М	Т	W	Т	F	М	Т	W	Т	F
8:00-08:45	İntro	G13	G13 G14 G13		G14	İntro	G15	G16	G15	G16
09:00-09:45	İntro	G13	G14	G13	G14	İntro	G15	G16	G15	G16
10:00-10:45	MT1	G13	G14	G14	G13	MT1	G15	G16	G16	G15
11:00-11:45		G13	G14	G14	G13		G15	G16	G16	G15
Pause										
13:00-13:45	MT2	G14	G13	G13	G14	MT2	G16	G15	G15	G16
14:00-14:45		G14	G13	G13	G14		G16	G15	G15	G16
15:00-15:45	MT3	G14 G13 G14		G13	MT3	G16	G15	G16	G15	
16:00-16:45	-16:45 G14 G13 G14		G13		G16	G15	G16	G15		







### Main Building 3rd Floor Plan with Newly Added Room and Labs





### Main Building 2nd Floor Plan with Newly Added Facilities

### Main Building 1st Floor Plan with Newly Added Facilities





### Main Building Ground Floor Plan with Newly Added Facilities







### ERCIYES UNIVERSITY FACULTY OF VETERINARY MEDICINE



# **Annex 6: Pathology Practice Student Tracking Form**

Name – Surname	
Number	
	Photo
Advisor	

\*Basic biosafety measures, correct use of tools and equipments, disposal of cadavers and general hygiene practices related to necropsy and pathology practises are explained in the theoretical content of courses.

		5. Semester															
	PRACTISES	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.
ology	Inspection of preparats																
athc	Imparting archieve Slides and online sources																
General Pa	Macroscopic Evaluation of Anomalies																
	Description and interprepation of Tumors (From Biopsy and Necropsy Materials)																
	SSL (Preparat Examination, Description and interpretation of macroscopic lesions, self learning with logbooks)																
	Interprepation of Museum Archieve Material (Organ and Cadavers)																

									6. Sen	nester							
Ŀ	PRACTISES	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.
logy	Examination of Systems Preparats																
athc	SSL(Preparat Examination of Systems, Preparate self learning)																
ial P	Imparting archieve Slides and online images of systems																
spec	Macroscopic Diagnosis of Systems																
•,	Interpretation of Museum Archieve Material (Organ and Cadaver)																
	Preparat Examination of Systems																
									7. Ser	nester							
---------	--	----	----	----	----	----	----	----	--------	--------	-----	-----	-----	-----	-----	-----	-----
	PRACTISES	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.
y-II	Preparat Examination of Systems																
itholog	SSL (Preparat Examination, Description and interpretation of macroscopic lesions, self learning with logbooks)																
al Pa	Imparting Archieves and online Internet Images																
peci	Macroscopic Diagnosis of Systems																
S,	Interpretation of Museum Archieve Material (Organ and Cadaver)																

										7.	Semest	er						
		PRACTISES	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.
	Large Animal Small Animal																	
	Small Animal Poultry Wild Animal	Small Animal																
	Necropsy Techniques Wild Animal Experimental Animal																	
	Experimental Animal Organ Material Evaluation and Identification of Macroscopic Findings																	
Ev																		
Pro	eparation of Fixing Solut	ion																
	Large Animal																	
		Small Animal																
Col	Collection and Transfer of Poultry																	
ä	Samples	Wild Animal																
2	bumpies	Experimental Animal																
e	Organ Material																	
Z		Tissue Tracking of Routinely Collected Samples																
		Tracking of Cytological Samples																
	Processing of Samples	Inspection and identification of Samples on Electron Microscope																
	(Tissue Tracking) Preparation of Frozen Sample Section																	
		Tracking of Graft and Operation Material for Scientific Studies																
Se	Sectioning and Preparation of Samples																	
Ide	Identification and Evaluation of Prepared Materials																	
Re	ports (Routine, Scientific W	ork, Judical Case and Expertise etc.)																
Ar	chive Material Preparati	on																

										9-10. 9	emester							
		PRACTISES	1	2.	3.	4.	5.	6.	7.	8.	9.	10	11.	12.	13.	14.	15.	16.
		Large Animal																
		Small Animal																
	Necropsy	Poultry																l
	Techniques	Wild Animal																
	-	Experimental Animal																l
		Organ Material																l
	Evaluation and Identifi	cation of Macroscopic Findings																
	Preparation of Fixing S	olution																
_		Small Animal																
L		Poultry																
te	Collection and	Wild Animal																
	Transfer of Samples	Experimental Animal																
		Organ Material																l
		Tissue Tracking of Routinely Collected Samples																
		Tracking of Cytological Samples																
	Processing of	Inspection and identification of Samples on Electron Microscope																
	(Tissue	Preparation of Frozen Sample Sections																
	Tracking)	Tracking of Graft and Operation Material for Scientific Studies																
	Sectioning and Preparation of Samples																	
	Identification and Evalu	uation of Prepared Materials																
	Reports (Routine, Scientific Work, Judical Case and Expertise etc.)																	
	Presentation				1													







