



ERCIYES UNIVERSITY
FACULTY OF VETERINARY MEDICINE



SELF - EVALUATION REPORT

EAEVE

KAYSERİ 2018



TABLE OF CONTENTS

Introduction	01
1. Objectives and Organisation	04
2. Finances	11
3. Curriculum	15
4. Facilities and Equipment.....	30
5. Animal Resources and Teaching Material of Animal Origin	39
6. Learning Resources	46
7. Student Admission, Progression and Welfare	50
8. Student Assessment	55
9. Academic and Support Staff	58
10. Research Programmes, Continuing and Postgraduate Education	62
11. Outcome Assessment and Quality Assurance	70
12.ESEVT Ind icators	74



Address : Erciyes University Faculty of Veterinary Medicine 38280, Talas/Kayseri-TURKEY

Telephone : +90 352 339 94 84

Fax : +90 352 337 27 40

Website : <https://veteriner.erciyes.edu.tr>



INTRODUCTION

Brief history of the Establishment and of its previous ESEVT Visitations

Erciyes University (ErciyesU) is a State University established in 1978. The name of the university was inspired by Mount Erciyes (3916 m), which lies 15 kilometers, to the south-west of the city and is one of Turkey's most influential winter sports centers. ErciyesU consists of 18 faculties, 7 institutes, 3 colleges, 2 vocational colleges, 38 research centers, 445 departments, 140 student clubs, 2223 academic staff and 64199 undergraduates (44% female, 56% male). Currently there are 6515 master and about 1576 PhD students. Annual budget of ErciyesU in 2017 was 438 million TL.

Due to the high potential of animal population and animal product industry, Faculty of Veterinary Medicine of ErciyesU (FVMEU) was first established in 1995. At the beginning, the faculty gave education in the city center at Kocasinan district. The building was old and inefficient for veterinary education and had no proper clinical facilities. Therefore, a new building for the FVMEU was established at campus area of ErciyesU. When main building was almost ready, FVMEU moved to the new faculty building in February 2012. The construction of another set of 3 buildings was started shortly thereafter and clinical (and necropsy) activities started in March 2012.

FVMEU is a member of “The Association for the Evaluation and Accreditation of Veterinary Institutes and Programs of Veterinary Medicine (VEDEK)” which is the national accreditation unit of veterinary education in Turkey.

According to the Times Higher Education (THE) Young University Rankings list considering the world's best universities aged 50 years or under (including 250 universities in 2018), ErciyesU takes place 201-250th among more than 1700 universities in 55 countries. The list is based on the same 13 performance indicators assessing the universities across teaching, research, international outlook and their work with industry. ErciyesU ranked 5th among Turkish universities and FVMEU takes the first place among veterinary faculties in Turkey and among all faculties in ErciyesU (https://www.timeshighereducation.com/world-university-rankings/2018/young-university-rankings#!/page/0/length/25/name/erciyes/sort_by/rank/sort_order/asc/cols/stats).<https://www.erciyes.edu.tr/Duyuru-Haber/ERU-THE-50-Yasindan-Genc-Universiteler-Siralamasinda-Dunyanin-Ilk-250/9235>

There are total of 82 academic staff; 35 professors, 13 associate professors, 17 assistant professors and 17 research assistants in FVMEU. Over the last 18 years the FVMEU has graduated 788 veterinarians, 204 master and 35 PhD degrees and it has currently 392 students enrolled in the 5 year veterinary curriculum along with 299 master and 73 PhD students.

Main Features of the Establishment

Besides its education and research activities, FVMEU contributes to animal health and livestock activities by providing services to Kayseri and surroundings by Veterinary Teaching Hospital (VTH) which is strategic and accessibly located. VTH of FVMEU is the largest animal hospital in the region which consists of 3 blocks, to provide clinical services for all domestic and exotic animal species. The services given by FVMEU are recently being recognized by its stakeholders and public, which increase the number of patient and the hand-on work potential for the students. Furthermore, scientists working in FVMEU have produced several scientific studies to solve regional problems and these duties will continue with better scientific approach.

FVMEU building has 28 research laboratories, 7 practical training laboratories, 1 student computer laboratory, 8 classrooms, 4 meeting and study rooms, 1 conference hall and a reading room.

Being part of the main campus of ErciyesU; students of FVMEU can benefit from many social opportunities such as university library, swimming pool, sports facilities, restaurants, cafes etc., while academic staff can cooperate with many centers and institutes that offer multidisciplinary research studies and project facilities.

Scientific quality of academic staff of FVMEU points out being 2nd and 3rd among 22 faculties in ErciyesU in terms of number of research projects funded by ErciyesU and research papers published in 2017 (per academic staff), respectively (<http://apsis.erciyes.edu.tr/BapRaporlari2.aspx>). FVMEU has hired its own academic staff with the highest standards (regarding their English language score and graduate point average) among the graduates in Turkey. All of them have doctorate degree, some of whom have PhD graduate from the USA and EU.

Main developments since last visitation

After the last visitation of EAEVE in 26-30 November 2012, 10 major deficiencies were listed for FVMEU. Since last EAEVE visitation, nearly all of the reported deficiencies were removed and several improvements including organisation, management, curriculum and facilities have been introduced as recommended by the expert group.

1. In order to ensure all students to access large animal clinical cases, the number of large animal patients has been increased by 24/7 emergency and promotional activities.
2. In order to ensure all students to access companion animal clinical cases, the number of companion animal patients has been increased by 24/7 emergency and mobile clinic services and by several protocols signed with Kayseri municipalities and other official organizations [Gendarmerie Horse and Dog Training Center (JAKEM), Kayseri Provincial Police Headquarters, Kayseri 12th Air Transportation Main Base Command, etc.]
3. Automation system has been activated in VTH to ensure the accessibility and maintenance of clinic and pathological records.
4. A mobile clinic has been functionalized for companion animals and specific contractual arrangements have been done to increase the potential for farm animals.
5. Some instruments were provided to enable up-to-date training for diagnostic and treatment purposes such as ultrasonography (USG), endoscopy unit, hormone analysis and hematology device, eye unit, Digital x-ray and autoanalyser.
6. Several protocols have been signed with modern equipped slaughterhouses and meat processing plants in order to guarantee the teaching and hands-on work in meat hygiene and meat inspections for students.
7. A separate facility was designed to perform necropsies.
8. 24 h emergency service, 7 days per week has been functionalized for companion animals.
9. Hospitalization facilities for companion animals, avian and small ruminants have been constructed.
10. Separate isolation facilities were constructed for small and large animals which will further be improved.

In addition

- **FVMEU curriculum was reviewed** in 2013-2014 considering the curriculum of Turkish veterinary faculties approved by EAEVE and the evaluation report of EAEVE in 2012, to improve professional practice. Extramural practical trainings were incorporated in the curriculum to increase the practical training of students.
- **Constructional improvements have been done;** 1 student club room, 4 student meeting and study room, a reading room, a student computer room, a student complex and a conference hall were entered to service.
- **New commissions and clubs were established** (culture, arts, biosecurity, accreditation, accreditation of education and training, external stakeholders, internal stakeholders, questionnaire and SWOT analysis commission, alumni and vocational training committee). Students were also involved in some of these commissions.

- **The web page** has been updated and enriched.
- **Questionnaires were put into implementation** for students, administrative and academic staff, external stakeholders, internships, external practical trainings, Farabi and Erasmus students, patient owners for Quality Assurance (QA).
- **New research laboratories were opened** for Food Hygiene and Technology, Toxicology and Pharmacology (cell culture lab), Laboratory Animal Science, Aquatic Animal Disease departments and existing laboratories were renovated to be functionally used. The floor materials of anatomy laboratories and all of the clinical facilities were renewed.
- **For biosecurity;** chemical storage cabinets and rooms, warning devices and signs, eye showers, body showers, hand disinfectants and working instructions for each unit were added.
- Laboratories for Vectors and Vector-borne Diseases Implementation and Research Center (ERVEK) were established. An insectarium and tick units were designed for the control of vector-borne diseases.
- **Voluntary 24/7 student orientation system was introduced** for intern students at VTH to ensure the required professional skills and attitudes.
- **Collaborations with internal and external stakeholders were enhanced** with specific contractual arrangements.
- **Main changes in VTH;**
 - Opening of a central sterilization unit, radio-diagnostic units (Eye unit, Digital X-ray), intensive care units for newborns (companion animals).
 - Actively engaging of the patient registration and patient numeratory systems for owners.
 - Opening of student clinical skill room.
 - Improvements in the pharmacy service.
 - Opening of veterinarian resting room.
 - Operation rooms are equipped with camera systems to monitor the operations.

Main problems encountered by the Establishment

- Insufficient number of research assistants and support staff as well as the limited authority of FVMEU to take action.
- Lack of large animal hospitalization units.
- Insufficient caseloads according to species (pig, equine) in VTH.
- Insufficient necropsy materials especially for pig and equids.
- Insufficient non-academic practitioner teaching staff.
- Late recognition and delayed implementation of recording in FVMEU.
- Late recognition and delayed implementation of QA in FVMEU.

Version and Date of the ESEVT SOP which is Valid for the Visitation

ESEVT “Uppsala” SOP May 2016

01

OBJECTIVES AND ORGANISATION





OBJECTIVES AND ORGANISATION

1.1. Factual Information

1.1.1. Details of the FVMEU, i.e. official name, address, phone number, Email and website addresses, Establishment's Head, name and degrees of the person(s) responsible for the professional, ethical, and academic affairs of the VTH, official authority overseeing the Establishment

Name of the Establishment: Faculty of Veterinary Medicine, Erciyes University
Address: Erciyes University Faculty of Veterinary Medicine 38280, Talas/Kayseri-TURKEY
Telephone: +903523399484
Fax: +903523372740
Website: <https://veteriner.erciyes.edu.tr>
Title and name of head of the establishment: Dean, Prof. Dr. Abdullah İNCİ, DVM, PhD
Is the Establishment within a university? Yes.
Title and name of responsible for VTH (professional and ethical): Assoc. Prof. Ali Cesur ONMAZ, DVM, PhD.
Competent authority overseeing the establishment: The Council of Higher Education (YOK), Turkey

1.1.2. Summary of the Establishment Strategic Plan with an updated SWOT analysis (Strengths, Weaknesses, Opportunities and Threats), the mission and the objectives

The Strategic plan of FVMEU and ErciyesU is available in: <https://veteriner1.erciyes.edu.tr/ckfinder/userfiles/files/Birim%20Stratejik%20Plan%20De%C4%9Ferlendirme%20Raporu.pdf> and https://stratejikplan.erciyes.edu.tr/2017-2021/_ respectively. The strategic plan of FVMEU points out to the need to provide a more effective and efficient service for the community needs and to be prepared for the future in accordance with its mission and vision statements.

The priorities for FVMEU are;

- To improve the quality of teaching, research and other services,
- To renovate the curriculum in favor of practical trainings to acquire skills for the veterinary professionals,
- To be accredited by EAEVE in accordance with Uppsala SOP's by 2021,
- To improve and diversify partnerships to expand the employment opportunities of graduates,
- To increase number of academic and support staff,
- To develop collaborations with national and international veterinary faculties for research and education purposes,
- To improve the current structure of teaching and research facilities,
- To activate and engage the QA system for all services of FVMEU,
- To increase numbers of necropsy materials.

Mission Statement

By providing continuously upgraded, research and evidence-based education; to train professionals of intellectual and prestige who are competent in their field, aware of the necessity of lifelong learning, respectful to ethical values, seeking to protect animal, human and environmental health. To conduct research by using advanced technology, to share knowledge and experiences through the variety of educational and professional consulting activities. In line with the needs and expectations of the society, to become a professional and continuing education center as a national and international source of specialized knowledge.

Vision

Being one of the leading veterinary faculties in Turkey, our main vision is to guide veterinary training and research with a wide and holistic perspective by cooperating with national and international centers, tending to the rational use of resources, providing alternative solutions to global challenges, establishing team work and developing tradition of quality and democracy.

SWOT ANALYSES	
STRENGTHS	WEAKNESSES
<ul style="list-style-type: none">• Sufficient research funding support opportunities.• High scientific quality of academic staff; FVMEU ranks as the 2nd and 3rd for numbers of research projects and research papers per academic staff published in 2017 respectively in ErciyesU.• Low average age of academic staff.• VTH of FVMEU is the only licensed and equipped animal hospital that provides 24/7 emergency and mobile clinic services in Kayseri province and surroundings.• Increasing patient population; as the recognition of VTH increases by the high potential of services, the patient population for both large and companion animals come to an increase.• Strong infrastructure in research laboratories.• High potential of meat and meat product producing plants and slaughterhouses in Kayseri for the adequate caseload of practical training of the students.• Having protocols with “Saray Halı farm” which is one of the largest and modern premises in Turkey and even Europe.• Multidisciplinary projects and scientific and educational cooperation with many faculties, centers and research institutes such as ERVEK, Experimental Research and Application Center (DEKAM), Technological Research and Application Center (TAUM), Erciyes Nanotechnology Research Center (ERNAM) and Genome and Stem Cell Center (GEN-KOK),• ErciyesU has been elected as a “research university” by YOK.• A large number of departments with PhD programs.• Development of new fields of activity: Laboratory Animal Science, Aquatic Animal Disease.• Having the management approach that is open to innovation, focused on solutions, decided, attaches importance to communication, as a priority.	<ul style="list-style-type: none">• Insufficient number of research assistants and support staff as well as limited authority of FVMEU to take action.• Lack of large animal isolation and hospitalization units.• Inadequate equipment (advanced radio diagnostic units such as CT and MRI) in diagnosis in VTH.• Insufficient caseloads according to species (pig, equine) in VTH.• Insufficient necropsy materials especially for pigs and equids.• Insufficient non-academic practitioner teaching staff.• Late recognition and delayed implementation of recording in FVMEU.• Insufficient financial funding for constructional purposes despite big improvements in 2018.• Late recognition and delayed implementation of QA in FVMEU as well as lack of QA implementation by an independent authority.

OPPORTUNITIES	THREATS
<p>Thanks to the qualified veterinarian and laboratory staff for the increase in patient satisfaction and confidence in hospital services.</p> <p>To be able to cooperate with public and industrial organizations in educational and technical issues.</p> <p>Water buffalo breeding project, Akkaraman sheep breeding project and other projects in cooperation with the Ministry of Agriculture and Forestry.</p> <p>Increased number of protocols with internal and external stakeholders.</p> <p>Being an important center of animal breeding and meat products in Turkey.</p> <p>Strategic geographic location of university that is close to the city center and easy to access.</p> <p>Being very close to the pilot milk processing unit in the campus that is mainly devoted to practical training of students.</p>	<p>The worsening of the economic situation of farmers.</p> <p>The reduction of livestock numbers and the increase in expenses and costs in animal breeding in Turkey.</p> <p>Opening of new veterinary faculties in Turkey.</p> <p>The lack of adequate staff due to legal obstacles and bureaucratic difficulties.</p> <p>Being less attractive than some other undergraduate programs which effects quality and profile of the students of FVMEU.</p>

1.1.3. Summary of the Establishment Operating Plan with timeframe and indicators of achievement of its objectives

Strategies and Objectives	Implementation
1. Improvement of teaching quality	
To improve and update the teaching programs in terms of quality and quantity	Mid-Term
To increase the number of teaching and support staff	Mid-Term
To be accredited by EAEVE and National Accreditation Units	Immediate
To review and update the curriculum to fulfill the international standards	Immediate
To develop practical training	Immediate
To modernize teaching materials and facilities	Mid-Term
To organize educational courses in accordance with the community demands	Immediate
To create opportunities of scholarships for Master and PhD students	Immediate
To increase the numbers of necropsy materials	Immediate
To develop partnerships to promote teaching and research	Mid-Term
To increase number of vocational seminars for the alumni and to promote continuous education	Mid-Term
To expand and modernize the VTH	Long-Term
2. Improvement of the quality of academic staff and students	
To increase participation of teaching staff and students to international education programs	Mid-Term
To periodically organize educational seminars for teaching staff	Mid-Term
To increase number of rewarded students	Mid-Term
To increase number of organized activities for development of students (Student congress, seminars etc.)	Mid-Term

To provide participation of students in scientific researches	Immediate
To improve academic staff and student welfare	Mid term
To take place among the first preferred faculties according to the National University Exam	Long term
3. Improvement of research quality	
To renovate research laboratories	Long-Term
To stimulate academic staff for scientific projects	Immediate
To develop collaborations with other national and international institutions, centers and faculties	Mid-Term
To support the academic staff to attend congress, conferences, training courses and workshops	Immediate
To increase the scientific publications in SCI and SCI-Exp. index	Mid-Term
4. Organization of meetings with professionals, stakeholders, relevant sectors and graduates annually	Immediate
5. Engagement of outcome assessment and QA in all services	Immediate
6. Persuasion of environment-sensitive management approach in the Establishment	Immediate

Immediate: The action to start in less than one year;
Mid-Term: Between 1-2 years;
Long term: More than two years