2. Before accepting the suspected patient make sure that the Isolation Unit is clean
<ol> <li>To identify the patients in the isolation unit, the patient ID must be placed on the board (file number, animal species, race, gender, age, diagnosis of suspected disease)</li> </ol>
4. The density in the Isolation Unit should be limited only to what is required for optimum patient care.
5. Patients should only be transported from the isolation room when necessary.
6. The process flow for isolated patients should be; Isolation Entry Room, Isolation Examination Room - Isolation Room Isolation Examination Room
7. Hospitalized patients should not be taken outside for any reason.
<ol> <li>An assigned cleaning staff should clean the isolation units. The isolation cleaning protocol must be followed unless otherwise specified.</li> </ol>
<ol> <li>Diagnostic and treatment procedures should be performed within the Isolation Unit. There must be oxygen connections for anaesthesia procedures.</li> </ol>
10. When the areas out of the isolation unit need to be cleaned, the necessary procedures should be programmed jointly by those responsible for the surrounding areas. Strict protocols should be followed to decontaminate areas after procedures (see Isolation Cleaning Protocols).
11. Products/materials brought to the isolation unit should be discarded or thoroughly cleaned and sterilized before returning to general use.
12. In cases where students and staff need to participate in the treatment process for isolation patients, they should have graded treatment/examination programs for it.
13. If a patient is transferred from the Shelter Unit to the Isolation Unit, the cage previously containing that animal must be thoroughly disinfected. (See Isolation Cleaning Protocol).
14. Patients admitted to the Isolation Unit will not be transferred to another unit unless the illness ends. Decisions will be taken by a caregiver, a senior clinician, and an ICU member.
15. Medicines should be stored in the Isolation Clean Room where there is a waste bin and refrigerator.
16. All samples going to clinical laboratories should be identified as potential infection risk and must be carefully placed in a zippered bag on the front of the door so that the outside of the pouch is free of contamination.
17. Laboratory samples should be processed in a bio-secure cabin.
18. Patient owners are prohibited from entering the Isolation Unit. In some situations, this may be allowed after consultation with the nursing supervisor, a senior clinician, and an ICU member. Pet owners must wear personal

CASE FLOW CHART FOR INFECTIOUS PATIENTS

1. The infectious unit supervisor should be informed about infectious suspected patient

protective equipment and must be accompanied by a clinician or staff member.

19. The patient is delivered to the owner after the treatment is completed.

#### **Annex 7.2: Guide for Common Diseases**

Suspected Disease, Canine, Feline	Species	Zoonotic	Route	Precautions	Communication	Transport	Disinf	Housing
Anti-microbial resistant bacteria	All	Yes	Bite, scratch, direct contact	Gloves, blue gown	Zoonotic sticker on lab. specimens	On-cart	Accel	Restriction
Aspergillosis	All	No	Respiratory, inhalation of conidia,	Gloves, Handle contaminated materials as infectious	Routine	Routine	Accel	Normal, with barrier restriction
Acute feline upper respiratory infection	Cats	No	Aerosol droplets, surface contact	Glove, white gown, handle contaminated materials as infectious	Routine	On cart, in cage	Accel	Isolation
Bartonellosis	Dogs, cats	Yes	Flea-associated	Gloves, Handle contaminated materials as infectious	Zoonotic sticker on lab. specimens	Routine	Accel	Restriction
Blastomycosis	All	Yes	Soil, inhalation, scratch, bite wounds,	Handle contaminated materials as infectious	Zoonotic sticker on lab. specimens	Routine	Accel	<u>Normal</u> - <u>Cleaning Procedure</u>
Bordetella	Dogs, cats	<u>Yes</u> , immune comp.	Aerosol droplets, nose to nose, coughs	Gloves, white gown	Zoonotic sticker on lab. specimens	On-cart	Accel	<u>Isolation</u>
Borreliosis	Dogs	Yes	Tick-associated	Routine Gloves	Zoonotic sticker on lab. specimens	Routine	Accel	Normal
Brucellosis	All	Yes	Body fluids (urine, semen, vaginal secretions)	Gloves, white gown, mask, Face shield if draining tract	Contact log, Routine, Contact clinical supervisor, zoonotic sticker on lab. specimens	On cart	Accel	Restriction, Isolation if draining tracts are apparent
Calici	Cats	No	Direct contact, aerosol droplets	Gloves, white gown	Routine	On cart, in cage	Accel	Isolation
Calici, High path.	Cats	No	Direct contact, aerosol, droplets	Gloves, white gown	Routine	No Transport Remains in Isolation	Accel	Isolation
Campylobacteriosis	Dogs, cats	Yes	fecal oral, contact with environmental surfaces	Gloves, blue gown	Zoonotic sticker on lab. specimens	On-cart	Accel	Restriction
Canine Distemper	Dogs	No	Aerosol droplets, surface contact	Gloves, white gown	Routine	On-cart		<u>Isolation</u>
Canine Influenza	Dogs	No	Aerosol droplets, surface contact, linens, fomites	Gloves, white gown, shoe covers, head cover	Routine	No transport	Accel	<u>Isolation</u>
Chlamydia	Cats	No	Aerosol droplets, surface contact	Gloves, white gown	Routine	On-cart, in cage	Accel	Isolation
Coccidioidomycosis	All	No	Direct contact with infected fluids, dressing	Gloves, Handle contaminated materials as infectious	Routine, Call hospital epidemiologist to report to state	Routine	Accel	Restriction