1.1.4. Organizational chart (diagram) of the Establishment

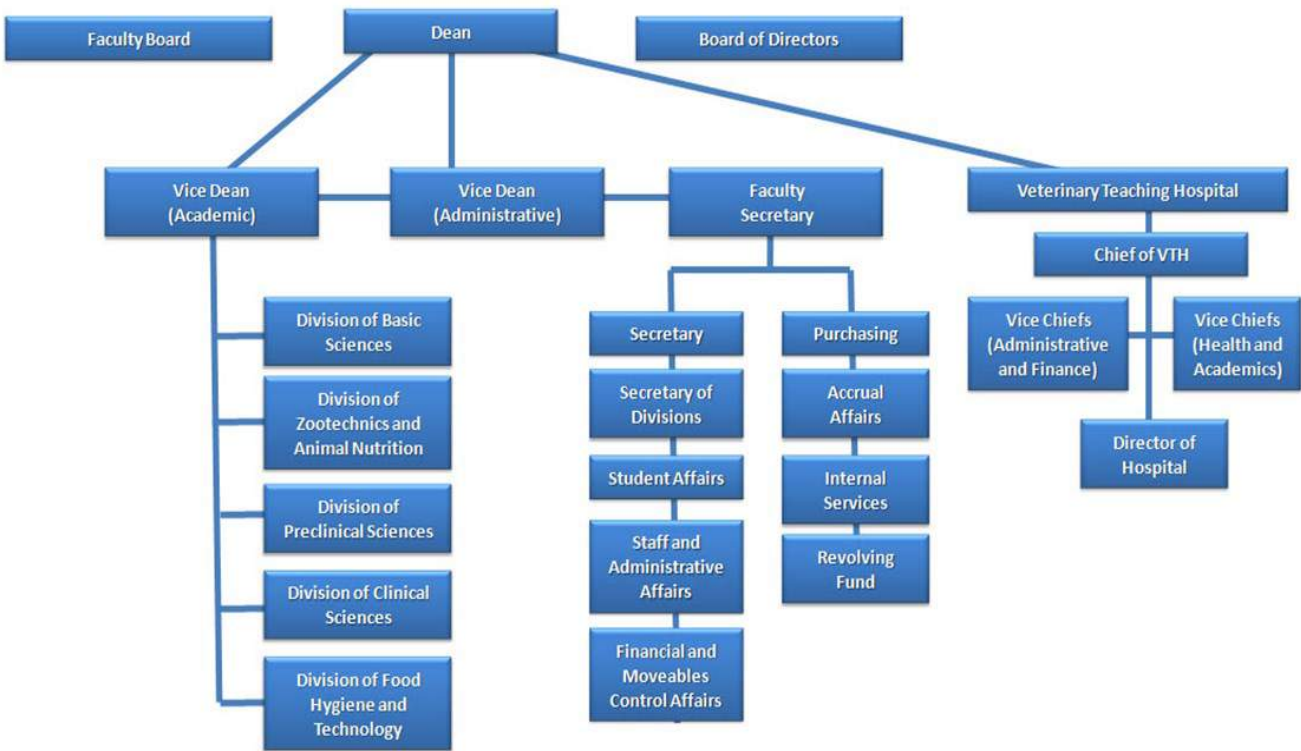


Figure. Organisation Chart of FVMEU

1.1.5. List of departments/units/clinics and councils/boards/committees with a very brief description of their composition/function/responsibilities (further information may be provided in the appendices)

Faculty Board is the body of strategic decisions and supervisions concerning coordination of academic affairs, educational plans, scientific research and publication activities in accordance with FVMEU mission. It also performs the related duties given by YOK Law. The faculty board normally convenes at the beginning and end of each semester; however, it could come together upon proposal when necessary. It consists of 12 members with heads of all divisions, 3 representatives of professors, 2 representatives of associate professors, 1 representative of assistant professors and 1 representative of students. **Students are also included in related committees within FVMEU and within the University senate.**

Dean is the representative of FVMEU elected among all FVMUE’s full professors.

Board of Directors is a body that assists the dean in administrative activities namely i) to apply the principles identified by the Faculty Board's decisions, ii) to ensure implementation of the education - teaching plans, programs and calendar iii) to prepare a draft program for the budget and investments of Faculty iv) to take decisions in all issues including admission of students, course equivalents, procedures for education and examinations about faculty management and v) to perform related duties given by YOK Law. Board of Directors consists of 7 members; dean, 3 representatives of professors, 2 representatives of associate professors, 1 representative of assistant professors.

Divisions are the operative units in charge of teaching and research activities. FVMEU has 5 divisions having their own internal organization related to vocational areas of scientific and technical knowledge. Heads of divisions are elected among and by the heads of the departments for three years. They carry out academic and administrative issues; to chair departmental boards, to implement decisions of departmental boards, and to coordinate, communicate and collaborate between departments by monitoring and supervising all activities.

Divisions	Head (Prof. Dr.)
Basic Sciences	Güner KÜÇÜKBAYRAM
Preclinical Sciences	Fuat AYDIN
Clinical Sciences	Gültekin ATALAN
Food Hygiene and Technology	Zafer GÖNÜLALAN
Zootechnics and Animal Nutrition	Erol BAYTOK

The departments in each division are summarized in Figure below.

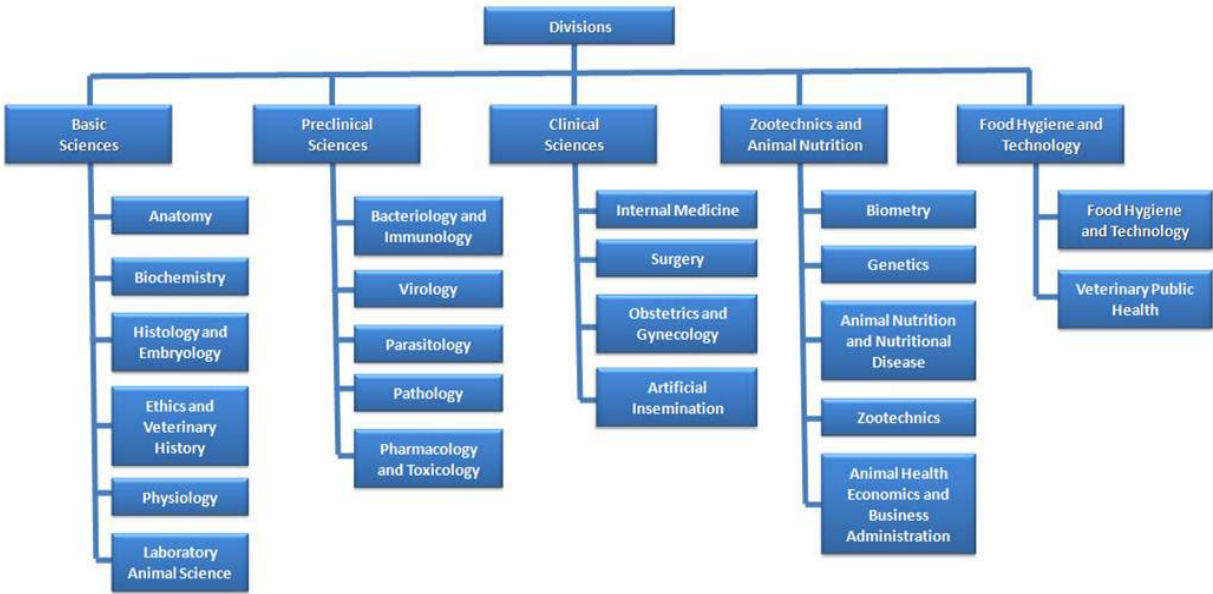


Figure. Divison Chart of FVMEU

Committee and Commissions of FVMEU

- Internship Coordination Committee
- Education, Teaching and Coordination Commission
- Selection Committee
- Culture-Art and Competition Committee
- Scholarship Commission
- Stage Commission
- Academic Evaluation Committee
- Commission of Assignment For Scientific Purposes
- Academic Encouragement Application And Examination Commission
- Curriculum Planning Committee
- Biosecurity Commission
- QA Commission
- Strategic Plan Commission
- Purchasing Commission
- Accreditation Committees
 - * Education - Teaching Accreditation Committee
 - * Internal Stakeholders Commission
 - * External Stakeholders Commission
 - * SWOT Analysis Commission
 - * EAEVE SER Commission
 - * Graduates and Occupational Training Commission
 - * Student Activities Club
 - * Webpage Committee
- VTH Project Inspection Commission
- Measurement and Evaluation Commission
- Journal of FVMEU Commission
- Medical Waste Committee
- Revolving Fund Commission

1.1.6. Description of how (procedures) and by who (description of the committee structure) the strategic plan and the organization of the Establishment are decided, communicated to staff, students and stakeholders, implemented, assessed and revised

The strategic plan of FVMEU was prepared by the Dean, the administrative staff and the strategic plan committee for 2017-2021 and submitted to students, staff and stakeholders. After the last revisions completed, it is published on the web site and scheduled for implementation. The organization chart of the FVMEU is regulated by national legislation in which all the tasks, responsibilities and functions are defined in detail.

1.2. Comments

Major changes have been recorded since the recognition of EAEVE Uppsala SOP's were raised in FVMEU. Both the administrative and academic staff as well as the students contributed to the process with high motivation. Being very young and open to innovations, FVMEU in reality, has great opportunities to implement all the actions sited in the strategic plan. Ranking among the top ratings in published research papers and projects, a special insight into FVMEU has been provided at university level. Opening of new veterinary faculties did not change the attraction potential of FVMEU in respect to the academic staff mobility. Significant changes are expected for FVMEU in expanding the area of all facilities (VTH, teaching farm, laboratories etc.) and improving the quality of all services.

1.3. Suggestions for improvement

Harmonization and renovation of curriculum in accordance with the international standards is one of the most important issues not only for FVMEU but also for all of the veterinary faculties in Turkey. FVMEU plans to organize serial meetings with the attendance of deans and academic staff of veterinary faculties of Turkey to discuss and clarify how to implement Day One Competencies (DOC) and harmonize curriculum in favor of practical trainings. FVMEU has a dynamic team and potential to implement its strategic plan within the estimated timeframe; however, the strict follow up of the plan depends on the support of ErciyesU. Collaborations between departments and common use of laboratories should be stimulated to provide rational use of resources. Website should be renovated and enriched in order to be effectively and simply used by all stakeholders, students and who seek for its services. Tradition of quality, good services and entrepreneurship should be established. Opening of new veterinary faculties must be avoided to increase the existing opportunities.



02

FINANCES





FINANCES

2.1. Factual information

2.1.1. Description of the global financial process of the Establishment

ErciyesU, a state-owned university, is financed by the Turkish government. Budget proposals prepared by the University's Strategy Development Department are presented to the university board of directors. In addition, investment budget proposals are sent to the Ministry of Development. After being approved by the Ministry of Finance, budget law proposal is sent to Turkey's Grand National Assembly's (TBMM) Budget and Planning Commission. This commission approves the budget law proposal and submits the report to the TBMM's General Assembly. The budget is discussed at the General Assembly under the chairmanship of the Minister of Finance. The budget law accepted by the TBMM is sent to the President of the Republic to be approved. After the budget law is approved by the President, it is published in the Official Gazette and enters into force at the beginning of the financial year. The budget transferred to the university is allocated to the departments according to the needs and demands by the expenditure units. The Financial Audit of expenditures in the field of FVMEU is carried out by the staff in charge, assessment officer (Faculty Secretary), spending authority (Dean), ErciyesU Strategy Development Department, respectively. After the financial audit, payments are made for spending. These expenditures are controlled by the Court of Accounts auditors appointed by the Court of Accounts in the following year.

FVMEU's annual budget consists of;

Grants allocated by the Rectorate,

Research funds provided by ErciyesU Scientific Projects Support Unit (BAP) and

Revolving fund service fees derived from the activities of FVMEU (hospital and other diagnostic unit revenues).

Academic and support staff salaries and social insurance contribution including the costs of internet, heating, water and electricity of FVMEU are covered by the Rectorate. Travel payments, consumption goods and supplies (consumables, cleaning materials, stationery, etc.) movable property purchases and repairs (fixtures, computers, air conditioners, machinery-equipment purchases and repairs), building maintenance (building renovation and repair) and service procurement (telephone and fax bill, course etc.) are covered by FVMEU's annual budgets.

2.1.2. Degree of autonomy of the Establishment on the financial process

After the budget is transferred to ErciyesU from the Ministry of Finance, the spending units allocate it to the faculties according to the needs and demands. Although the quantity of budget is decided by Rectorate, priorities of the expenditures are decided by the Dean of the Faculty. Therefore, FVMEU administration has sufficient autonomy for the use of the budget.

2.1.3. Percent of overhead to be paid to the official authority overseeing the establishment on revenues from services and research grants.

Eight percent (8%) of the revenue from the services provided in VTH is paid back to the official authority as taxes, and 1% of the revenue is transferred to state budget. Additionally, 5% of the revenue provided from the services are transferred to BAP for funding the future research projects.

2.1.4. Annual tuition fee for national and international students

There is no tuition fee for national students within the first five years of education. However, students who comment graduate from FVMEU over 5 years have to pay 386 TL (approximately 70 Euros) per year as a tuition fee. For international students, the tuition fee is 230 TL (40 Euros) per year. The tuition fee is determined by the Council of Ministers for each academic year. Tuition fees including national/international students are transferred to the University budget, but not to the faculty budget.

2.1.5. Estimation of the utilities and other expenditures directly paid by the official authority and not included in the expenditure tables

The costs of internet, heating, water and electricity of FVMEU are covered by the Rectorate.

2.1.6. List of the on-going and planned major investments for developing, improving and/or refurbishing facilities and equipment, and origin of the funding

In 2018, calf intensive care unit was built with 200.000 TL (40.000 Euros) budget. Emergency services were functionalized (24/7 hour) in the VTH. Mobile clinic for patients was purchased.

In 2018, student reading room, social activity clubs and internet room were established newly. Conference hall (named as Mehmet Akif Ersoy) was built and opened on 3rd May, 2018.

In 2018, an infrastructure project (including sterilization unit, hospitalization cages and microscopes etc.) has been entitled to support VTH by BAP. Within this project 450.000 TL (90.000 Euros) has been allocated to VTH.

VTH is planned to be expanded for ruminant, equine, exotic and wild animals with new units and equipments. This project will be realized with a budget of 20.000.000 TL (4.000.000 Euros) on an area of 15.000 m². Project of expansion has been taken into the investment plan of 2019.

2.1.7. Prospected expenditures and revenues for the next 3 academic years

The financial sources of FVMEU expected to increase over the next years, due to regular increase of revenue of VTH and emergency clinical services every year.

Moreover, the state budget is expected to increase approximately 10% each year (at a level of inflation rate), and revenues from all services of FVMEU are expected to continue to increase (as occurred over the last 3 years).

Additionally, ErciyesU was selected as one of the ten research universities in Turkey by 2018. Therefore, the budget of ErciyesU and FVMEU for the next years is expected to increase.

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

Each year, the faculty administration promotes a meeting with department and division heads, academic and support staff, director of VTH to get their demands (purchasing needed instruments and equipment, expanding laboratory and VTH etc.) and views.

The decisions of meetings as a list is prepared according to the need and priority order and presented to the Rectorate. Then, the Rectorate promotes a meeting with the University Senate composed by the Vice Rector, the Deans of the faculties, directors (Vocational Colleges, Graduate Schools, etc.) where annual investment and development budget of ErciyesU are drawn up, discussed and approved.

The prepared budget proposal is submitted to the Ministry of Finance by the Rectorate. Here, as a result of the meeting between the Ministry of Finance experts and the representatives of the university (Rector, Finance Director), The Ministry of Finance presents the revised lists to the TBMM, where it is discussed at the Planning and Budget Commission in the presence of representatives of YOK. Budget is implemented after being approved by TBMM. The budget transferred to ErciyesU is allocated to the faculties according to the needs and demands by the expenditure units. After the budget is transferred to FVMEU, the Dean decides where and how to use it.

Table 2.1.1. Annual expenditures during the last 3 academic years (Turkish Lira, TL)

	Area of Expenditures	Years			Mean
		2017	2016	2015	
A	Personnel (academic and support staff)	8.610.272	8.118.122	6.609.600	7.779.331
B	Operating costs (consumable supplies, travel payments, purchased services)	76.485	274.800	383.000	244.762
C	Maintenance of building	77.200	15.200	2.200	31.533
D	Equipment	195.200	161.200	32.700	129.700
E	Hospital expenditures	413.402	155.652	23.469	197.508
F	Project expenditures	2.142.300	2.587.725	2.072.415	2.267.480
Total Expenditures (A+B+C+D+E+F)		11.514.859	11.312.699	9.123.384	10.650.314

Euro/TL rate is 5.50

Table 2.1.2. Annual revenues during the last 3 academic years (Turkish Lira, TL)

	Revenue Sources	Years			Mean
		2017	2016	2015	
A	Public authorities (salaries, insurance and annual budget)	8.959.157	8.569.322	7.027.500	8.185.326
B	Hospital Services	450.548	207.043	100.629	252.740
C	Research Grants	2.142.300	2.587.725	2.072.415	2.267.480
D	Other Sources (Renting facilities)	19.610	17.300	15.750	17.553
Total Revenues (A+B+C+D)		11.571.615	11.381.390	9.216.294	10.723.100

Euro/TL rate is 5.50

Table 2.1.3. Annual balance between expenditures and revenues (Turkish Lira, TL)

Year	Total Expenditures	Total Revenues	Balance
2017	11.514.859	11.571.615	56.756
2016	11.312.699	11.381.390	68.691
2015	9.123.384	9.216.294	92.910

Euro/TL rate is 5.50

2.2. Comments

Although veterinary medicine education is a much more expensive education compared to the educational costs of other faculties, there is no extra legal regulation for the veterinary faculties budget in Turkey. Therefore, the vast majority of the faculty budget consists of grants allocated annually by the Rectorate and, in part, the revolving fund income from the services of the FVMEU. The faculty administration decides how and where to spend the budget, except salaries. There are official law and regulations for all expenditures.

There is limited flexibility in the preparation of the budget and the use of the approved budget due to the government's tight monetary policy and long bureaucratic procedures. This situation leads to delays in investments.

It is expected that the budget transferred to the ErciyesU by the state will increase in the coming years as ErciyesU is selected as one of 10 research universities in 2018. In addition, in the last 3 years, there has been a regular increase in annual service income of the VTH and future increase is expected. It is thought that this will provide flexibility to the faculty administration in terms of expenditure.

2.3. Suggestions

Rural population is 25%, in Turkey. Livestock production is the main source of income for these people. The budgets of present veterinary faculties should be increased instead of establishing new veterinary faculties in Turkey, since veterinary medicine education costs are expensive.