Coronavirus enteritis	Dogs	No	Fecal-oral	Gloves, white gown	Routine	On-cart, in cage	Accel	Isolation
Cryptosporidiosis	All	Yes	Fecal-oral	Gloves, mask, white gown, shoe covers, head cover	Contact log, Zoonotic sticker on lab. specimens	No transport	Accel	Isolation
Cryptococcosis	All	No	Respiratory, inhalation of spores	Gloves	Routine	Routine	Accel	Normal
Dermatophytosis	All	Yes	Hair, dander, fomites- bedding, linens,	Gloves, white gown, shoe covers, head cover	Contact Log, Handle contaminated materials as infectious, Zoonotic sticker on lab. specimens	On cart, in cage		Isolation
Ehrlichiosis	Dogs	Yes	Tick-associated	Routine	Zoonotic sticker on lab. specimens	Routine	Accel	Normal
Feline Immunodeficiency virus	Cats	No	Secretions, saliva, bites	Routine	Routine	Routine	Accel	Normal
Feline leukemia virus	Cats	No	Secretions, direct contact	Routine	Routine	Routine	Accel	Normal
Feline Panleukopenia	Cats	No	Fecal oral	Gloves, imperviou gown	Infectious disease	Limit transport in hospital, on cart	Accel or bleach	Isolation
Giardiasis	All species	Yes	Fecal oral	Gloves, blue gown	Zoonotic sticker on lab. specimens	Routine	Accel	Restriction
Histoplasmosis	All species	No	Respiratory, Inhalation of spores,	Routine	Routine	Routine	Accel	Routine
Herpes	Cats	No	Direct contact, aerosol droplets	Gloves, white gown	Routine	On cart, in cage	Accel	<u>Isolation</u>
Infectious canine hepatitis	Dogs	No	Body fluids, environmental surfaces	Gloves, white gown, shoe covers, head cover	Handle contaminated materials as infectious	On cart	Accel	Isolation
Infectious canine tracheobronchitis	Dogs	No	Aerosol, environmental surfaces	Gloves, white gown, shoe covers, head cover	Handle contaminated materials as infectious	No transport in hospital	Accel	Isolation
Leptospirosis	All	Yes	Body secretions, urine, blood	Gloves, white gown, face shield	Contact log on cage, Zoonotic sticker on lab. specimens	On-cart	Accel	Restriction
Mycobacterium	All	Yes	Direct contact, aerosol droplets	Gloves, mask, white gown	Contact log on cage, Zoonotic sticker on lab. specimens	On-cart	Accel	Isolation
Mycoplasma	All	No	Inhalation	Routine Gloves	Routine	Routine	Accel	Normal
Parvovirus enteritis	Dogs	No	Fecal oral, environmental surfaces	Gloves, white gown	Routine	On-cart	Accel	Isolation
Rabies	All mammals	Yes	Bites, scratch	Gloves, gown, mask, shield, shoe covers, head cover	Contact log, Routine, Contact clinical supervisor, Zoonotic sticker on lab. specimens	No transport	Accel	Restriction, Isolation, if confirmed
Rocky Mountain Spotted Fever	Dogs	Yes	Tick associated	Routine Gloves	Zoonotic sticker on lab. specimens	Routine	Accel	Restriction