In order to achieve a higher degree of autonomy for expenditures, attempts should be made to increase the revolving fund income of FVMEU and the scope of community service should be expanded. The number of continuing education programs within FVMEU should be increased. Communication with companies in the livestock sector should be increased and sponsorship agreements should be made. Increasing income and budget will help FVMEU to improve its infrastructure, this will in turn improve the quality and quantity of researchers and students.

03

CURRICULUM





CURRICULUM

3.1. Factual Information

3.1.1. Description of educational aims and strategy in order to propose a cohesive framework and to achieve the learning outcome.

FVMEU's curriculum was renewed in accordance to 2005/30 EC Directive in 2013 after the first EAEVE visit to FVMEU in 2012. In this regard, qualification criteria for veterinary student education have also been established for veterinary faculties in Turkey. Thus, FVMEU educational aims are pretty much specified by these criteria. These criteria comprise of the basic knowledge, proficiency skill and competence for bachelor, MSc, and PhD level education in veterinary medicine and related science areas. The learning outcomes of training at FVMEU, which could be accessed at Bologna Information System of ErciyesU, have been designated according to these criteria.

The training of veterinary students at FVMEU comprise of 5 years of full-time theoretical, practical and clinical trainings. The strategy of the curriculum of FVMEU is to achieve these learning outcomes and to teach basic medical and preclinical sciences in the first 3 years followed by clinical sciences, animal production and FSQ in the last 2 years of training.

The strategy of FVMEU educational system can be outlined as below:

- Basic Veterinary medical sciences are considered in the first 4 semesters. Students gain comparative Anatomy, Histology, Biochemistry and Physiology knowledge with robust practical training in laboratories. Along with the theoretical information, they gain laboratory work discipline and become familiar with biosafety issues.
- Semesters 5 to 6 are mostly for preclinical sciences which are Parasitology, Pharmacology and Toxicology, Microbiology, Virology and Pathology. The main strategies of these courses are to prepare students for clinical training and also to provide skills for basic diagnostic methods and pathological examinations. In addition, Animal Welfare, Animal Production, and Animal Nutrition related courses are provided at this level. Professional development are faster in the 5th semester because the introduction to the clinical studies commence and they begin to gain DOC for the clinics.
- Semesters 7 to 10 are two years of clinical knowledge, skills, and competences. Students take clinical training from Departments of Internal Medicine, Surgery, Obstetrics and Gynaecology, and Artificial Insemination. In different semesters, students are rotated in clinics. During this period, they are taken out for extramural training to provide hand-on work in private farms or Erciyes University Agricultural Research and Application Center (ERUTAM). The 10th semester is internship during which more than half of the semester is spent at VTH. Aside from clinical training, courses involved to Food Safety and Quality (FSQ) are taught in this segment of the training. Students are transferred to slaughterhouses and food processing plants and they practice ante-mortem, post-mortem examinations, and inspect process flow in food processing plants for sanitation and Hazard Analysis and Critical Control Points (HACCP).
- At the end of the 8th semester, students are required to have a type of mandatory summer training, an extra practical training. Students undergo 20-working days (160 hours) in governmental research laboratories, private clinics and hospitals or farms under the supervision of a non-academic veterinarian during summer.
- Students are supposed to take one elective course each semester. Therefore, they can obtain more advanced knowledge on some fields.
- FVMEU students are instructed occupational English during 1st and 2nd semesters (each 2 hours) to improve self-confidence of our graduates within the international platforms related to veterinary profession.

3.1.2. Description of legal constraints imposed on curriculum by national/regional legislation and the degree of autonomy that the Establishment has to change the curriculum

The universities in the Turkey are linked to YOK. In the administrative and academic procedures, universities have to be ruled according to major Higher Education Law no 2547. Professional subjects stated by the corresponding legislation (YOK has adopted EU/2005/EC directives) are being

followed in FVMEU. When a need for a change in the curriculum emerges, department heads propose it to Education, Teaching and Coordination Commission, and the commission evaluates the proposal for various features such as the ratio of theoretical, practical and clinical teaching hours and avoiding overlapping of the subjects. After the required arrangements are performed, the commission submits the proposal to the Faculty Board. If approved, the proposal must be further approved by University Senate before being put into implementation. Regarding updating the curriculum, FVMEU is authorized to make a revision in the curriculum within the framework of above mentioned legislation.

There are obligatory three courses in any university programme in Turkey including Atatürk's Principles and History of Revolution, Turkish Literature, and Second Language beyond the veterinary profession. These courses are taught in the first year of the education.

3.1.3. Description of how curricular overlaps, redundancies, omission, and lack of consistency, transversality and/or integration of the curriculum are identified and corrected.

Education, Teaching and Coordination Commission is the main body dealing with the curriculum. Curriculum for each course is available on the internet. These documents include topics to be taught each of a 16-week of a semester. These course plans are reviewed by the Education, Teaching and Coordination Commission once a year for overlaps and consistency. In addition, outcomes of the student evaluations made online at the end of each semesters anything arising regarding redundancy or lack of consistency. In case of any problem, Education, Teaching and Coordination Commission, prepares a proposal in collaboration with the academic staff in charge. Curricular issues are evaluated in collaboration with by working with the departments. However, if anything major comes through, for example, place of the course needs to be changed into the another semester, this should be approved by the Faculty Board as well as the senate of ErciyesU.

3.1.4. Description of the core clinical exercises/seminars prior to the start of the clinical rotations

There are four courses that play major role in preparing students for the clinical rotations including; Introduction to Internal Medicine I and II, External diseases and General Veterinary Surgery courses. The content of the courses mainly are acquiring basic clinical examination skills and common diseases. The clinical practice of these courses is taught in the clinical skill laboratory at the VTH. Students are introduced with biosecurity SOPs of the VTH. Apart from these courses, students are exposed to knowledge about zoonosis, epidemiology and some level of pathology. During this coursework, they acquire theoretical and practical information about biosecurity.

3.1.5. Description of the core clinical rotations and emergency services and the direct involvement of undergraduate students in it

Clinical courses are 32 weeks in 3rd year (4 hours/week), 32 weeks in 4th year (8 hours/week), and 32 weeks in 5th year (8 hours/week) and 7 weeks (30 hours/week) of internship in the clinics in the second semester of the 5th year. Theoretical courses for the clinical trainings are taught in the 4th and 5th years. The VTH is composed of a small and large animal clinics. Students in each clinic are grouped for rotations in Surgery, Internal Medicine, Obstetrics and Gynecology, and Artificial Insemination. Attendance to the clinical training is required for 8 hours each week. Fifth-year students stay at the emergency room (ER) for 16 hours (until 12 am) during their rotations. Students assist the supervising teaching staff in diagnosis and treatment of the clinical cases. Students' clinical rotations and related information have been provided in Table 3.1.5.

3.1.6. Description of the teaching in slaughterhouses and in premises for the production, processing, distribution/sale or consumption of food of animal origin

Regarding the practical training and final exam of the Meat Inspection and Technology courses; they are carried out in slaughterhouses in the second semester of the 4th year. There is no slaughterhouse and food processing unit belonging to FVMEU. However, there are several slaughterhouses with modern processing facilities and 2 dairy processing plants that FVMEU signed protocols with to ful-

fill the needs for hand on work for students. FVMEU has also bilateral agreements with a poultry processing plant for collaborating in the practical training of the veterinary students for FSQ. A student group of 15 to 20 are taken twice per week to the slaughterhouses 16 visits for 8 weeks (8x2) to Molu or Büyüksimitçi slaughterhouses, one visit (1x1) to Saray Farm Slaughterhouses are performed. Additional two visits are done to the slaughterhouses for the exam (1x2) (Total 19 visit). The distance between the slaughterhouses and the FVMEU is approximately 7-16 km. Students are grouped for antemortem or postmortem inspections of cattle, sheep, and goat species under the supervision of teaching staff. Students actively take part in; i) observing suspicious signs of possible notifiable, reportable and zoonotic diseases and take appropriate action, ii) evaluating the physical conditions and welfare status of animals, identifying the conditions affecting the quality and safety of foods of animal origin, iii) performing ante mortem and post mortem inspections of animals destined for the food chain.

As the only poultry slaughtering and processing plant was closed in Kayseri in 2013, the students are taken to poultry slaughtering and processing plant ones a year extramurally, 187 km away from FVMEU. To monitor fish meat production, inspection and quality, “Sultan trout hatchery” located about 25 km away from FVMEU is visited. In respect to pig meat inspection, visual training by videos in the classroom is carried out.

Regarding milk hygiene and technology courses; most of the practical trainings (7 weeks) are carried out in Food Hygiene-Practical Training Laboratory. In addition, students actively participate in some milk technology applications (yogurt and different types of cheese making) for 5 weeks in Safiye Çıkrıkçıoğlu Vocational School dairy processing plants, 724 m away from FVMEU within the campus of ErciyesU. One visit to Saray Farm Milk Processing Units are performed during the semester. It is compulsory for the students to have logbooks during practical trainings of milk hygiene and technology courses even during the visits.

During the practical training of food hygiene courses, students are informed about the national legislations concerning the food production and hygiene. The practical training of the food hygiene and control course is carried out in Food Hygiene-Practical training laboratory where students take part in some of the chemical and microbiological food analysis for 5 weeks (5x2).

For VPH; there are only theoretical courses in the curriculum.

Students are required to apply biosecurity SOPs during their visits to every kind of facilities. After the visits, students are subjected to a discussion for which cases they experienced in the visited facility, deficiencies and appropriate conditions observed and what corrective measures could be of concern. For every practical training in FSQ, students are divided into two practical classes (A and B), each one with 20-25 students.

During internship in FSQ; the intern students (3-4 student groups) visit the ruminant’s slaughterhouse by themselves under the responsibility of the official veterinarians. In addition, case discussing (to solve problems in food processing plants, to take precautions in case of foodborne, emerging and zoonotic diseases, to understand the legislations and to apply sanitation process in food industry) is carried out.

3.1.7. Description of the selection procedures of the electives by students and the degree of freedom in their choice

Communicating with the student representatives, the Vice Dean who is responsible for student affairs, prepares a list of electives to be opened each semester. This list needs to be approved by the Board of Directors of FVMEU. When registration for courses started at the beginning of the semester, students are informed about the list. Every student has to take 1 elective course per semester. Each elective course is 1 ECTS. The total of the ECTSs for electives is 9 within a 9 semester curriculum. At least, 10 students are needed for a course to be opened. If number of registry is insufficient

for a course, students are asked to change their preferences to the ones with sufficient registry. List of elective courses is available at the faculty web page as well as in Table 3.1.3. There is no restriction for a student to choose the elective course other than the requirement for the number of students.

3.1.8. Description of the organization, selection procedures and supervision of the EPT

The EPT is embedded in the clinical rotations at FVMEU. Like clinical rotations, students join obligatory EPT in semesters 7, 8, and 9. FVMEU cooperates with Kayseri Chamber of Veterinary Surgeons, as a close stakeholder that provides FVMEU to sign protocols with private veterinary practitioners in Kayseri. Practitioners who have high number of caseloads to enable veterinary students and those with regular records are preferred.

Beyond this EPT during the academic semesters, there is also an obligatory EPT, referred as “Summer Stage”. This training is mandatory for students who passed to 5th year. It must be carried during summer time between 8th and 9th semesters. There is a formal directive regulating this EPT which is “Summer Internship Directive of FVMEU”. In general, students preferred to take this EPT in their own cities. Students assure an acceptance letter from the private clinics, veterinary hospitals, farms, slaughterhouses, pharmaceutical companies, state-owned or private diagnostic laboratories, feed production plants, food analysis laboratories and state veterinary offices. This acceptance letter has to be approved by the Stage Commission of the FVMEU. EPT period is 20 work days comprise of 160 hours at least. ErciyesU is in charge of health insurance fees of students during EPT. Students are obligated to note all cases in their logbooks provided by FVMEU during their summer stage training sessions. At the end of summer stage students submit their logbooks to the stage commission to be evaluated for their involvement in clinical and practical works. Supervising practitioner has to fill an evaluation form about the student’s capabilities and makes comments and sends this form in a closed envelope to the FVMEU. In addition both supervisor and students are asked to fill the questionnaires (put into implementation by 2018) which will be evaluated by the stage commission. The total EPT hours are shown in Table 3.1.4.

3.1.9. Description of the procedures used to ascertain the achievement of each core practical/clinical activity by each student

In FVMEU, most of the final exams of the courses that have practical training, regardless of laboratory work or animal material, include both theoretical written and oral exam that takes place on laboratory settings, on slaughterhouse material or any other teaching material. These oral exams are essential indicators whether the practical training is satisfactory.

At the end of clinical rotations, students are scored by oral exam at VTH. Final exam of the Meat Hygiene, Inspection and Technology courses takes place at the slaughterhouses. Mainly, transfer and welfare conditions of animals, ante-mortem and post-mortem examinations, evaluation of pathological changes and final judgement of meat asked to the students. Compliance with biosecurity procedures by the undergraduates are strictly followed by the supervisor.

Another mechanism for assuring the achievement of core clinical or practical training is the feedback obtained from the EPT collaborators. Their comments and suggestions are considered as golden value and directly taken into consideration.

Periodic meetings with our external stakeholders which is an important part of our QA also provide useful information on efficacy of clinical and practical training at FVMEU.

3.1.10. Description of how and by whom the core curriculum is decided, communicated to staff, students and stakeholders, implemented, assessed and revised

The current core curriculum has been in use since 2014. Some major changes have been performed. Faculty Board has the responsibility to review and update the curriculum. The legal procedure for the curricular changes has been outlined in section 3.1.2. However, before presenting to the Faculty

Board, Education Teaching and Coordination Commission works on the draft curriculum. The commission evaluates the proposals from the divisions, communicates with stakeholders and with related administrative staff and students. Curricular revisions can be initiated by proposals from the departments, suggestions of the stakeholders, outcomes of the student evaluations, national and international dynamics (e.g. 36/2005/EC). After the commission finalizes the curricular draft, it is presented to the Faculty Board. Being approved by the board, it has to be approved by the ErciyesU Senate. The Dean is responsible for the implementation of the curriculum. Academic Council of FVMEU meets once every semester. All academic personnel is required to attend this meeting. In addition to other academic issues, the curriculum in use is discussed and areas for improvement is detected.

Table 3.1.1. Curriculum hours in each academic year taken by each student.

Academic years	A	B	C	D	E	F	G	H
Year-1	592	-	-	224	-	-	-	816
Year-2	480	-	-	384	-	-	-	864
Year-3	512	-	-	352	32	128	-	1024
Year-4	560	-	-	100	92	256		1008
Year-5	480	-	-	238	20	254		992
TOTAL	2624			1298	144	638		4704

A: lectures; B: seminars; C: supervised self-learning; D: laboratory and desk-based work; E: non-clinical animal work; F: clinical animal work; G: others; H: total.

Table 3.1.2. Curriculum hours in EU-listed subjects taken by each student

Subjects	A	B	C	D	E	F	G	H
Basic subjects	114			99				213
Medical physics	16							16
Chemistry (inorganic and organic sections) (Medical Chemistry)	16			32				48
Animal biology, zoology and cell biology (Medical Biology)	32							32
Feed plant biology and toxic plants (Feed Hygiene and Technology)	32			32				64
Biomedical statistics Biostatistics 10th sem. Internship Biostatistics	16 2			32 3				53
Basic Sciences	1017			891				1908
Anatomy, histology and embryology Anatomy I Anatomy II Topographic Anatomy Histology I Histology II Embryology 10th sem. Internship Clinical Anatomy 10th sem. Internship Histology	48 48 16 32 32 32 4 4			72 72 32 32 32 6 6				120 120 48 64 64 32 10 10

Physiology							
Physiology I	48			32			80
Physiology II	48			32			80
10th sem. Internship Clinical Physiology	4			6			10
Biochemistry							
Biochemistry I	32			32			64
Biochemistry II	48			32			80
10th sem. Internship Clinical Biochemistry	4			6			10
General and molecular genetics							
Genetics	30						30
10th sem. Internship Clinical Genetics	4			6			10
Pharmacology, pharmacy, and pharmacotherapy							
Pharmacology I	30			30			60
Pharmacology II	32			32			64
10th sem. Internship Clinical Pharmacology	8			12			20
Pathology							
General Pathology	32			32			64
Special Pathology I	32			32			64
Special Pathology II	48			32			80
10th sem. Internship Clinical Pathology	8			12			20
Toxicology	32			16			48
Parasitology							
Parasitology	30						30
Helmintology	32			32			64
Protozoology	30			30			60
Entomology	15			30			45
10th sem. Internship Parasitology	8			12			20
Microbiology							
Microbiology I	32			32			64
Microbiology II	32			32			64
Virology I	14			28			42
Virology II	32						32
10th sem. Internship Microbiology	8			12			20
10th sem. Internship Virology	8			12			20
Immunology	15			30			45
Epidemiology	16						16
Professional communication							
10th sem. Internship Clinical Ethics and Deontology	1			1			2
Professional ethics (Ethics Deontology and Legislation of Veterinary Medicine)	16						16
Animal ethology (Ethology (Animal Behaviors))	16						16
Animal Welfare (Animal Welfare)	16						16
Animal nutrition							
Animal Nutrition and Nutritional Diseases	32			32			64
10th sem. Internship Animal Nutrition and	8			12			20

Clinical Sciences	696			152		638		14 86
Obstetrics, reproduction and reproductive disorders								
Obstetric and Gynecology I	48							48
Obstetric and Gynecology II	48							48
Reproduction, Artificial Insemination and Andrology	32							32
Diagnostic pathology								
Necropsy	16			32				48
Medicine and surgery including anaesthesiology								
Surgery I	32							32
Surgery II	32							32
Traumatology and Orthopedic Surgery	32							32
Foot Diseases	16							16
Internal Diseases of The Cattles I	32							32
Internal Diseases of The Dog And Cats I	30							30
Internal Diseases of The Cattles II	30							30
Internal Diseases of The Dog And Cats II	32							32
Equine Internal Medicine	16							16
Anaesthesiology-Reanimation	16							16
General Surgery	16							16
Laboratory Animal Diseases	16			32				48
Fish Diseases	16			32				48
10th sem. Internship Laboratory Animal Science	4			6				10
10th sem. Internship Seafood	4			6				10
Clinical practical training in all common domestic animals								64 64 12
Clinics - 5th. Sem.						64		8
Clinics 6th. Sem.						64		12
Clinics 7th. Sem.						128		8
Clinics 8th. Sem.						128		12
Clinics 9th. Sem.						128		8
Preventive medicine								
Virology I	2			4				6
Avian Disease	4			4				8
Genetics	2							2
Parasitology	2							2
Entomology	1							3
Immunology	1			2				3
Protozoology	2			2				4
Pharmacology I	2			2				4
Internal Diseases of The Dog And Cats I	2			2				2

Diagnostic imaging (Radiology)	16							16
State Veterinary services and public health Veterinary Medicine Public Health	16							16
Veterinary legislation, forensic medicine and cer- tification Forensic Veterinary Medicine	16							16
Therapy in all common domestic animal species 10th sem. Internship Obstetric and Gyneco- logy I	12					18		30
10th sem. Internship Obstetric and Gyneco- logy II	12					18		30
10th sem. Internship Small and Large Animal Surgery I	12					18		30
10th sem. Internship Small and Large Animal Surgery II	12					18		30
10th sem. Internship Small and Large Inter- nal Diseases I	12					18		30
10th sem. Internship Small and Large Inter- nal Diseases II	12					18		30
10th sem. Internship Artificial Insemination Avian Disease	28			28				56
Propaedeutics of all common animal species External Diseases	16							16
Introduction to Internal Diseases I	16							16
Introduction to Internal Diseases II	16							16
Animal Production	186				159			345
Animal production and breeding Breeding of Seafood	16				32			48
Breeding and Diseases of Bees	16				16			32
Economics Livestock Economy	28							28
10th sem. Internship Livestock Economy	2				3			5
Animal husbandary Zootechnics I	32				32			64
Zootechnics II	30				30			60
Animal husbandary Husbandary of Laboratory Animals	30							30
10th sem. Internship Zootechnics	16				32			48
	8				12			20
Herd health management Livestock Economy	4							4
Animal husbandary	2							2
Zootechnics II	2				2			4

Food Safety and Quality	128				152			280
Inspection and control of food and feed (Food Hygiene and Control) 10th sem. Internship Food Hygiene and Technol	28 4				28 6			56 10
Food hygiene and food Microbiology Veterinary Medicine Public Health 10th sem. Internship Veterinary Public Health	8 16 4				10 6			18 16 10
Practical work in places for slaughtering and food processing plants (Meat Hygiene Examination and Technol) 10th sem. Internship Food Hygiene and Technol	32 4				48 6			80 10
Food technology including analytical chemistry (Milk Hygiene and Technology) 10th sem. Internship Food Hygiene and Technology	28 4				42 6			70 10
Professional Knowledge	23			11				34
Professional ethics & behaviour 10th sem. Internship Clinical Ethics and Deontology	1			2				3
Veterinary legislation History of Veterinary Medicine 10th sem. Internship Clinical Ethics and Deontology	16 1			2				16 3
Veterinary certification and report writing 10th sem. Internship Clinical Ethics and Deontology	1							1
Communication skills 10th sem. Internship Clinical Ethics and Deontology				1				1
Practice management & business 10th sem. Internship Livestock Economy	2			3				5
Information literacy & data management 10th sem. Internship Biostatistics	2			3				5
TOTAL	2164			1153	311	638		4266*

*Except for some courses that are national requirments, English, professional English and elective courses.

A: lectures; B: seminars; C: supervised self-learning; D: laboratory and desk-based work; E: non-clinical animal work; F: clinical animal work; G: others; H: total.

Table 3.1.3. Curriculum hours are taken as electives for each student

Subjects	A	B	C	D	E	F	G	H
Basic Subjects								
Computer	16							16
Basic Science								
Principles of Laboratory Studies	16							16
Animal Systematics	16							16
Statistical Calculations	16							16
Aesthetic Anatomy	16							16
Dissection and Exenteration of Domestic Animals	16							16
Cell Physiology	16							16
Cell Metabolism	16							16
Histological Techniques and Microscopy	16							16
Histology of Poultry	16							16
Dissection of Laboratory Animals	16							16
Exercise Physiology	16							16
Avian Physiology	16							16
Genetic Diseases in Farm Animals	16							16
Specific Biochemistry of Tissue and Organs	16							16
Anatomy of Wild Animals	16							16
Exotic Animal Anatomy	16							16
Laboratory Techniques of Parasitology	16							16
Immunology of Autoimmun Diseases	16							16
Morphological Pathology	16							16
Cytological Diagnosis Techniques	16							16
Parasitic Infections and Infestations of Domestic Avians	16							16
Ticks and Their Biological Importance	16							16
Population Genetics and Evalutation	16							16
Bacterial Infections of Egzotic Animals	16							16
Parasitic Zoonosis	16							16
Use of Immunopathologic Techniques in Diagnosis of Zoonoses Diseases	16							16
Molecular Methabolism of Methabolic Diseases	16							16
Medical Aromatic Plants and Their Use	16							16
Bacterial Zoonoses	16							16
Analytical Toxicology and Veterinary Pharmaceutical Remains	16							16

Biology and breeding of crayfish	16							16
Breeding and Diseases of Trout	16							16
Immunity in Parasitic Diseases	16							16
Pig Diseases	16							16
Clinical Sciences								
Diagnosis of Clinical Laboratory	16							16
Veterinary Oncology	16							16
Acid-Base Balance and Fluid-Electrolyte Disorders and Their Treatment of Principles	16							16
Pathology of Helmint Diseases	16							16
Avian Surgery	16							16
Oral and Maxillofacial Surgery	16							16
Eye diseases	16							16
Egzotic Animal Diseases and Treatment	16							16
Use of Immunopathological Techniques to Diagnose Zoonotic Diseases	16							16
Embryo Transfer in Farm Animals	16							16
Reproductive Veterinary Homeopathy	16							16
Estrus Control and Artificial Insemination in Dogs	16							16
Laparoscopic Insemination in Sheep	16							16
In Vitro Fertilization in Cattle	16							16
Ultrasonography	16							16
Ultrasonografic Application in Gynecology	16							16
Rational Drug Use in Animals and Prescription Information	16							16
Breast Health and Diseases	16							16
Emergency Clinic	16							16
Mycotoxins and Public Health	16							16
Control of fertility and fertility in Cattle farms	16							16
Control of fertility and fertility in sheep farms	16							16
Pesticides and Public Health	16							16
Animal Production								
Molecular Biology in Farm Animal Breeding	16							16
Exotic Animal Husbandry	16							16
Husbandry of Cats And Dogs	16							16
Feed Additives and Feed Legislation	16							16
Feed Analysis and Evaluation	16							16

Biochemistry of Nutrition in Animals	16							16
Herd Management and Practical Training in Sheep Breeding	16							16
Herd Management in Dairies	16							16
Genetic Improvement in Milk and Meat Cattle	16							16
Pig Husbandry	16							16
Organic Animal Nutrition	16							16
Costs and Profitability in Animal Husbandry	16							16
Shelters in Livestock	16							16
Animal Health Economics	16							16
Techniques in Ration Preparations	16							16
Biotechnology in Animal Husbandry	16							16
Pet Nutrition	16							16
Reproductive Herd Health and Management in Dairy Cattle	16							16
Methods of Breeding in Poultry Industry	16							16
Fattening Systems in Feedlot	16							16
Nutrition of Race Horses	16							16
Livestock Breeding Statistics	16							16
Food Safety and Quality								
Food Codex	16							16
Sanitation in Food Businesses	16							16
Professional Knowledge								
Veterinary Terminology	16							16
Animal Rights	16							16
Survey Editing and Evaluation	16							16
Research Methods in Health Sciences	16							16
Animal Registration Systems	16							16
Rational Drug Use in Animals and Prescription Information	16							16
Livestock Sector in Turkey and the European Un- ion	16							16
Public Relations in Veterinary Medicine	16							16
TOTAL								

A: lectures; B: seminars; C: supervised self-learning; D: laboratory and desk-based work; E: non-clinical animal work; F: clinical animal work; G: others; H: total.

Table 3.1.4. Curriculum days of external practical training (EPT) for each student

Subjects*	Minimum duration (weeks)	Year of programme
Production animals (pre-clinical)	200 hours**	4 and 5 year
Companion animals (pre-clinical)		
Production animals (clinical)		
Companion animals (clinical)		
FSQ*** and VPH****		
Others		

** It is not likely to determine the subjects for EPT precisely because students are free to choose the place for obligatory summer internship, but those in semesters 7, 8, and 9 are mainly at production animal clinics, slaughterhouses and animal farms.*

***160 hours come from the obligatory summer stage, the other 40 come from semester 7, 8, 9, and 10.*

****Food Safety and Quality*

*****Veterinary Public Health*

Table 3.1.5. Clinical rotations under academic staff supervision (excluding EPT)

Types	List of clinical rotations (Disciplines/species)	Duration (weeks)	Year of pro- gramme
Intra-mural (VTH)			
Animal clinic	Surgery, Internal medicine, Obstetrics and Gynaecology, and Artificial Insemination	90	3, 4 and 5
Emergency clinic	All disciplines and species	NA	5
Ambulatory clinics (AC)			
Ambulatory clinics (AC)	AC of companion animals	NA	5
FSQ and VPH			
Meat Inspection	Slaughterhouses	10	4
Milk Hygiene	FVMEU laboratory, Safiye Çıkrıkçıoğlu Vocational School dairy processing plants, Saray Halı Farms	13	4
Food safety	Food Hygiene Practice Laboratories	5	3
Electives	NA		
Other (specify)	NA		

3.2. Comments

- Numbers of elective courses needs to be decreased and practical or clinical hours could be added to the elective courses. The electives in our curriculum does not support the students to specialize and focus on a specific topic during education period. Briefly, the electives should be improved both quantitatively and qualitatively.
- Although the subjects have been aligned horizontally by increasing the coordination between the disciplines to synchronize the subjects, presence of some minor problems, and avoiding redundancies is not completely possible. In addition, places of some courses in our curriculum needs to be reconsidered.
- The number of stakeholders could be increased. FVMEU had better sign up EPT-agreements both with private clinicians and farms where students gain experience. This comment is not valid for the summer stage.
- New curriculum started to be implemented through 2014 academic year. However, students who are subject to the old curriculum before 2014 need to graduate as of September 2018, when the faculty will have a visit. It is likely that two groups of students, belonging to the old and the new curriculum, will be enrolling at the time of the visit. During the visit, the new curriculum will be in the first semester of the 5th grade and will not yet be subject to intern training. A small number of students will probably be studying intern before the 2014 curriculum during the visit.
- FVMEU curriculum does not employ seminar and supervised self-learning sufficiently. This is probably because of these concepts not to be well established in Turkish education system. Graduation thesis harbouring both seminar and supervised-self learning is under consideration in current curriculum. Seminars and scientific meetings with students are not routinely announced and documented.

3.3. Suggestions of improvement

- The teaching staff should be encouraged to include more supervised-self learning and seminars in their teaching programmes. More guidance should be provided.
- In FVMEU an equine unit should be built and this unit should be functinoalized at the next academic year. Therefore, FVMEU's students will be able to practice more on horses.
- Mobile clinics service at FVMEU has been started. From next year onwards it will be offered to a wider range of services.
- The curriculum must be harmonized with national and international standards periodically.
- The number of students per supervisor needs to be reduced. The supervisor should add counseling hours to his/her schedule.
- Deans of Veterinary Faculties in Turkey should have a harmonization in their curriculum and DOC.
- The exam schedule must be determined and announced at the beginning of the semester.
- Student numbers exceeding 40 classmembers must be divided into groups especially for the practical trainings.





04

FACILITIES AND EQUIPMENT





FACILITIES AND EQUIPMENT

4. Facilities and equipment

4.1. Factual information

FVMEU is located in the main campus of ErciyesU and is 10 km away from the city center. The area is well served by public transportation and also near the tramway stations. There are also rings that provide access at regular intervals within the campus. FVMEU building is located on 13704 m² and VTH on 4312 m² area. In addition to VTH building, large animal units are planned. The detailed in- formations about the main building of FVMEU are shown in Table 4.1.1.

Table.4.1.1. Description of main building, VTH and premises

Bulding	Surface/ Floors	Facilities
Maing Bulding	13704 m ²	The main building includes offices of dean and vice-deans, faculty secretary, administrative staffs, academic staff, student affairs. In addition student classrooms, practical traning labs, social activity areas, a conference hall, a computer lab, a compu- ter room, a reading room, seminar and meeting rooms, research laboratories, student lockers and a student canteen.
VTH	4312 m ²	Hospital building consists of emergency polyclinic examination rooms, surgical operation units, clini- cal and preclinical departments, student dressing rooms, student cabinets and showers.
Premises		Cattle, sheep and poultry farms (ERUTAM) are approximately 20 kilometers away from FVMEU which provide hand on work opportunities for stu- dents. For FSQ courses students are taken to sla- ughterhouses, food processing plants and modern private farms with which protocols were signed.

*Name at the FVM Facilities. WA: Wheelchair accessible,C: Computer, W: Wi-Fi coverage, M: Media

4.1.2.2 Description of the premises Group work (seminars, tutorials, ..)

Halls	Places (Number)	Name	Surface(m ²)	Equipment	Floor
1	20	Z13	50	WA /C/W/M	1
2	25	The first floor hall	50	WA /C/W/M	1
3	50	249	48	WA /C/W/M	2
4	25	221	50	WA /C/W/M	2
5	10	Seminer hall	50	WA /C/W/M	3
6	200	Conference hall	500	WA /C/W/M/ S	-1
7	20	Virology	50	WA /C/W	1

8	20	Pathology	50	WA /C/W	2
9	20	Obstetrics and gynecology	50	WA /C/W	2
10	20	Artificial insemination and reproduction	50	WA /C/W	2
11	20	Surgical	50	WA /C/W	1
12	20	Internal medicine	50	WA /C/W	1

*Name at the FVMEU Facilities. WA: Wheelchair accessible, C: Computer, W: Wi-Fi coverage, M: Media, S: Seat

4.1.2.3 Description of the premises for practical work

Halls	Places	Name	Surface(m ²)	Equipment	Floor
1	344	Student lab	123	WA /C/W	3
2	Student Microscope Room	Student lab	165	WA /C/W	2
3	249	Student lab	129	WA /C/W	2
4	Z21	Anatomy	180	WA /C/W	1

*Name at the FVMEU Facilities. WA: Wheelchair accessible, C: Computer, W: Wi-Fi coverage, M: Media, Veterinary Faculty Hospital; VFH

4.1.3. Description of the premises for housing (ERUTAM and DEKAM)

Healthy animals

ERÜTAM consists of two separate sections, which of Mithatpaşa farm area and the İncesu farm area. There are cattle and chickens in the Mithatpaşa farm area and there are sheep and goats in the İncesu farm area.

Animal Species	Number
Cattle	100
Sheep	200
Goat	20
Chicken	2000
Mice	1000
Rats	1000

Hospitalised animals

Hospitalization	Species	Places
	Small Ruminant	1 unit
	Avian	1 unit and 4 cages
	Companion	1 unit

4.1.4. Description of the premises for clinical activities

Unit (Internal Diseases Clinic)	Number	Area (m ²)
Infection diseases examination room	1	17,39
Vaccine room	1	12,45
Cat clinical infection examination room	1	24,86
Clinical laboratory	1	24,86
Large animal examination	1	37,95
Exotic inspection	1	12,04
ECG and imaging room	1	12,01
Pet clinic small animal examination room	1	12,11
Pet clinic small animal examination room2	1	24,86
Necropsy room	1	20,06
Internal medicine research laboratory	1	37,9
Infectious diseases examination room	1	17,39
Unit (Surgical Clinic)	Number	Area (m ²)
Eye examination room	1	3,8
Dog examination room	1	24,86
Preparation examination room	1	11,9
Operating room 1	1	36,34
Sterilization room	1	10,47
Cat examination room	1	11,01
Operating room 2	1	24,01
Dark room	1	11,76
N-ray room	1	11,34
Large animal examination room	1	24,57
Unit (Obstetrics and Gynecology Clinic)	Number	Area (m ²)
Pharmacy	1	11,81
Small animal examination room	1	25,2
Operating room 1	1	12,1
Operating room 2	1	24,86
Post operative care room	1	24,9
Imaging room	1	24,86
IFV room	1	24,86
Large animal examination room	1	37,5
Laboratory 1	1	25,6
Laboratory 2	1	38,3
Pharmacy	1	25,2
Unit (Artificial Insemination and Reproduction)	Number	Area (m ²)
IVF and embryology laboratory	1	63,9
Spermatological analysis laboratory	1	24,7

Unit (Pathology Laboratory)	Number(number)	Area (m2)
Cell culture laboratory	1	26
Routine laboratory	1	25,2
Sections laboratory	1	12,1
Pathology laboratory	1	12,1
Laboratory1	1	12,1

Diagnostic services including necropsy

A new necropsy hall is established in 2018. Cadavers are brought to necropsy hall with owners possibilities and support staff. There are no tools for cadaver transport and no responsible staff in charge for the necropsy room.

Pathology

The Pathology Department is located on the 2nd floor of the VTH. In the department where the offices of the academic staff are also located, there are a research laboratory, a sectioning laboratory, a light microscopy, a diagnosis laboratory, an archive and a warehouse. In addition, there is an immunopathology laboratory, a cell-tissue culture laboratory and a library / seminar room for use of research staff and graduate-doctorate student activities.