Rotavirus	Dogs	No	Fecal oral, environmental surfaces	Gloves, white gown	Routine	On-cart	Accel	Isolation
Salmonellosis	All	Yes	Fecal oral, environmental surfaces	Gloves, white gown, Mask, Shoe covers	Contact log on cage, Zoonotic sticker on lab. specimens	No transport in hospital	Accel	Isolation
Sarcoptic mange	Dogs	Yes	Skin, hair, fomites	Gloves, blue gown,	Contact log, Zoonotic sticker on lab. specimens	On-cart	Accel	Restriction
Sporotrichosis	Cats	Yes	Cutaneous inoculation, contact with exudate, scratch	Gloves, blue gown (covering arms)	Contact log, Zoonotic sticker on lab. specimens	On-cart	Accel	Restriction
Toxoplasmosis	Cats	<u>Yes</u> , Preg, ImmC	Fecal oral	Gloves, blue gown	Zoonotic sticker on lab. specimens	On-cart	Accel	Restriction
Transmissible venereal tumor	Dogs	No	Direct contact, urine	Gloves, blue gown	Routine	Routine	Accel	Normal

INSTRUCTIONS AND PRINCIPLES	WEB LINKS
Education and Examination Directive	https://veteriner.erciyes.edu.tr/Uploads/files/Egitim%20Ogretim%20ve%20Sinav%20Yonergesi.pdf
Regulations of Clinical Skills Laboratory Course Practice	https://veteriner.erciyes.edu.tr/Uploads/files/Klinik%20Beceri%20Lab_%20Dersi%20Uyg_%20Esaslari.pdf
Regulations of Clinical Courses and Clinical Night Shift Practice	https://veteriner.erciyes.edu.tr/Uploads/files/Klinik%20Dersleri%20ve%20Klinik%20Nobeti%20Uygulama%20Esaslari.pdf
Regulations of Assessment and Evaluation	https://veteriner.erciyes.edu.tr/Uploads/files/Olçme%20ve%20Degerl_%20Esaslari.pdf
<b>Regulations of EPT</b>	https://veteriner.erciyes.edu.tr/Uploads/files/Staj%20Esaslari.pdf
Regulations of Veterinary Medicine Internship Training and Final Project	https://veteriner.erciyes.edu.tr/Uploads/files/Vet_%20Hek_%20Intornluk%20Egit_%20ve%20Bitirme%20Odevi%20Esaslari.pdf
Cleaning and Disinfection Instructions of All Facilities in FVMEU	https://veteriner.erciyes.edu.tr/Uploads/files/HASTANE%20TEMIZLIK%20KURALLARI%20TALIMATI.pdf
<b>Biosecurity Manual</b>	https://veteriner.erciyes.edu.tr/erciyesUniversitesi.aspx?veterinerFakultesi=17

# **Annex 8.1: Web Links Regarding the Instructions and Regulations of FVMEU**

## Annex 8.2: Web Links of Flow Charts Regarding the Analyses, Procedures and Processes of FVMEU

Biochemistry Laboratory Analysis	https://hayvanhast.erciyes.edu.tr/Dosyalar/IsAkisSemalari/BIYOKIMYALABARATUVARANALIZLERI.pdf
Clinic Patient Treatment	https://hayvanhast.erciyes.edu.tr/Dosyalar/IsAkisSemalari/CERRAHIKLINIGIHASTATEDAVIISLEMILERI.pdf
(Surgery)	
Clinic Patient Treatment	https://hayvanhast.erciyes.edu.tr/Dosyalar/IsAkisSemalari/DOGUMVEJINEKOLOJIKLINIGIHASTATEDAVIISLEMILERI.pdf
Gynaecology)	
Purchasing Directly from	https://hayvanhast.erciyes.edu.tr/Dosyalar/IsAkisSemalari/DONERSERMAYEDOGRUDANTEMINISLEMLERI.pdf
Circulating Capital	
Reproduction and Artificial	https://hayvanhast.erciyes.edu.tr/Dosyalar/IsAkisSemalari/DOLERMESUNITOHUMLAMAHASTAMUAYENEISLEMLERI.pdf
Insemination Patient Examination	
and Treatment	
Pharmacology Laboratory Analysis	https://hayvanhast.erciyes.edu.tr/Dosyalar/IsAkisSemalari/FARMAKOLOJILABARATUVARANALIZLERI.pdf
Flow Chart	
Physiology Laboratory Analysis	https://hayvanhast.erciyes.edu.tr/Dosyalar/IsAkisSemalari/FIZYOLOJILABARATUVARANALIZLERI.pdf
Flow Chart	
Genetic Laboratory Analysis Flow	https://hayvanhast.erciyes.edu.tr/Dosyalar/IsAkisSemalari/GENETIKLABARATUVARANALIZLERI.pdf
Chart	
Food Lab Analysis Flow Chart	https://hayvanhast.erciyes.edu.tr/Dosyalar/IsAkisSemalari/GIDALOBORATUVARANALIZLERI.pdf
Patient Admission Registration	https://hayvanhast.erciyes.edu.tr/Dosyalar/IsAkisSemalari/HASTAKANULKAYITISLEMLERI.pdf
Procedures	
Histology - Embryology Laboratory	https://hayvanhast.erciyes.edu.tr/Dosyalar/IsAkisSemalari/HISTOLOJIEMBRIYOLOJILABARATUVARANALIZLERI.pdf
Analysis Flow Chart	
Internal Diseases Patient	https://hayvanhast.erciyes.edu.tr/Dosyalar/IsAkisSemalari/ICHASTALIKLARIHASTATEDAVIISLEMLERI.pdf
Examination and Treatment	
Procedures	
Clinical Laboratory Biochemistry	https://hayvanhast.erciyes.edu.tr/Dosyalar/IsAkisSemalari/KLINIKLABARATUVARBIYOKIMYAANALIZLERI.pdf
Analysis Flow Chart	
Microbiology Laboratory	https://hayvanhast.erciyes.edu.tr/Dosyalar/IsAkisSemalari/MIKROBIYOLOJILABARATUVARANALIZLERI.pdf
Sample Acceptance	https://hayvanhast.erciyes.edu.tr/Dosyalar/IsAkisSemalari/3346ea98-4a93-4677-8144-b539b589c641.pdf

Pathology Laboratory Procedures	https://hayvanhast.erciyes.edu.tr/Dosyalar/IsAkisSemalari/PATOLOJILABORATUVARANALIZLERI.pdf
Radiology Procedures	https://hayvanhast.erciyes.edu.tr/Dosyalar/IsAkisSemalari/RADYOLOJIISLEMLERI.pdf
Sterilization Processes	https://hayvanhast.erciyes.edu.tr/Dosyalar/IsAkisSemalari/STERILIZASYONISLEMLERI.pdf
Ultrasound Processes	https://hayvanhast.erciyes.edu.tr/Dosyalar/IsAkisSemalari/ULTRASOUNDISLEMLERI.pdf
Virology Laboratory Analysis Flow	https://hayvanhast.erciyes.edu.tr/Dosyalar/IsAkisSemalari/VIROLOJILABORATUVARANALIZLERI.pdf
Chart	
Emergency Response to Hazardous	https://hayvanhast.erciyes.edu.tr/Dosyalar/IsAkisSemalari/5cd1e9a0-e68e-439d-8ab5-584f163aa7a6.pdf
Chemical Spills (Personnel, Student,	
etc.)	
Emergency Response in Hazardous	https://hayvanhast.erciyes.edu.tr/Dosyalar/IsAkisSemalari/8e372040-d8f2-4be2-82c3-9a93ae1f5a90.pdf
Chemical Spills (Environment and	
Area)	
Parasitology Laboratory Analysis	https://hayvanhast.erciyes.edu.tr/Dosyalar/IsAkisSemalari/PARAZITOLOJILABORATUVARANALIZLERI.pdf

## Annex 8.3: Web Links of QA Organisation, Protocols and Procedures Including Events and Meetings

Commissions	https://veteriner.erciyes.edu.tr/komisyonlar.aspx?veterinerFakultesi=14
Strategic Plan	https://veteriner.erciyes.edu.tr/Uploads/files/Birim%20Stratejik%20Plan%20Değerlendirme%20Raporu.pdf
BIDR	https://veteriner.erciyes.edu.tr/Uploads/files/2020%20BİRİM%20İÇ%20DEĞERLENDİRME%20EAEVE%20ICIN%20WEBE%20KONULAN.pdf
Workflow Charts	https://veteriner.erciyes.edu.tr/erciyesUniversitesi.aspx?veterinerFakultesi=4
Task Definitions	https://veteriner.erciyes.edu.tr/erciyesUniversitesi.aspx?veterinerFakultesi=12
Organization Chart	https://veteriner.erciyes.edu.tr/organizasyonSemasi.aspx?veterinerFakultesi=15
Occupational Health and Safety	https://veteriner.erciyes.edu.tr/isSagligiGuvenligi.aspx?veterinerFakultesi=22
Vedek Accreditation	http://www.vedek.org.tr/index.php?option=com_content&view=article&id=112&Itemid=
Surveys	https://veteriner.erciyes.edu.tr/anket.aspx
Visitor Book	https://veteriner.erciyes.edu.tr/ziyaretciDefteri.aspx
Quality Commission Meeting	https://veteriner.erciyes.edu.tr/etkinlik.aspx?tnm=1096
Distance Education	https://veteriner.erciyes.edu.tr/etkinlik.aspx?tnm=1095
Educational Skills Training	https://veteriner.erciyes.edu.tr/etkinlik.aspx?tnm=83
Assessment Meeting with External Stakeholder	https://veteriner.erciyes.edu.tr/etkinlik.aspx?tnm=96
Academic Staff Training Meeting	https://veteriner.erciyes.edu.tr/etkinlik.aspx?tnm=97
Course Information Packages	https://dbp.erciyes.edu.tr/Program/Learn.aspx?Learn=%7c%2fxP1Rzf7GQ%3d
Disaster Management Seminar	https://veteriner.erciyes.edu.tr/etkinlik.aspx?tnm=1099
Stakeholders	https://veteriner.erciyes.edu.tr/Uploads/files/Paydaslar.pdf
Herd Health Event	https://veteriner.erciyes.edu.tr/etkinlik.aspx?tnm=1102
Zoom Seminar Event	https://veteriner.erciyes.edu.tr/duyuruDetay.aspx?duyuru=3259
Obstetrics And Gynaecology Workshop	https://veteriner.erciyes.edu.tr/etkinlik.aspx?tnm=101
Photo Galery	https://veteriner.erciyes.edu.tr/erciyesUniversitesi.aspx?veterinerFakultesi=20