Microbiology

The microbiology department consists of weighing room, a storeroom, a sterilization room, a display electrophoresis room, routine bacteriological analysis laboratory, molecular analysis laboratory, freezer and a refrigerator room. Bacteriological, serological, molecular analysis and antibiogram tests are routinely performed in microbiology laboratory.

Parasitology

There are three laboratories, "Protozoology and Molecular Parasitology", "Helmintology and Serology" and "Entomology". In the parasitology department these laboratories carry out routine parasitological diagnostic and molecular analysis. It also serves for clinics.



Virology

Virology Department consists of three laboratory, Viral Serology Laboratory, Cell Culture and Viral Diagnostic Laboratory, and Molecular Virology Laboratory. The virology laboratory has all the technical infrastructure and equipment for routine analysis.

Tablo.7.Laboratory Equipment

	Tools Available
Microbiology Laboratory	Light Microscope, Stereo microscope, Fluorescent Microscope, Incubator and Sterilizer, Autoclave, Centrifuge, Vortex, PCR, Electrophoresis and Power Supply, Gel Imaging System, Biosafety Cabinet, Benmari Device, Deep Freezer (-20 °C and -80 °C), Distile Water Device.
Virology Laboratory	Inverted Microscope, PCR, CO ₂ Incubator, Benmari, Refrigerated Centrifuge, Biosafety Cabinet, Pure Water Device, Electrophoresis, ELISA Reader, Autoclave, Biosafety cabinet.
Parasitology Laboratory	Binocular microscope, Trinocular microscope, Digital camera and computer-assisted fluorescent trinocular microscope, Trinocular phase contrast Inverted microscope, Camera and computer aided stero-microscope, Stereo-microscope, - 20°C freezer, - 81°C freezer, - 196°C croyobank, Liquid nitrogen transfer tank, Bacteriological oven, Fully equipped oven with CO ₂ , Nano-drop spectrophotometer, Nano-drop spectrophotometer, PCR, Fully-equipped sterilization cabinet, Fully-equipped sterilizing cabin, Spectrophotometer, Western blot apparatus, Electrophoresis, Vertical electrophoresis system, Hybridization oven, RLB minibloter, gel and imaging system, Real Time PCR, Nucleic acid and protein analysis and imaging unit (Advanced level) / Fusion Fx5, Dry Block Heater, Water bath, Multispin vortekscentrifuge, TissueLyser LT, Ultra Centrifuge, Chromatographic Protein Purification System, Autoclave, Dry air sterilizer, Mono distiller, Ultra pure deionized water device (DEPW).
Pathology Service	Trinocular Microscope, Centrifuge, Water Purification Devices, Incubator, Sterilizers, Binocular Microscope, Water Baths, Table Top Paraffin Device, Motor Saw, Sharpening Machines, Microtome, Tissue Tracking Device, Refrigerator, Heater Table, Cytospin 4, Microtome (Semi automatic), Deep Freezer), Trinocular Research Microscopy System with 5 Education Title.
Necropsy room	There is a new necropsy hall established outside the faculty.
Artificial Insemination Laboratory & IVF laboratory	Phase contrast microscope and imaging system, cryobank units, heating table, water bath, refrigerator, precision scale, pH meter. Ultrasonography device, binocular light microscope, surgical aspirator device, surgical electrocautery device, small animal intensive care cabinet, milk somatic cell counting device, gas anesthesia device, Ruminant and dog oestrus detector
Internal medicine	+4 Vaccine storage cabinet, Scales (Max 20kg), Small animal examination table, Medicine cabinet (with chrome plated glass cover), Medicine cabinet, Computer, Printer, Stethoscope, Centrifuge, Microcentrifuge, Microscope, -20 Refrigerator (2 pcs), +4 Refrigerator, Metal detector ferrera hauptner, Great animal travay, Rumen content, Exclusive cattle, Rumen gas fountain, Cattle animal, Nasal mordant, Rumen pump / Mark II set, Torak's, Magnet attachment, Urinary catheter (Cattle), Urinary catheter (Sheep), Plessimetr, Percussion attractive, Infusion Pump, Calf cabinet with chrome cap, Endoscopy, bronchoscopy, Ulttasonography device, Convex probe 2-5 mHz, Microconvex probe 5-8 mHz, Cardiac probe, Electrocardiography device, Wood Lamp Blood pressure monitor, Portable blood pressure monitor, Live animal scale, Evozone medical ozone generator

Surgery	Small animal examination tables, inhalation anesthetic machines(2), otoscope-ophthalmoscope, +4 Refrigerator, phaco microscope, Large animal travay, Ultasonography device, Convex probe 2-5 mHz, Microconvex probe 5-8 mHz, Cardiac probe, x-ray unit and portable 100 MA x-ray device, Large and small animals operation sets (soft tissues, orthopedics, eye), Stethoscope, Medicine cabinets (with chrome plated glass cover), Medicine cabinets, Fire meter Infusion Pump, patient monitor, dog and cat cabinet with chrome cap, CR system, block autoclave, oven, operation lamps, bipolar cautery, smal animal feeding tubes, phaco microscope, hand washing bench with chrome cap, orthopedic cordless drill, nail and plate sets.
Food Hygiene and Technology	3 Incubators, Thermalcycler device (Double modular, Gradient-adjusted), Thermal cycler device (Single modular), 2 Heated dry block incubator and shaker, Gel Imaging System, UV transilluminator, 5 Horizontal electrophoresis system, Qubit® 3.0 Fluorometer, 2 Security Cabinet, ELISA Reader and Automatic Washing System, Refrigerated Microcentrifuge, High-Speed Centrifuges (Multi-Purpose), Lab Water Purification Systems, Autoclave, Dry air sterilizer, hot water bath, 2 Microwave oven, Vortex, Spin-Vortex, Heated Magnetic Stirrer, -81 ° C Freezer, 5 (+4 ° C) Refrigerator, 3 Deepfreezer, 2 pH meter, Macfarland Densitometer, Dishwasher
Obstetrics and Gynecology	Ultrasonography device, Binocular light microscope, Surgical aspirator device, Surgical electrocautery device, Small animal intensive care cabinet, Milk somatic cell counting device, Gas anesthesia device, Ruminant and dog oestrus detector, Small and large animal vaginoscope, vaginal speculum, Power delivery intervention equipment , Small animal scale, Surgical hand washing unit, Surgical operation sets, Ozone disinfectant, Nitrogen tank, Ph meter, Deionized water device, Phase contrast microscope, Oven, Centrifuge, CO2 incubator, Precision scales, Water bath
Biochemistry	UV-VIS Spectrophotometer, ELISA reader, Laminar air flow, CO2 incubator, Ice machine, Centrifuge, Refrigerated centrifuge, Precision scale, Deionized water device, pH meter, Sonicated, Homogenizer, Vortex, Shaker, Fume hood, Microscope
Pharmacology	Nitrogen Blast System, Bainmarie, Ice Machine, Refrigerator, Shaker, CO2 Oven, Deep Freezer, Distilled Water Device, ELISA System, Gas Chromatography, Precision Scale, Homogenizer, HPLC (Liquid Chromatography), Heater Dry Block, Isolated Organ System Magnetic Stirrer, Microscope (Inverted, Light), pH Meter, Rotarot, Rotary Evaporator, Refrigerated Centrifuge, Spectrophotometer, Spectrophotometer, Vortex

FSQ & VPH

FSQ and VPH extramural visits are provided in Table 5.1.8. The visited facilities (slaughterhouses, food processing units, fish processing unit, poultry porcessing unit and modern private farms) and distances to FVM are marked and shown in a map in Figure below.

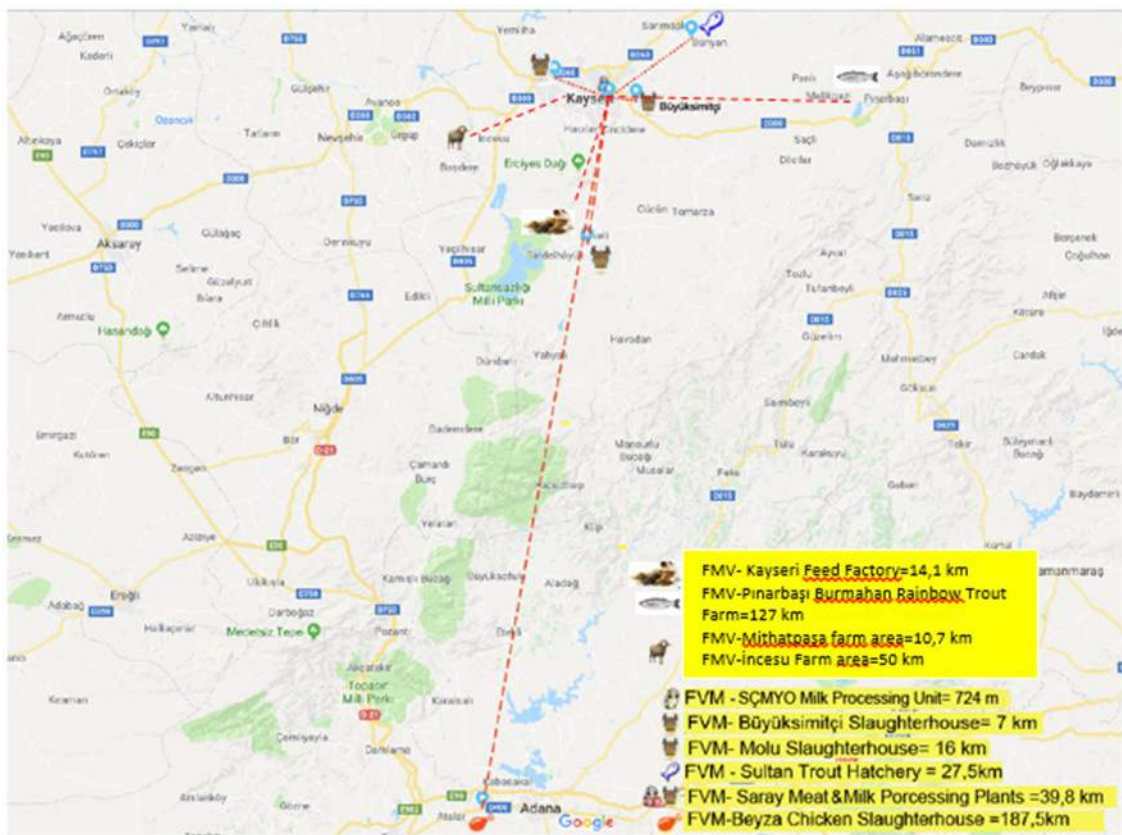


Figure. Visit map of FSQ

Department of Food Hygiene and Technology has three main laboratories including;

1. Conventional Food Hygiene and Technology Laboratory (167.35 m²), (divided into four sections; Food microbiology laboratory, Food chemistry laboratory, Serology laboratory and Sterilization room) are composed of seven chambers ranging from 9.55 m² to 40.12 m²
2. Molecular food microbiology laboratory (82 m²)
3. Food Hygiene-Practical training laboratory (76.25 m²)

Food Hygiene and Technology department has total (167.35+ 76.25+82) 325,6 m² of laboratory area. The theoretical parts of all courses for FSQ and VPH are carried out in the relevant student classrooms in the main building of FVMEU.

4.1.5. Description (number of rooms and places) of the premises for: Study and self-learning

Central Library

The detailed information about central library was given at 6th SER section of FVMEU.

Library of FVMEU

On the ground floor of the main building, there is a reading room of 85 m² size, a student study room, a computer room and 4 meeting and study rooms

Catering

There are many food service facilities around FVMEU in the campus area. The main university restaurants serving for student and staffs are almost 1 km away from FVMEU. There is also a private cafeteria of 165 m² in the area of FVMEU.

Locker rooms

There are 2 student locker rooms in main building and one in VTH. There are also showers in VTH. Also there are 450 private cabinets for students in main faculty building.

Leisure

There are 83 student social clubs in ErciyesU. There are several football, volleyball, basketball fields, a semi Olympic swimming pool and a riding club that serve students.

4.1.6. Description of the vehicles used for:**Students transportation**

For students and teaching staff educational purposes, FVMEU Dean's Office provide the transportation by the Main Vehical Unit of ErciyesU.

Ambulatory clinics

There is an ambulatory service in VTH. It contains main clinical response equipments which could serve as mobile clinic

Live animals transportation

We do not have a live animal transport system. Animal owners deliver animals to VTH with their own means. In addition, Breeder's Association provides calf transfer to VTH and that vehicle could be used by VTH at the time of need.

The transportation of cadavers

Cadavers are brought to necropsy room with their own possibilities of animal owners and by assistant personnel. There is no tool for cadaver transport. We also have no responsible staff for the necropsy room.

4.1.7. Description of the equipment used for**Teaching purposes**

FVMEU has all the laboratory equipment and necessary infrastructure that our students can carry out education and training.

Clinical services

VTH is used for both educational and clinical services. There are tables, rooms and equipment that students can use for surgical procedures during training periods.

4.1.8. Description of the strategy and programme for maintaining and upgrading the current facilities and equipment and/or acquiring new ones.

The strategic plan of FVMEU was prepared by the dean, the administrative staff and the strategic plan committee, periodically every 5 years. This plan is evaluated according to the report prepared by the related commissions of FVMEU every year. It is evaluated whether the planned goals and targets are consistent or not. Necessary precautions are taken to make the activities compatible with the strategic plan.

4.1.9. Description of how procedures and by whom (description of the committee structure) changes in facilities, equipment and biosecurity procedures (health & safety management for people and animals, including waste management) are decided, communicated to staff, students and stakeholders, implemented, assessed and revised

Regarding the biosecurity procedures; the decisions and recommendations taken by the Biosafety Assessment committee of FVMEU are carried out by the Dean's Office. The labs receive funding from national and international scientific research projects and project research budgets such as TUBITAK, TAGEM and BAP. In addition, the Dean's Office create budget for teaching expenditures, laboratory equipments and supplies.

4.2. Comments

The infrastructure required for laboratories needs to be updated. Despite financial resource shortage and long process of obtaining new devices, the infrastructures and equipment of the laboratories could be evaluated as satisfactory. The lack of a cadaveric transport vehicle for VTH and the lack of a pharmacy near VTH are some of the problems we encounter. The university farm used by FVMEU is far to be functionally used for the practical trainings of students.

Suggestions for improvement

We are lacking a wider necropsy room, equipped with a camera system monitoring the necropsy for the students. Students must be more involved in scientific activities, giving them the ability to follow animals and take responsibility. Self-study learning materials must be increased during vocational training (model, organ and tissue samples, histological tissue preparations, pathological preparations, etc.). Clinical diagnostic equipment should be further expanded. The student's practices on animals should be further increased. VTH must be expanded to have intensive care and hospitalization units for different species of animals to increase the caseloads for student training. Creation of a resting room for students of nightshift in the clinic is needed. Additions to current seating and waiting areas for patient owners are needed. The accessibility of automation systems should be improved.



05

ANIMAL RESOURCES AND TEACHING MATERIAL OF ANIMAL ORIGIN





ANIMAL RESOURCES AND TEACHING MATERIAL OF ANIMAL ORIGIN

5. Animal resources and teaching materials of animal origin

5.1. Factual information

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

The main objective of FVMEU is to become a model of educational system that follows developments around the world based on EAEVE criteria. Our training strategy consists of three parts; pre-clinical training, clinical training and farm training. The diversity and numbers of animal materials are being tried to be increased with external stakeholders.

Preclinical training is provided by FVMEU by using materials and cadavers of animal origin. In addition, for the laboratory-based courses, materials of healthy animals from the VTH, DEKAM and ERUTAM are used.

Our basic clinical trainings focus especially on ruminants and companion animals as well as exotic animals and equids. Increased number of caseloads for all species of animals (especially companion animals) are recorded in VTH. Since 2017, VTH has functionalized 24/7 services throughout the year. Patient number in pet animals was increased by bilateral protocols between the FVMEU and the municipality and gendarme of Kayseri. In addition, to increase the number of equine patients for VTH, bilateral agreements between FVMEU and Nevşehir JAKEM and police (Kayseri Provincial Police Headquarters) was signed. Ruminant practical training is provided by VTH and routine visits to ERUTAM (it consists of two units: Yenimahalle and Incesu) and Saray Farm, Develi. Students begin to take clinical courses at 6th semester. The knowledge and skills of students are improved during clinic lessons and farm visits (ERUTAM) by implicating; handling restraining techniques, clinical examinations, injection techniques, catheter applications, urine collection technique, imaging techniques and operations on animals. Detailed information on farm training is given in Chapter 4.

5.1.2. Description of the specific strategy of the Establishment in order to ensure that each student receives the relevant core clinical training before graduation, e.g. numbers of patients examined/treated by each student, balance between species, balance between clinical disciplines, balance between first opinion and referral cases, balance between acute and chronic cases, balance between consultations (one-day clinic) and hospitalisations, balance between individual medicine and population medicine

Investments were spend to equip and modernize VTH based on EAEVE criteria. The number of teaching staff and support staff is tended to increase.

In order to bring VTH and practical education to the top level, students are given intensive training for 2.5 days with rotation at 9th and 10th semester. In 2018, to increase interest of students to the clinical applications, portcard system was started to be implemented in VTH, and with this system, the clinical applications of each student throughout the semester are followed. The automation system in VTH has been started and the patient tracking system has been opened for the use of students under the supervision of teaching staff in charge. An example of portcard is provided in Annex 1.

In Turkey, the number of small enterprises decreased with increasing migration from villages to cities, with it, the number of big enterprises increased. As a result, herd health training and medicine has become the forefront. We are aiming to increase the scope of the herd health education course which is currently an elective course at FVMEU and make it compulsory.

5.1.3. Description of the organisation and management of the teaching farm(s) and the involvement of students in its running (e.g. births, milking, feeding)

ERUTAM is a research and teaching farm (including cattles (100 pcs), small ruminants (220 pcs) and poultry (2000 pcs) belonging to ErciyesU. Being away from and not being completely managed by FVMEU, limited use for student practices are of concern. Parturition, observing and assisting

births are performed by interns in reproduction and obstetrics practical trainings by the students of FVMEU. To compensate the need of hand on work for students for zootechnics and animal nutrition practices, bilateral agreements with modern private farms (e.g. Saray Halı) were signed. All farm training practices are carried out under the supervisions of academic staff.

5.1.4. Description of the organisation and management of the VTH and ambulatory clinics (opening hours and days, on-duty and on-call services, general consultations, list of specialised consultations, hospitalisations, emergencies and intensive care, ..)

VTH provides short term treatments for the ruminant and equine animals until the hospitalization units for large animals is completed. VTH is mainly serving for companion animals.

The VTH staff consists of practitioners, academic and support staff and students. The VTH administration consists of the chief and vice chief and the director of hospital. VTH serves 24 hours a day during 365 days. Diagnostic treatment and counseling services related to Internal Medicine, Surgery, Obstetrics and Gynecology and Artificial Insemination are offered. Companion animals are able to be hospitalized in VTH. Intensive care units are available for newborns of lambs, calves, kids and companion animals.

During the night shift and at weekends, a practitioner and related academic staff serves.

Satisfaction and complaints related to the services of VTH are followed by questionnaires and e-mails cited in the website (<https://hayvanhast.erciyes.edu.tr/Iletisim.aspx#>). Strategies are developed to increase the satisfaction of owners by considering staff opinions.

In 2018, the ambulatory service was functionalized. Arrangements are still going on to provide active participation of students to this procedure.

5.1.5. Description of how the cadavers and materials of animal origin for training in anatomy and pathology are obtained, stored and destroyed

The animal materials used in practical courses of the anatomy are obtained from the animals died in the clinics, ERUTAM, DEKAM and the municipal shelters. Purchasing is of concern to obtain equine, cow and sheep cadavers where there is no adequate training material. Fresh organs are provided from the slaughterhouses in case of lack of organ materials. Cadavers used for practical training of pathology courses are also obtained from animals died in VTH despite the treatment efforts. As soon as animals arrive, necropsy is performed and morbid substances are sent to related laboratories (Microbiology, Virology, Parasitology etc.) for diagnosis. Poultry used in practical training of Poultry Animal Diseases courses (1 chicken for 2 students) are obtained from ERUTAM. Waste necropsy materials are placed in medical waste bags and delivered to the personnel of Kayseri Municipality Medical Waste Disposal Service. The basic step of pathology education is provided with the preparations (microscopic preparations) found in the archives.

5.1.6. Description of the group size for different types of clinical training (both intra-murally and extra-murally).

Intramural training takes place during 6-10th semesters. Approximately 20 students are distributed within the clinical practices to provide 3-4 students per case in services of Internal Medicine, Surgery, Obstetrics and Gynecology, Artificial Insemination departments. The number of students in each group in the internship training is 3-4. Extramural trainings are carried out during 8-10th semesters. During internship group of 3-4 students per teaching staff are taken to ERUTAM for Obstetrics and Gynecology practical trainings.

5.1.7. Description of the hands-on involvement of students in clinical procedures in different species, i.e. clinical examination, diagnostic tests, blood sampling, treatment, nursing and critical care, anaesthesia, routine surgery, euthanasia, necropsy, report writing, client communication, biosecurity procedures, (both intra-murally and extra-murally)

Students are involved in intensive preclinical in the 2nd year and education is completed with the internship program in the 5th year. Learning schedule can be summarized as below.

2nd-3rd Year: In 2nd year, with preclinical lessons such as Topographic Anatomy, Microbiology, Virology, Parasitology and Basic Pathology, students are prepared for clinical activities. In different clinical departments, they learn procedures for taking anamnesis and approaching to the patient. They experience implications such as handling restraining of animals, measurement of body temperature, measurement of number of pulse and respiration, examination of skin lymph nodes and mucosa, follow and assist diagnostic procedures (biological sample collection), preparation and application of drugs, perform physical examination, analyzing nutritional and welfare statues take part of differential diagnosis and take medical records.

4th Year: Students participate in activities related to preparation of animals for surgical operations, application of anesthesia protocols, monitoring of operations, patient follow-up, interpretation, diagnosis, drug application in clinical services. Visits to ERUTAM with groups of 20 students; breast, CMT, rectal and vaginal examinations, designation of pregnancy periods in reproductive ultrasound examination, epidural anesthesia, injection applications are performed. They effectively communicate with the owners in VTH, carry out diagnosis, interpretation of laboratory results, collection of blood, urine and stool specimens, ultrasonography, endoscopy, radiology and EKG examinations, catheter placement, bandage and other immobilization techniques. Preventive medicine is another issue to be considered; vaccination and disinfection applications are performed. Biosecurity measures, environmental conditions, predisposing factors are evaluated by students within this context.

Also in Poultry Diseases course, applications such as taking blood from chickens, general examination and poultry necropsy are done.

5th Year: Intern groups (3-4 students) participate pregnancy examinations by USG and rectal examination at weekly farm visits.

Students assist the activities (taking into account the biosecurity rules) related to preparation of animals for surgical operations, application of anesthesia protocols, monitoring of operations, patient follow-up, interpretation, diagnosis, drug application in the clinical services. They perform techniques such as clinical examination in VTH, diagnosis, interpretation of laboratory results, collection of blood, urine and stool specimens, ultrasonography, endoscopy, radiology, EKG examinations, catheter placement, application of probe, bandage, other immobilization techniques and cadaver packing. Students actively participate in operations. In addition, intern students make necropsy examinations of died animals introduced to the clinics for diagnostic purposes under the supervision of the teaching staff.

5.1.8. Description of procedures used to allow students to spend extended periods in discussion, thinking and reading to deepen their understanding of the case and its management

Related to the patient animals coming to the VTH; alternative treatment protocols, diagnostic and treatment techniques, between the 4th-5th grade students and teaching staff, are discussed. Literature homework is given to intern students and literature is discussed afterwards.

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

Patient and owner information; radiology, biochemistry, complete blood count findings, vaccination monitoring system, other laboratory results (microbiology, parasitology, virology, pathology) are stored in the computer environment in the automation system of VTH. In addition, a patient registration file is prepared for each patient and a printed copy of the patient's clinical and laboratory results is created. Records can be tracked by hospital staff, lecturers and students when necessary. The annual patient flow is evaluated statistically by species.

5.1.10. Description of procedures developed to ensure welfare of animals used for educational and research activities

Permission documents for the welfare of animals used in education and scientific research are strictly

followed by the Animal Experiments Local Ethics Committee (HAYDEK), which is located in the campus of ErciyesU. All procedures of 3R and its principles are applied.

5.1.11. Description of how (procedures) and by whom (description of the committee structure) the number and variety of animals and materials of animal origin for pre-clinical and clinical training, and the clinical services provided by the Establishment are decided, communicated to staff, students and stakeholders, implemented, assessed and revised.

Patients used for preclinic and clinical trainings are evaluated annually by the hospital administration, and bilateral protocols are established with external stakeholders to ensure patient flow in the areas considered necessary.

5.2. Comments

The numbers of companion animal cases are sufficient for a proper skill acquisition. The flow of patients in companion animals was increased by bilateral protocols with the municipality and Kayseri gendarmerie. As the ambulatory service was functionalized in 2018, no records are available about the mobile clinic yet (Table 5.1.4.) Similarly, the numbers of large animal cases except equine are sufficient. Bilateral agreements were signed with Nevşehir JAKEM and Kayseri provincial police headquarters to increase the number of equine cases in VTH. Ruminant practical training is provided by routine visits to ERUTAM and Develi-Saray Farm. Increasing the number of exotic animals will be made possible through an agreement with the Zoo in our province.

5.3. Suggestions for improvement

Real size models and stimulation models for cats, dogs, cattle, and horses (instead of live animals) should be provided to be used in clinical practice. Along with the completion of the large animal hospitalization units, it would be possible for cattle, equine, small ruminants, and pigs to be hospitalized which will increase the case loads for educational purposes. The number of technicians and support staff in the hospital needs to be increased. Investments need to be made for the development of ERUTAM. It is recommended that the budget of the Veterinary Faculty be independent. Expansion of clinical facilities must be planned and financially supported at university level as a midterm target.

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

Animal Species		2015	2016	2017	2018	Mean*
Number of cattle cadaver		-	1	1	3	0.66
Number of small ruminant cadaver		2	2	2	3	2
Number of pig cadaver		-	-	-	-	-
Number of cat-dog cadaver		3	2	3	4	2.66
Number of Equine cadaver		2	2	2	3	2
Number of poultry cadaver		-	1	1	1	0.66
Number of rabbit cadaver		-	-	-	1	-
Number of Exotic pets cadaver		-	-	-	-	-
Specimen	Liver	3	5	2	4	3.33
	Intestines	4	6	4	4	4.66
	Brain	15	10	10	10	11.66
	Eye	4	6	4	4	4.66
	Lung	10	10	10	4	10
	Spleen	2	2	5	3	3
	Pancreas	-	-	-	-	-
	Stomach	2	4	4	4	3.33
	Heart	10	15	10	10	11.66
	Kidney	15	10	10	12	11.66

*: The year 2018 is not included in the calculated mean.

Table 5.1.2. Healthy live animals used for pre-clinical training (animal handling, physiology, animal production, propaedeutic)

Animal Species	2015	2016	2017	2018	Mean
Cattle					
Small Ruminants					
Pigs					
Companion Animals					
Equine					
Poultry and rabbits	21	21	21	21	21
Rat and Mouse	20	20	20	20	20
Exotic pets					
Other					

Table 5.1.3. Number of patients seen intra-murally (in the VTH)

Animal Species	2015	2016	2017	2018	Mean*
Cattle	371	648	1282	1713	767
Small Ruminants	69	164	207	153	146
Pigs	-	-	-	-	-
Companion Animals	1282	2971	5765	5851	3339
Equine	16	16	21	67	17.6
Poultry and rabbits	43	41	70	109	51.3
Exotic pets	124	200	441	404	255
Other	-	-	-		-

*: The year 2018 is not included in the calculated mean.

Table 5.1.4. Number of patients seen extra-murally (in the ambulatory clinics)

Animal Species	2015	2016	2017	2018	Mean*
Cattle	23	25	27	40	25
Small Ruminants					
Pigs					
Companion Animals				54	
Equine		2	3	5	1,6
Poultry and rabbits					
Exotic pets					
Other					

*: The year 2018 is not included in the calculated mean.

Table 5.1.5. Percentage (%) of first opinion patients used for clinical training (both in VTH and ambulatory clinics, i.e. tables 5.1.3 & 5.1.4)

Animal Species	2015	2016	2017	2018	Mean
Cattle					
Small Ruminants					
Pigs					
Companion Animals					
Equine					
Poultry and rabbits					
Exotic pets					
Other					

Table 5.1.6. Cadavers used in necropsy

Animal Species	2015	2016	2017	2018	Mean*
Cattle	23	12	17	32	17.3
Small Ruminants	50	56	62	28	56
Pigs	-	-	-	-	-
Companion Animals	3	4	3	7	3.33
Equine	-	-	-	1	-
Poultry and rabbits	46	52	50	2	49.3
Exotic pets	-	1	2	2	1
Fish	-	-	-	-	-
Lab. Animals (Rats, Mouse)	-	-	-	72	-
Biopsy	15	20	7	-	14
Other	-	-	-	-	-

Table 5.1.7. Number of visits in herds/flocks/units for training in Animal Production and Herd Health Management

Species	2015	2016	2017	2018	Mean*
Cattle	42	41	38	48	40.33
Small Ruminants	10	18	-	-	9.3
Pigs	-	-	-	-	-
Companion Animals	-	-	-	-	-
Equine	-	-	-	-	-
Poultry and rabbits	8	8	8	8	8
Fish Farm	-	1	1	1	0.66
Zoo Visit	-	-	-	-	-
Other	-	-	-	-	-

Number of practical training groups

***: The year 2018 is not included in the calculated mean.**

Table 5.1.8. Number of visits in slaughterhouses and related premises for training in FSQ

Species	2015	2016	2017	2018	Mean
Ruminant’s Slaughterhouses	16	18	18	19	17.75
Pig’s Slaughterhouses	-	-	-	-	-
Poultry Slaughterhouses	-	-	-	1	0.25
Related Premises**					
Others (<i>specify</i>)					
Fish production plant	1	1	1	1	1
Milk and milk product processing plant	10	10	10	11	10.25

** Premises for the production, processing, distribution or consumption of food of animal origin

Note: The intern student visits are not included in the table, as they visit the ruminant’s slaughterhouse by themselves under the responsibility of the official veterinarians.

06

LEARNING RESOURCES





LEARNING RESOURCES

6.1.Factual Information
6.1.1.Description of the main library of the Establishment

Kadir Has Central Library (KHCL),the main library of ErciyesU is located in the centre of the campus and easily accessible for all students. The KHCL is first entered services in 1975. Since then it has been used for library purposes.

Website	https://kutuphane.erciyes.edu.tr/	
Staff (FTE) and qualifications	Full time: 1 department manager, 6 librarians, 4 chiefs, 4 officers, 1 technician, 5 assistants.	
Open days and hours	Academic term:	Weekdays 08:00-17:00, Weekends (Sat.) 09:00-12:30
	Out of academic term:	Weekdays 08:00-17:00
Annual budget	1.900,00 TL (for 2017)	
Facilities	KHCL has a closed area of 10.400 m², 5 floors, a capacity of 663 seats, and private study rooms capacity of 50 seats, a conference hall for 128 people	
Equipment	A computer room with 100 computers and, for online catalog browsing 4 computers are available. It is also possible to search with portable private computers. All the material available in the library is transferred to electronic media using the program called “Yordam 2001-Library Information -Document Automation” and presented to the users on the internet	
Number of veterinary books and periodicals	485 books and 29 periodicals.	
Number of veterinary e-books and e-periodicals	144 e-books and 163 e-periodicals	
Number of other (e)books and (e)periodicals	Totally 20532 e-books, 47443 e-periodicals and 4465722 E-thesis areavailable.	

Borrowing system: Member of the library can borrow books (Table 6.1). University identity must be submitted when borrowing books. Intensively used library resources such as encyclopaedias, dictionaries and reserve resources cannot be borrowed. Academic and administrative staff and students are natural members of the KHCL.University identity is sufficient for the registration. Absent materials in the library could be provided from various libraries by Interlibrary Loan System.

Table: Borrowing periods and numbers from KHCL.

The reader	Borrowing period	Elongation	Number
Academic Staff	30 days	twice	5 books
Administrative staff	15 days	twice	3 books
Post graduate students	30 days	twice	5 books
Students	15 days	twice	3 books

6.1.2. Description of the subsidiary libraries

There are four independent other libraries in the university: Library of Faculty of Theology, Library of Faculty of Economics and Administrative Sciences, Library of 15 Temmuz Campus and Library Develi Sami Tutum.

FVMEU has a reading room with limited resources of self-learning and novel books, dedicated to the use of its students. The location of the room is in the main building, floor -1.

6.1.3. Description of IT facilities and of e-learning platform

Library and Documentation Department provides services with 14 GIH, 2 THS, 4 AHS, 2 YHS staff. All the materials available in the library are transferred to electronic media using the program called “Yordam 2001-Library Information-Document Automation” and presented to the users on the Internet.

Purchasing, cataloguing, sorting, lending and announcement services of our library's printed collection are carried out by this automation program. In addition, the statistics on the service provided can be taken and tracked.

Information access service is provided with 5 catalogue scanning devices. 2 self check (automatic borrowing) devices presented to readers to borrow services (borrowing-elongation).

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

KHCL has made subscriptions to 57 national and international databases (Supplement). For the learning and use of the database, students and staff training programs are held at regular intervals to which FVMEU students also attend.

6.1.5. Description of accessibility for staff and students to electronic learning resources both on and off campus (Wi-Fi coverage in the Establishment and access to Virtual Private Network (VPN))

Staff and students need to connect to the existing Wi-Fi and internet network on campus to access electronic learning resources. Proxy settings and user name/passwords are necessary to access out of campus. ErciyesU wireless internet connection areas are shown on the map (Fig 6.1).

6.1.6. Description of how procedures for access to and use of learning resources are taught to students.

The consultation service is provided to ensure that the library users are able to access the knowledge in most efficient and easiest way possible. Various content and level education-promotion activities are organized and the library resources are introduced.

Library orientation tours are organized regularly. In 2017, 282 undergraduate, 20 high school students and 188 academic staff have been trained to use databases. Continuous training is also provided at certain intervals about the use of the collections of databases for academic staff. Additional detailed information and documents for procedures and resources are available on the website (<https://kutuphane.erciyes.edu.tr/belge-ve-formlar/Kutuphane-ve-Dokumantasyon-Daire-Baskanligi/75>)

6.1.7. Description of how and by whom the learning resources provided by the Establishment are decided, communicated to staff, students and stakeholders, implemented, assessed and revised

The books, which the academic units and students request to be purchased, is examined by the commission according to the current user statistics and it is investigated what characteristics they have. If it is deemed appropriate, it is purchased and opened for trial use. All members are informed about the updated list of books via website.

6.2. Comments

ERU has a big library and enough IT staff but the library is accessible mostly in working hours. It seems that the academic staff and the students are not completely integrated with the system. The li-

brary is nearly 1.5 km far from FVMEU. There is a reading room in the main faculty building but it has been in service for 6 months. Text book purchase is planned for the future. Both the reading room and the library is not frequently used by the students. Since some of the documents are in English in the library, the library is not effectively used by students. It is be expected that this scenario will change in the near future, supporting improved student e-learning and interaction systems.

6.3.Suggestions for improvement

Compulsory student thesis must be put in the practice for the students to refer to the library opportunities.Free extra credit English courses can be opened for students to ensure the student progress by using foreign teaching materials. The newly built reading room must be enriched by the native language book orders.It is necessary to encourage students to benefit more from available facilities. Presentation of library and faculty facilities should be done in the first year.