#### **Annex 9: Animal Welfare Checklist of VTH**

Score*         5         4         3         2         1           Score*         Normal Behavior         Image: Social Behavior <thimage: behavior<="" social="" th=""></thimage:>	ERCIYES UNIVERSITY VETERINARY FACULTY EDUCATION RESEARCH AND PRACTICE HOSPITAL										
Normal Behavior         Image: Social Behavior	Score*	nosinal	5	4	3	2	1				
Social Behavior         Image: Social Behavior	-	Normal Behavior									
General Condition of the Animal         General Health         Image: Second Sec		Social Behavior									
Animal         Good Human - Animal Relationship         Image: Ima	General Condition of the	General Health									
General Appearance       Image:	Animal	Good Human – Animal Relationship									
Environmental Temperature $\begin{tabular}{ c c c c }{l c c c c c c c c c c c c c c c c c c c$		General Appearance									
Environment         Weather Quality         Image: Constraint of the symbol of the symb		Environmental Temperature									
EnvironmentVentilationIIIAdequate NutritionIIIIFood QualityIIIIFood HygieneIIIIAdequate Water IntakeIIIIWater QualityIIIIGeneral HygieneIIIIHygiene of Cage FloorIIIIHygiene of Food and Water BowlIIIISuitable Cage DimensionIIIIRest ComfortIIIIIComfortable MovementIIIIAdequate LightingIIII	<b>T</b> • 4	Weather Quality									
Adequate Nutrition         Image:	Environment	Ventilation									
Nutrition         Food Quality         Image: Constraint of the system of		Adequate Nutrition									
Nutrition         Food Hygiene         Image: Constraint of the symbol         Image:		Food Quality									
Nutrition         Adequate Water Intake         Image: Constraint of the second	NT / */*	Food Hygiene									
Water QualityImage: Constraint of the second se	Nutrition	Adequate Water Intake									
General Hygiene       Image: Comparison of Cage Floor       Image: Cage Floor		Water Quality									
Hygiene of Cage Floor       Image: Composition       Image:		General Hygiene									
Housing       Hygiene of Food and Water Bowl       Image: Composition of the second se		Hygiene of Cage Floor									
Housing       Suitable Cage Dimension       Image: Comfort       Ima		Hygiene of Food and Water Bowl									
Rest Comfort     Image: Comfortable Movement       Comfortable Movement     Image: Comfortable Movement       Adequate Lighting     Image: Comfortable Movement	Housing	Suitable Cage Dimension									
Comfortable Movement     Image: Comfortable Movement       Adequate Lighting     Image: Comfortable Movement	Housing	Rest Comfort									
Adequate Lighting     Image: Constraint of the second		Comfortable Movement									
NOTES:		Adequate Lighting									
	NOTES:										

Scor\*: 5, Excellent; 4, Very Good; 3,Good; 2,Average; 1,Poor

Controller	
Name- Surname	
Signature	
Date	
Total Score	

Mission	Number	Working Unit
Health technician	2	VTH
Technician	1	Emergency
Anesthetist	1	Surgical clinic
X-ray Technician	1	Surgical clinic
Technician	1	Laboratory
Patient registration	1	VTH
Support Team	7	VTH, warehouse
Hospital pharmacy	2	Pharmacy
Cleaning and Support Staff	1	Main Building
Veterinary technician	1	VTH
Patient registration	1	VTH
Laborant	1	VTH
Pharmaceutical and warehouse clerk	1	VTH
Hospital teller	1	VTH
Circulating capital	2	VTH
Public relations	1	VTH
Support team	3	VTH
Electric technician	1	Main Building
Accrual	1	Main Building
Department secretary	2	Main Building
Dean's secretary	1	Main Building
Editorial Staff	2	Main Building
International office	1	Main Building
Purchasing officer	1	Main Building
Student affairs	1	Main Building
Cleaning and support staff	4	Main Building
Registration officer	1	Main Building

## Annex 10: List of Recruited Support Staff (After Visit 2018)

NOTE: Five veterinarians were also hired to overcome the huge work load of the VTH

The Subjects of Seminars organized by FVMEU				
Subject	Date	Attendees		
Assesment and Evaluation Methods	27.02.2018	82		
Public health effects of Bisfenol A and Phthalates	12.03.2018	135		
Legal and inspective veterinary medicine: Roles and responsibilities	5.06.2018	120		
Veterinary Education and Profession in EU Countries	23.05.2018	60		
Beekeeping Course	18.02.2019	120		
Pet Behavior and Welfare	7.03.2019	40		
I. International Animal Hospital Congress	28.03.2019	90		
Process Contaminants in Food	5.06.2019	155		
Cat and Dog Vaccination programmes	2.04.2019	60		
Veterinarian respons to the Covid-19 Crisis	25.04.2019	60		
Equestrian Status & Future in Turkey	3.05.2019	150		
Teaching skills and techniques	27.05.2019	80		
Public Health Effects of Plastics and Cosmetics (Series of High School Seminar )	2018-2019	(approx.50-150)x10		
I. International, VI. National Veterinary Pharmacology Congress	04-07.09.2019	210		
Traning of Academic Staff on Training Skills	11.09.2019	82		
Biosecurity Procedures in Laboratory Practice	17.09.2019	45		
How to Motivate People on Animal Rights in Turkey	4.10.2019	70		
Implementation of Quality Control and Assurance System	14.10.2019	80		
Determination of Assesment Methods in line with Cognitive Level	11.02.2020	82		
Biosecurity Measures in VTH	23.02.2020	35		
ESEVT Visitation Experience of FVMEU	3.06.2020	25		
Obstetrics Gynecology and Calf Care Workshop	5.03.2020	50		
National Poet Mehmet Akif Ersoy	12.03.2020	150		
Instructions for the use of New Webbased Informatic Software in FVMEU	25.09.2020	45		
How to use Online Education Methods?	2.10.2020	15		
Quality Assurance (QA) In A Modern Veterinary School	7.10.2020	20		
Instructions for the use of Vetopratik: A Webbased Informatic Software	18.10.2020	82		
Orientation training Seminars	27.10.2020	80		
One Health Seminar	13.11.2020	40		
Veterinary Disaster Management	18.11.2020	30		
Strategies to Improve Biosecurity as a Traditional Strength of FVMEU	23.12.2020	30		
Occupational Health and Safety	22.01.2021	70		
QA of Curriculum (Stakeholders in Veterinary Education)	4.02.2021	80		
Minimum Qualifications in Veterinary Education	11.02.2021	5		
Veterinary Core Education (VUÇEP) Programme Presentation	5.06.2021	10		
Mission of EAEVE to Develop the Quality and Standard of Veterinary Establishments	9.06.2021	150		
Artificial Intelligence and Digital Technologies in Veteriary Medicine	15.06.2021	100		