Figure. ErciyesU Wireless internet connection areas (Map)
Sabanci Cultural Complex (1), Civil Aviation College (2), Faculty of Engineering (3), Dentistry (4), School of Foreign Languages(5), KHCL (6), Information Technology Centre (6), Faculty of Arts and Sciences (7), Faculty of Education and Veterinary Medicine (8) Hotel (9).

Supplement
LIST OF THE DATABASE SUBSCRIPTION

- American Chemical Society (ACS)*
- American Institute of Physics (AIP)*
- American Physical Society (APS)*
- ASCE (The American Society of Civil Engineers)*
- ASTM*
- Avery Index to Architectural Periodicals (EBSCO)*
- Beck Online Hukukveritabanı*
- BioOne*
- BMJ Best Practice*

BMJ Journals
CAB Abstract
Clinical Key
Dentistry & Oral Sciences Source Veritabanı
EBSCO eBook Academic Collection
EBSCOHOST Web
Emerald
Engineering Village2
Food Science and Technology Abstract (FSTA)
HeinOnline
Hiperkitap
İdealonlineVeritabanı
IEEE Xplore
Institute of Physics (IOP)
iThenticate
JoVE (Journal of Visualized Experiments)
JSTOR (The Scholarly Journal Archive)
Kanunum.com
KazancıHukuk
Mary Ann Liebert
MatchSciNet
Mendeley Institutional Edition (MIE)
Nature Genetics
Nature Nanotechnology
Nursing@Ovid
OVID-LWW
OXFORD JOURNALS ONLINE
Pressreader
Proquest Dissertations and Thesis Abst&FT
Rosetta Stone
SAGE Journals (Premier)
SciFinder - Methodsnow
Science Online
ScienceDirect
Scopus
Sobiad
SinerjiHukukYazılım
SpringerLINK
Swisslex
STATdx
Taylor & Francis Online Journals
ThiemeEbooks
Thieme E-Journals
Turnitin
Türkiye Atıf Dizini
UpToDate
Web Of Science
Wiley Online Library

07

STUDENT ADMISSION, PROGRESSION AND WELFARE





STUDENT ADMISSION, PROGRESSION AND WELFARE

7.1. Factual Information

7.1.1. Description of how the educational programme proposed by the establishment is advertised to prospective students.

The presentation of our faculty is provided via our web site (<https://veteriner.erciyes.edu.tr>). There is sufficient information about the faculty (history, mission and vision, management, organization chart, in house evaluation, strategy plan, academic staff with academic CV and administrative staff), about divisions and departments, (course notes (if available) and course contents, international collaborations, useful links, activities, publications, projects, research facilities, clinical applications) in the website. Also, social and scientific activities are shared on social media (facebook, twitter, instagram). FVMEU is introduced in local and national television channels by the rectorate.

7.1.2. Description of admission procedures for standard students

-Selection criteria

The admission of students, who completed upper secondary education, to undergraduate programs is managed by the YOK. Students are required to enter the Student Selection and Placement exam administered by OSYM in order to enter the undergraduate program. The exam, Higher Education Institutions Examination (YKS) which includes multiple-choice questions, is conducted in two stages. The first step, Basic Qualification exam (TYT), consists of Turkish Language, Social Sciences, Basic Mathematics and Science (Totally, 135 minutes for 120 questions). The second step, Field Qualification exam (AYT), was held at 4 fields (Turkish Language and Literature, Social Sciences 1-2, Mathematics and Science). TYT and AYT scores (40% and 60%, respectively) are added with the average of the graduation scores. After the placement scores are announced students prefer the undergraduate programs they want to register.

- Policy for disabling and ill students

There is no determined quota application for the disabled and ill students by FVMEU. For students with disabilities who prefer our faculty, we strive to provide equal opportunities in their education, examinations and social activities.

- Composition and training of the selection committee

Students are selected and placed by OSYM with the points they receive from the central examination system.

- Appeal process

Students may appeal the results of the exam within 10 days of the announcement date. Appeal processes are carried out by OSYM.

- Advertisement of the criteria and transparency of the procedures

All information regarding the examination process (applications, evaluation, placement etc.) is announced on the OSYM website and at the national press.

7.1.3- Description of the admission procedures for full fee students

1. YOS (Foreign Student) Examination: Students apply to the departments where the quota is opened in the universities. These students study with their own facilities and pay university expenses.
2. YTB (Overseas Turks and Relatives Communities) Exam: An examination conducted under Ministry. Here students take exams Scholarship winners do not make any payments to the Republic of Turkey and the university dormitories during the training period. Undergraduate - Masters and PhD students are awarded scholarships at different rates.
3. Government Scholarship Students: These students receive scholarships from their own country.

7.1.4. Description of how the establishment adopts the number of admitted students to the available educational resources and the biosecurity and welfare requirements.

The student quota for the faculty is determined by the OSYM. The library, student clubs, canteen, and classrooms in our faculty are of optimal standard. Transportation to ErciyesU is easily provided by bus tram and taxi. Talas is a settlement preferred by students and it is within the walking distance to FVMEU. Medical faculty and dentistry hospitals of our university serve the students. Dining hall of ErciyesU offers quality, varied and cheap meals to staff and students. In order to support the social and cultural activities of the students, ErciyesU has a large number of student clubs. There are many indoor and outdoor sports facilities where students have the opportunity to make sports at all hours of the day. Süleyman Demirel Sports Hall located on campus, capacity of 2500 spectators, is a modern sports hall (for basketball, volleyball, badminton, handball) consisting of gymnastics and table tennis halls. There are also 4 outdoor tennis courts, 4 open basketball courts, 2 open volleyball courts, semi Olympic indoor swimming pool, fitness hall, and outdoor mini football courts which are used by students in the campus. Also, there are post offices and bank branches/ATMs on campus. Gloves, aprons, glasses and mask (where required), disinfectants are widely used for biosecurity. Biosecurity commission (including academic and administrative staff) was established in FVMEU. The biosecurity commission consists of 13 members; chairmanship duty is carried out by Prof. Dr. Fuat AYDIN. Students are informed about the rules that must be followed in the clinic and laboratory. The committee is continuing to work on improving biosecurity issues by organising meetings at certain intervals.



7.1.5. Description of:

The progression criteria and procedures for all students:

Students enrolled in FVMEU know that the training period is 5 years (10 semesters) and they have to complete all the semesters successfully. Students have to take 30 ECTS courses every semester. There is a passing course system in FVMEU. One midterm and one final exam are applied for these courses which are offered every semester. In order to attend a final exam, student have to attend at least 70% of the theoretical and 80% of the practical training. Detailed information about student assessment system is given in Chapter 8. Our students can take up four courses in summer school in FVMEU. In order to graduate, students have to complete 300 ECTS. The regulations regarding the registration,

attendance, exam evaluation process, criteria of graduation and objection to the exam result can be reached at https://www.erciyes.edu.tr/.../Onlisans_ve_Lisans_EgitimOgretim_Yonetmeligi.doc.

The remediation and support for students who do not perform adequately

Faculty administration assigns an advisor for each class of students in each academic period. These advisors monitor the students and evaluate their performance. The advisor direct students with poor performance to the faculty administration where necesarry. Faculty administration takes the charge to help or support the low performing students.

The rate and main causes the attrition

There is no formal statistics or data about the rate of attrition of FVMEU students. However, it is seen that the main reason for attrition is dense of curriculum and difficulty of courses.

7.1.6. Description of the services available for students (1.e. registration, teaching, administration, mentoring and tutoring, carriers advice, listening and counselling, assistance in case of illness, impairments, and disability, clubs and organizations.

Following the placement of students as a result of the examinations, students can register online or by directly applying to the faculty. A civil servant in charge of student affairs assists the students for re- gistration. After enrolment, one lecturer is assigned as an undergraduate advisor for each class by fa- culty administration. Students are subjected to orientation training on the first day of the academic year.

Medicare is free for university students in Turkey. In case of illness, students can visit the university doctors at the Health and Culture Directorate at campus or they can preferably go to public hospitals or one of the Family Health Centres everywhere in Turkey with no co-pay as long as they show a va- lid student ID card.

There are students’ clubs such as music, theatre, hall dance, scientific research club, nature observing clubs, horse riding club etc...

7.1.7. Prospected number of new students admitted by the establishment for the next 3 acade- mic years.

FVMEU accepts a total of 70- 80 students for each year and plans to keep the number stable for the next 3 years.

7.1.8. Description of how and by whom the admission procedures, the admission criteria, the number of admitted students and the services to students are decided, communicated to staff, students and stakeholders, implemented, assessed and revised.

Students benefit from scholarship funded by Government. Students apply to the official body of Scholarship and Dormitories Administration for Higher Education. Economic status and performance of the students are considered when evaluating the applications.

Table 7.1.1. Number of new veterinary students admitted by the Establishment

Type of students	2014/2015	2015/2016	2016/2017	2017/2018	Mean
Standard students*	66	53	73	81	68.25
Full fee students	-	-	-	-	-
Total	66	53	73	81	68.25

*Education is free an all Turkish Higher Education institutions.

Table 7.1.2. Number of veterinary undergraduate students registered at the Establishment

Years	2014/2015	2015/2016	2016/2017	2017/2018	Mean
First year	87	88	88	92	88.75
Second year	83	80	85	82	82.50
Third year	70	80	75	80	76.25
Forth year	66	66	71	72	68.75
Fifth year	58	61	59	66	61
Total	364	375	378	392	377.25

Table 7.1.3. Number of veterinary students graduating annually

* Education is free an all Turkish Higher education institutions.

Type of students	2014/2015	2015/2016	2016/2017	Mean
Standard students*	41	53	57	50.33
Full fee students	-	-	-	-
Total	41	53	57	50.33

Table 7.1.4. Average duration of veterinary studies

Duration	Students graduated in 2015 (%)	Students graduated in 2016 (%)	Students graduated in 2017 (%)	Mean (%)
+ 0**	23 (56.10)	25 (47.17)	30 (52.63)	51.66
+ 1 year	12 (29.27)	13 (24.53)	11 (19.30)	23.84
+ 2 years	4 (9.76)	12 (22.64)	6 (10.53)	14.57
+ 3 years or more	2 (4.88)	3 (5.66)	10 (17.54)	9.93

Table 7.1.5. Number of postgraduate students registered at the Establishment

Programmes	2014/2015	2015/2016	2016/2017	2017/2018	Mean
Interns*	52	61	48	61	55.50
Residents**	-	-	-	-	-
PhD students	1	3	4	9	4.25
MSc	23	12	17	11	15.75

* Internship programme is in the last year (9th and 10th semester).

** Currently, there is no residency programme in Turkey.

7.2. Comments

Main limitation is the lack of the autonomy in determining the number of new students registered each year. Student quotas are set by the YOK, not only for veterinary faculties, but also for all faculties in all universities. Generally, they tend to increase the quotas every year.

7.3. Suggestions for improvement

In parallel with the improvement of the physical infrastructure and equipment such as functioning of VTH and the use of the patient registration and tracking system, the number of animals applying to VTH is increasing day by day. This increase is critically important for the practical training of students.



08

STUDENTS ASSESMENT





STUDENTS ASSESMENT

8. Student Assessment

8.1. Description of global student's assessment strategy of the Establishment

The academic calendar is announced on the web page of the ErciyesU at the beginning of each academic year.

The curriculum provides the details of visual, auditory and practical trainings and these techniques depending on subjects are given by the departments. In each case, practical training is important and especially, problem-based learning is preferable.

Education in FVMEU consists of 10 semesters. Every semester contains a total of 16 weeks. There is one midterm examination, one final examination and one resit examination. The midterm exams are carried out between the 8th and 12th weeks of the semester. Final exams are given at the end of a semester and usually last, for 2-3 weeks. After final examination, students who do not succeed in the final and resit examinations, they can take the summer school. Make-up exams are conducted for those students who could not take the exam due to acceptable reasons. Right for a make-up exam is given for midterm exams only. After completion of the final exams, students who fail in the final exams are given a period of 1 weeks to prepare for exams.

Students who have only one course to graduate are entitled to take the single course exam. After the students have learnt all the scores of the exams, they will be able to take the single course exam by marking the button "I want to take the single course exam" until 3 days before the exam date at the latest on Student information System (OBISIS).

Students have to take a midterm and a final exam for each course in each semester. The exams can be written, oral, practical and clinical exam or mixture of them, depending on the subject. Students have to pass theoretical and practical skill exams. The contribution of theoretical and practical exams vary among the courses.

8.2. Description of specific methodologies for assessing

8.2.1.Theoretical knowledge

The assessment of theoretical courses is generally made through written and oral exams. Written exams can be in various forms including multiple choices, filling gaps, short/long answer questions. Examination forms (written papers, multiple-choice questions, oral, practical, clinical examination, continuous assessment) vary according to practical and theoretical lectures. Practical exams are related to both lectures and practical skills.

8.2.2.Pre-clinical practical skill

Oral exams are main method for the assessment of pre-clinical practical skill. Also the assessment of pre-clinical practical skills are carried out on healthy animals, cadavers, organs and archive materials, laboratory tests depending on the course content and subject. Students must succeed practical exam to pass the course.

8.2.3. Clinical practical skills

The assessment of clinical practical skills is carried out on animal patients presenting in clinics. Oral and practical exams are performed by the responsible lecturers of related course. Depending on the clinical skill level of students, the clinics are prepared with different materials, healthy or diseased animals for the exam. These skills include taking anamnesis, clinical examination of animal diagnosis, treatment and interpretation of prognosis.

From the 3rd year (6th semester) of education, introductory rotations to clinics are started. Students are expected to improve themselves on animal handling, how clinics work and how animal owners are met etc. 3rd year students are expected to have self-confidence and scientific background to note history of patients, to assist intern students, and handle animals properly under the supervision of an authorized person.

Practices in the clinics are started in the 4th year. Those from the 4th year are given some more serious responsibilities like injections, examination, sterilization and follow up of animals. Rotations are the

basic structure of the semesters of the teaching programme. 5th year students basically run clinic services with the cooperation of research assistants.

During the 9th and 10th semesters, all students take part in rotations organised by all the departments with a timetable determined by the Curriculum Planning Committee. During this term, all the departments including basic sciences are visited by all students in the 9th and 10th terms. Each group consists of 3-6 students depending on the number of students.

Students participating in clinical rotations receive a notebook containing basic clinical applications. This notebook is checked by the relevant lecturers, and the applications made by students are recorded. Taking visit records sufficiently, case follow ups, and attendance to operations are the criteria required of the student for evaluation. Clinical rotation achievement scores are given according to students' practices and results of theoretical examination. This encourages students to do more practice.

In the non-clinical departments, the applications that each section makes are recorded in the application book. Grading is done according to theoretical examination and participation in practical applications.

Every student has to do an obligatory extramural work (summer stage) which is an integral part of the curriculum. Extramural work can be performed in FVM clinics, private or governmental farms and clinics, slaughterhouses, research centers and institutes. Obligatory extramural work that students must undertake as part of their course is minimum 1 month between the end of the 4th year and before the 5th year. The work takes places during summer vacation. Extramural work is supervised by the extramural work committee, regularly.

Students spend their extramural work period with an experienced Veterinary Practitioner wherever they do their extramural work. Every student has an extramural work file which they have to fill in with what they have experience on a daily basis. Extramural committee evaluates these work files.

8.3. Description of the processes for awarding grades, including explicit requirements for barrier assessment

It is compulsory to attend 70% of theoretical courses and 80% of practical courses in order to take a final exam. If this condition is not met, the student is considered as absent for that course and the student's grading chart shows this situation as absent.

In calculating students' grades, 40 % midterm examination grades and 60 % of the final or summer school examination grades are considered. Students have to take 50 score at least in final exam. Crude score ≥ 60 is accepted as successful. Students are successful if grade point average success grades are 2.00 and above (CC and above). If grade of student is less than 2.00, the student is considered as failed and cannot take lectures in the upper half of the semester. Students within a degree of 2.50-4.00 may take courses of two semesters. Students within a degree of 1.00-1.99 can take also a maximum of 75% of failed courses. Students within a degree of below 1.00 can take lessons up to 50% of maximum course load.

The student takes a course corresponding to 30 ECTS credits. The weekly lesson hours for the learners will not exceed 36 hours.

8.3.1. Appealing

A student who disagrees with the result of an exam after the announcement of the results applies to the Dean's Office with a petition explaining his/her appealing. If his/her application is accepted, the Board of Department re-assess the student's exam paper and notifies the ultimate score of the student's exam paper to the Dean's Office.

8.3.2. Comments

Final exams are held within 2 weeks, thus students have to take at least 1 exam each day. This intense exam period might affect student's success in a negative way.

Use of online assessment technologies should be encouraged, although the e-learning platforms are very limited, if none, in teaching.

8.3.3. Evaluation of teaching and learning

Assessment of the quality of learning in the faculty depends on student questionnaires, staff surveys, success levels in lectures, graduation level criteria etc. There is no external evaluator. The role of students in the evaluation of teaching and teachers is obtained by questionnaires.

8.3.4. Suggestion for improvement

Courses should be given to improve student assesment approach and implementation of teaching staff. Seminars and/or workshops as well as online assesment could be useful. Lecturers who consistently use routine assesment methods should be encouraged to find and use new assesment methods. At all laboratory clinics, the hand skill and manipulation of the student should be assessed and the daily skills should be reflected in their grades. A two week period should be reserved to allow students to work on the exams for the visa week, provided that it is a 14-week course schedule.



09

ACADEMIC AND SUPPORT STAFF





ACADEMIC AND SUPPORT STAFF

9.1.1. Description of global strategy in order to ensure that all requested competences for the veterinary programme are covered and that staff are properly qualified and prepared for their roles (e.g. good teaching and assessing practices, knowledge of upto- date (e-) learning resources, biosecurity and QA procedures)

The FVMEU academic staff has the necessary academic and professional expertise in relevant areas of vocational training program for which the responsibility of the training programs is undertaken. ErciyesU “Academic Promotion and Appointment Criteria” are taken into consideration in the evaluation of the progress of the academic staff. In this context, it is required that each lecturer fulfills various evaluation criteria such as having done scientific work abroad during a certain period, making project, getting patent, publishing in indexed journal.