#### Annex 11: List of Seminars in FVMEU (2018-21)

Student Congresses			
The Subject	cts of Conferences, Seminars and	Presentations organized by IVSA	in FVMEU
20	19	20	20
The Emotional and Cognitive Worlds of Animals	Tips for Understanding Cats and Dogs	Reproductive Management in Sheep	Transition Period in Dairy Cows
The Relationship of Behavioral Science with Other Fields	Cognitive Dysfunction in Dogs	Newborn Calf Care	Vaginal Cytology
Behavioral Problems in Sensually Impaired Animals	Background of Equine Behavior to Improve Clinical Behavior	Newborn Cat-Dog Puppy Care	Current Treatment Options for Mastitis in Cows
For Those With Limited Time, Ways to Spend Quality Time With Their Dogs	Clinic Without Stress	Approach to Unwanted Pregnancy in Dogs	Applicability of Assisted Reproductive Technologies in Ruminants
Compulsive Disorders in Pets and Their Treatments	Behavioral Problems in Domestic Aviary	Ovariohysterectomy	Ultrasonography in Cat and Dog
Stress-free Intervention Methods and Behavioral Modification Principles in Horses	My Fur is Shedding! Is it stress? Psychological Alopecia	Rectal Examination and Ultrasonography	
Non-Medical Treatment	Chronic Stress and Pain Assessment	WORK	SHOPS
of Behavioral Disorders	in Horses and Donkeys	Vaginal Cytology Application	Ultrasonography in
WORK	SHOPS	and Evaluation	Cats and Dogs
Practice in Horse Behavior	Behavior Consultations in Cats and Dogs	Diagnosing Mastitis in Cows	Rectal Examination and Ultrasonography
Attende	ees: 132	Attendees: 150	
The Subject	ts of Conferences, Seminars and P	resentations organized by vetEBA	A in FVMEU
2017	2018	2019	2020
The Cost of Food Safety	Ruminant Abdominal	Pole Stars of Turkish	Importance of Nano Technology
	Ultrasonography	Veterinary Medicine	
Conscious Use of Antibiotics	Clinician Veterinary Medicine	Veterinary Homeopathy	Financial Literacy
Animal Welfare and Farm Setup	and Veterinary Medicine	Being Human First	Veterinary Medicine
Teva The Future of Horse Medicine in Turkey	Differences between Human and Animal Brains	Veterinary Bee Health	Pro's and Con's During the Supply, Storage and Presentation Process of Animal Products
Orthopedics, Traumatology and	Getting Ready	CCHF Disease and	Ethical Behaviors in
Neurosurgery in Veterinary	for After Graduation	Vaccine Studies	the Veterinary Profession
Wildlife Medicine in Turkey Treatment in Birds	Food, Where We Go Wrong	Poultry in the World and Turkey	Poultry Veterinary Medicine
Preventive medicine	Calf Care-Feeding Regimes for the Year of Reducing Calf Mortality (2018)	Don't Let Calves Die	Interpretation of Biochemical Parameters in Cat-Dog Diseases
Bee Products	E-prescription in veterinary medicine	Its More Than a Profession	Echocardiography in Cats and Dogs
Bovine Clinic Medicine	Overview of Reproductive Animal Husbandry	Current Approaches to Foot Diseases in Cattle	Farm and Herd Management
Diabetes Mellitus and Treatment Process	Physical therapy and rehabilitation	The Algorithm of Success in Dermatology Diseases	Treatment with flowers
Colic and Pain Management Nasolacrimal Drainage	New Concepts and Employment Areas in Veterinary Medicine	Oops! I Became a Physician	TIGEM From Past to the Future
Seminar of Ideal Project and Idea Verification	Veterinary Medicine in Private Sector	Overview of Process and Animal Nutrition in Compound Feed Production	Interview on the Cow and Life
Ovine Livestock Problems in Turkey	Cadaver Preparation Techniques From Past to Present	What if There is Another Way?	The Place of Veterinary Medicine in the Wildlife: Marine Mammals
The Science That Makes Utopia Real: Stem Cell	Entrepreneurship	Embryo Transfer in Cattle	You Just Want It
Common Diseases in Cats and Dogs	Preventive Measures for Lamb and Calf Deaths	Importance of Wild Animals Biodiversity and Its Status in Turkey	Equine, Equine Assisted Practices and Their Effects on People with Disabilities
Comparison of the Law and Welfare Aspects of Ear and Tail Cutting of Dogs in Europe and Turkey	Time for Development and Change	Specialization in Veterinary Medicine	Living Out of Sight Vultures
	Veterinary Homeopathy	Maximum Success in Cattle Medicine	The Importance of Plastics and Cosmetics in Public Health
		The Future of Ovine Livestock and the Position and Approaches of Veterinarians	Use of High Technology in Veterinary Surgery
		Important Postpartum Problems in Mares and Their Treatments	
		Being a Student of the Faculty of Veterinary Medicine in Turkey	
Attendees: 120	Attendees: 120	Attendees: 157	Attendees: 150

#### Abbreviations

AEC: Assessment and Evaluation Committee **BIDR:** Internal Assessment Report DOC: Day-One competence EAEVE: European Association of Establishments for Veterinary Education **EPT: External Practical Training ERU:** Ercives University ERUTAM: University Agricultural Research and Application Centre ERUZEM: Ercives University Distance Education Application and Research Center ESEVT: European System of Evaluation of Veterinary Training ETC: Education and Training Committee EUBAP: Scientific Project Supporting Unit of Ercives University FPU: Food Processing Unit FVMEU: The Faculty of Veterinary Medicine of Erciyes University **GCP: Good Clinical Practice GLP:** Good Laboratory Practice ICU: Intensive Care Unit **IT:** Information Technology IVSA: International Veterinary Students' Association **OBISIS:** Student Information System **OSYM:** Measuring, Selection and Placement Center QA: Quality Assurance QC: Quality Assurance Commission SOP: Standard Operating Procedure SSL: Supervised Self Learning TURKAK: Ministry of Foreign Affairs Turkish Accrediation Agency VEDEK: The Association for the Evaluation and Accreditation of Veterinary Institutes and Programs VetEBA: Veterinary Education, Science and Research VTH: Veterinary Teaching Hospital **VUCEP: Veterinary National Core Education Programme** YOK: Council of Higher Education