The emphasis is placed on the overlap of the competencies of education and Academic staff (field of study / academic expertise, etc.) with the contents of the courses in the FVMEU. There are specialist Academic staff (Professors, Associate Professors, Assistant Professors, Research Assistant) and support staff trained in the fields of the departments of the units. Most of the Academic staff have a PhD degree (Tablo 9.1.1.). Academic staff follow the curriculum specified in the course information package. Determination of the faculty member who will give a lecture will be discussed and approved in the faculty board after the members of the relevant department have decided. If the academic staff has any recommendation for the courses, the suggestions are submitted to the faculty board where student representative is also invited. The proposed amendment to the education-teaching training plans will then be processed in the OBISIS catalog software. The catalog software checks the legislation compliance with the proposed amendment and submits the training plan by the software to the approval of the senate of ErciyesU. After the approval by the senate, the current education-training plan will be put into practice on OBISIS beginning from the fall semester of the following academic year. The learning outcomes (knowledge, skills and competencies) required to be acquired in each course are determined in the course information package which is compatible with the Bologna process.

Access to lecture notes, books and other resources are provided on the web page prepared and followed by the web design commission of the FVMEU.

Other more advanced e-learning resources are also available in the library services of ErciyesU. All staff (teaching, research, support) and students have free access to bibliographic research databases allowing quick and easy access to the latest scientific information. Since 2017-2018 academic year, pedagogical seminars have started to be given to all academic members. Within this scope, a 2 day and 16 hour measurement and evaluation course organized by ErciyesU QA committee was given.

Biosecurity is another important aspect. Biosafety Commission identifies and reports the shortcomings and needs to be done in the faculty. This report is evaluated by the administration and put into implementation. Students and staff are aware of biosecurity guidelines and so facilities, equipment and animals are safely used and handled.

Course evaluation surveys system takes place in OBISIS to measure the educational performances of academic staff.

9.1.2. Description of the formal programme for the selection, recruitment and training to teach and assess students (including continuing education) of the academic staff

The demands of the academic staff of the divisions are transmitted to the dean. Requests are communicated to the Rector's Office by the Dean. After being approved by the Administrative Board of ErciyesU, the request is sent to YOK. The following regulations are tracked for the recruitment, appointment and promotion of academic staff in ErciyesU;

(a) Regulation on Procedures and Principles of the Examinations for Academic Staff other than the Academic Staff.

- (b) Regulation on the Promotion and Appointment of Academic Staff and
- (c) ErciyesU Academic Promotion and Appointment Criteria are taken into consideration.

In order to be appointed as professors, associate professors and assistant professors, it is necessary to fulfill the YOK criteria, and the ErciyesU “Academic Promotion and Appointment Criteria”. To be appointed as associate professor, the candidate's academic performance file is assessed by the scientific jury determined by YOK. The candidate who is awarded as associate professor is appointed to it if he/she fulfills the ErciyesU “Academic Promotion and Appointment Criteria”. The academic performance file is evaluated by the scientific jury established by the rectorate for assistant professor and professor appointments. If the reports are to be positive, the appointments are approved by the rector.

9.1.3. Description of the formal programme for the selection, recruitment and training to perform their specific duties (including continuing education) of the support staff

Support staff is employed in accordance with item 4/A, 4/B, 4/C of the Civil Personnel Law no.657. Administrative and support staff are required to have a variety of competences related to the service carried out. Support staff who are appointed for the first time are called candidates. The nomination period of the candidates cannot be less than 1 and more than 2 years. These support staff are subjected to basic trainings. This training is essential in order to be appointed.

9.1.4. Description of the formal programme for the appraisal, development, promotion criteria and procedures, supporting and mentoring of both academic and support staff

Within the scope of the “Academic Promotion System” published by YOK, all academic performances of academic staff namely; the completed datas on research projects, researches, national and international scientific publications, national and international citations to scientific publications, prizes and patents in the previous years are evaluated to be rewarded and scored. After the evaluation, incentives are paid according to performance.

Academic staff enter the data (completed scientific research projects, national and international scientific publications, national and international scientific meetings) in ErciyesU Academic Data Management System (AVESIS), and these data could be seen by all stakeholders.

Turkish Academic Network and Information Center (ULAKBIM) also financially promotes international publications by International Scientific Publication (UBYT) Program of Turkey.

Another criterion for evaluating the performance of Academic staff is the ErciyesU “Academic Promotion and Appointment Criteria”. In the evaluation progress of the academic staff, various evaluation criteria such as having been abroad for a scientific work for a certain period of time, getting a patent and publishing in indexed journal are requested.

Activities such as “TUBITAK Project Preparation Trainings” are organized in order to support the development of academic staff in scientific fields. Furthermore, courses and seminars on training of trainers are organized by the University as well as in-house professional and personal training activities for both administrative and academic staff.

On the other hand, financial resources provided by the university and FVMEU, support the activities of the academic staff to study and conduct researches abroad.

Academic staff are also supported financially to participate in congress, symposiums, courses and workshops both nationally and internationally. Academic staff are able to teach or are trained at partner universities abroad under ERASMUS programs.

AR-GE (Research and development) studies coordinated by academic members are supported by Research and Application Centers (ERUTAM, GENKOK, DEKAM, TAUM and ERNAM) Scientific

Research Projects Coordination Unit (BAP) and ETTO. Undergraduate, master and PhD students are allowed to take part in research projects.

Personnel are encouraged to participate in trainings to maintain their professional development. Within this scope, there are in-service training programs for all administrative and academic personnel throughout ErciyesU. Various certificate programs are organized by ERSEM in order to increase the professional skills of support staff of ErciyesU.

9.1.5. Description of the formal rules governing outside work, including consultation and private practice, by staff working at the Establishment

In this framework, faculty academic staff can establish a company or carry out a project in different categories by Erciyes TEKNO PARK A.Ş. (ETTO) They can also work with institutions and organizations such as the University Industry Cooperation Foundation (USIP) and the Central Anatolia Development Agency (ORAN), which are external stakeholders. In order to increase the studies with external stakeholders; catch-up works, working meetings, project designs are carried out through the ETTO Project Office. Institutional approval is required for the services such as counseling, expertise, training seminars and trustee, where academic staff are paid outside the establishment.

9.1.6. Description of the formal programme of the Establishment for the assessment of teachers by students and its outcome

The course evaluation questionnaires in OBISIS are used for assessment of the academic performance of the academic staff. Satisfaction questionnaires prepared by the Academic Evaluation and Quality Improvement Board (ADEK) are applied for each course taken by students through OBISIS. Contributions and participation of students in monitoring and evaluation process are also followed by student surveys during the training, graduation stage and the exchange of opinions afterwards. The "Student Counseling" system being implemented at the university is another application that contributes to the participation of students in the evaluation process. In addition, students can directly express their ideas to university staff and managers. Student's suggestions, comments and ideas are taken into consideration at meetings.





9.1.7. Prospected number of FTE academic and support staff of the veterinary programme for the next 3 academic year

We expect 5% of growth rate and it is expected that the number of academic and support staff of FVMEU will significantly be increased in the next 3 years as the attraction potential of FVMEU and city of Kayseri increase.

9.1.8. Description of how (procedures) and by whom (description of the committee structure) the strategy for allocating, recruiting, promoting, supporting and assessing academic and support staff is decided, communicated to staff, students and stakeholders, implemented, assessed and revised

Personnel affairs related to academic and support staff are carried out by the Department of Personnel. The academic staff of the university cadres are structured according to Higher Education Law number 2547 and related regulations. The quantitative continuity of academic staff depends on the number of staff assigned by the rectorate. In qualitative terms of the academic staff who carry out post-graduate education are upgraded according to “Academic Promotion and Appointment Criteria of ErciyesU”. Academic staff positions demands of the departments are communicated to the Rector's Office. List of demands are sent to YOK for approval. Academic personnel recruitment procedures begin after being announced on ErciyesU web site. For the assignments of academic staff candidates, related articles of Law no. 2547 are followed.

9.2. Comments

Our ratios of academic and support staff per student could be improved. The academic work of the staff is enough for the encouragement however we are convinced that the evaluation and incentive system for the education performance need to be improved.

Reducing the bureaucracy will accelerate our progress. We have young and dynamic staff and the place where the university located, has an attractive position in Turkey. Collaborations can be improved and better utilization of existing facilities for the institution should be ensured.

9.3. Suggestions for improvement

It is necessary to develop a mechanism for evaluating and rewarding the academic performance of academic staff. Depending on the request, the results of the surveys completed by students for each course should be discussed in faculty board and necessary precautions should be taken especially regarding the courses in which the problems are experienced. The number of research staff and technical staff (laboratory technician, etc.) should be increased. Collaborations could be expanded with international institutions, faculties and centers. Our academic staff should be encouraged and supported to come in contact with colleges in the national and international arenas to share knowledge and produce ideas.

Table 9.1.1. Academic staff of the veterinary programme

Type of contract	2017	2016	2015	Mean
Permanent (FTE)				
Full Professors	35	29	27	30,33
Associate Professors	13	14	14	13,6
Total Permanent (FTE)	48	43	41	44
Temporary (FTE)				
Assistant Professors	17	15	17	16,3
Research assistants (PhD Students)	17	21	20	19,3
Total Temporary (FTE)	34	36	37	35,66
Grand Total	82	79	78	79,6

Table 9.1.2. Percentage (%) of veterinarians in academic staff

Type of contract	2017	2016	2015	Mean
Permanent	% 93,50	% 94,93	% 96,15	% 94,86
Temporary	-	-	-	-

Table 9.1.3. Support staff of the veterinary programme

Type of contract	2017	2016	2015	Mean
Permanent (FTE)	21	20	19	20
Temporary (FTE)	11	8	8	9
Total	32	28	27	29

Table 9.1.4. Research staff of the Establishment

Type of contract	2017	2016	2015	Mean
Permanent (FTE)	43	43	41	42,33
Temporary (FTE)	34	36	37	35,66
Total	77	79	78	78



10

RESEARCH PROGRAMME, CONTINUING AND POSTGRADUATE EDUCATION





RESEARCH PROGRAMME, CONTINUING AND POSTGRADUATE EDUCATION

10. Research programmes, continuing and postgraduate education

10.1. Factual information

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

FVMEU research activities are mostly funded by ErciyesU BAP (<http://bap.erciyes.edu.tr/tr>). Researchers can also apply to TUBITAK, TAGEM, Ministry of Development Research Projects (DPT) for big grant projects. (<https://www.tubitak.gov.tr/tr/destekler/akademik/ulusal-destek-programlari>, <https://www.tarim.gov.tr/TAGEM>, <http://arastirma.kalkinma.gov.tr/duyuru/>).

Graduate or PhD training and academic studies are mostly carried out in FVMEU laboratories and research centers (DEKAM, ERUTAM, GENKOK, ERVEK, Equine and Equestrian Application and Research Center, Vaccine Research and Development Application and Research Center (ERAGEM), ERNAM and ETTO) at ErciyesU. (<https://en.erciyes.edu.tr/category/Research-Centers/3/17>, <http://www.erciyesteknopark.com/>)

The European Higher Education Area (EHEA) was launched along with the Bologna Process' decade anniversary, in March 2010, during the Budapest-Vienna Ministerial Conference. The EHEA aimed to ensure more comparable, compatible and coherent systems of higher education in Europe. ErciyesU has designed ECTS Information Package with the aim of clarifying details about the academic programs and the understanding of education for the university which have been formed in accordance with Bologna Process criteria. Each detail in the ECTS Information Package, regarding the implementation of ECTS credits of courses, student workloads, evaluation process and the relation of all these components with each other have been explained step by step. Education programs are subject to ErciyesU and, Erciyes University Graduate School of Health Sciences (SAGENS) programs. ECTS has been implemented by the SAGENS according to the Bologna process. ECTS is a student-oriented credit system based on the workload of the student. It is a value that represents all the studies (theoretical courses, applications, seminars, independent studies, examinations, assignments, etc.) that a student needs to complete in order to be successful in a course. ECTS is one of the most important fields of study in the application phase of Bologna Process in Turkey. In recent years, many universities in Turkey intensified their studies for adjusting their credit and grading systems to ECTS principles. All of the information provided in the ECTS Information Package for all stakeholders is a complete package which integrates the National Qualifications defined by YOK and their compatibility with the implementation of Bologna Process. (<https://bologna.erciyes.edu.tr/>)

The graduate and PhD education programs are applied by the SAGENS, (<http://sagens.erciyes.edu.tr/default.asp?sayfa=4>) within the frameworks and regulations in FVM as stated above. ErciyesU Course Information Package list available as online; <https://dbp.erciyes.edu.tr/Default.aspx>.

FVMEU missions;

Providing continuously upgraded, research and evidence-based education; to train professionals of intellectual and prestige who are competent in their field, aware of the necessity of lifelong learning, respectful to ethical values, seeking to protect animal, human and environmental health.

To conduct research using advanced technology, to share knowledge and experiences through a variety of educational and professional consulting activities.

In line with the needs and expectations of society, to become a professional and continuing education center as a national and international source of specialized knowledge.

FVMEU visions;

Being one of the leading FVM in Turkey, guide veterinary training and research with a wide and ho-

listic perspective by cooperating with national and international centers, tending to the rational use of resources, providing alternative solutions to global challenges, establishing team work and developing tradition of quality and democracy.

FVMEU is listed as one of the top ten veterinary faculties according to OSYM in Turkey. In addition, ErciyesU ranked 5th among Turkish universities and FVMEU takes the first place among veterinary faculties in Turkey and among all faculties in ErciyesU by THE Young University Rankings. The list is based on the same 13 performance indicators assessing the universities across teaching, research, international outlook and their collaboration with industry.

(https://www.timeshighereducation.com/world-university-rankings/2018/young-university-rankings#!/page/0/length/25/sort_by/rank/sort_order/asc/cols/stats)

The interdisciplinary and multidisciplinary research activities led by FVMEU members carried out with the participation of undergraduate and graduate students within the establishment. All students interested in scientific fields are encouraged to participate in research activities, assist, or produce independent projects with FVMEU academic staff. Also student of FVMEU can apply for projects of TUBITAK 2209-A - University Student Research Projects Support Program in Turkey. In 2018, 3 of our undergraduate students have been supported with 2209-A project grants by TUBITAK (<https://www.erciyes.edu.tr/Duyuru-Haber/Veteriner-Fakultesi-Ogrencilerimizin-Hazirladigi-%E2%80%9C9C/9230>).

The student council of Veterinary Education, Science and Research (VetEBA) has been established by students of the FVMEU with the support of ErciyesU Student Council under the mentoring of FVMEU members, and the 2nd national VetEBA congress was organized in 2018. (<https://www.erciyes.edu.tr/Duyuru-Haber/ERU%E2%80%99de-%E2%80%9C9C2-Ulusl-VetEBA-Kongresi%E2%80%9D-Basladi/8870>). In addition, undergraduate students attend scientific and social congresses organized by other FVM student scientific societies (VetBAK, <http://vetbak.istanbul.edu.tr/en/>, VetAnka, <http://www.veterinary.ankara.edu.tr/multimedia-archive/hayvanlarda-kanser-konulu-uluslararası-ogrenci-kongresi-yapildi/>). The number of students attending student scientific congress is given in Table 10.1.6.

Besides, all students have opportunities to visit FVM abroad using student exchange programmes (ERASMUS+, <http://erasmus.erciyes.edu.tr/>, FARABI, <https://farabi.erciyes.edu.tr/>, MEVLANA, <https://mevlana.erciyes.edu.tr/> etc.) to gain knowledge and develop experiences for training purposes.

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

Clinical practices and trainings are conducted through communication between graduate and undergraduate students. There is also a clinical system implemented as a rotation among intern students. These are carried out by cooperations among responsible clinical veterinarians, FVMEU academic staff of clinical sciences and MSc and PhD students.

The participation of undergraduate students in clinical training is carried out under the supervision of responsible FVMEU academic staff so that case management is applied to undergraduate and graduate students, and possible conflicts are prevented.

10.1.3. Description of how undergraduate students are; made aware of the importance of evidence-based medicine, scientific research and lifelong learning;

Undergraduate students have to learn basic veterinary science knowledge from in the first 3 years. Undergraduate students also gain laboratory skills besides theoretical courses during first 3 years of education by visiting research labs according to a defined schedule. Students attend clinical courses

from 3rd years to learn and implement evidence based medicine and case management. Undergraduate students participate in cases as an observer at the beginning of clinical training. The 5th year of education is called internship training to gain clinical experience. Internship students are subjected to weekly clinical rotation among Surgery, Internal Medicine, Obstetric and Gynecology, Reproduction and Artificial Insemination Departments.

However, undergraduate students who are interested in academic career, join laboratory and research studies, also discuss clinical cases with VTH academic staff, veterinarians and postgraduate students. At VTH, they can participate in scientific research studies and take place in scientific articles, attend congresses to present their studies.

are initiated to bibliographic search, scientific methods and research techniques, and writing of scientific papers;

At the beginning, scientific librarianship seminars are given to 1st year students by an expert from KHCL. Students can access detailed information about academic and occupational books and journals, thesis and e-resources (books, journals, databases) in KHCL (<https://kutuphane.erciyes.edu.tr/>). They learn evidence based scientific research techniques and evaluation methods through Biostatistics, Epidemiology and internship courses. In addition, students prepare seminars in some departments during the internship period. In this way, students can improve their skills in the preparation and presentation of scientific publications.

Undergraduate and postgraduate students can participate in scientific research studies and they present their studies in congresses organized by students. When students prepare scientific presentation, they learn bibliographic search, scientific and research techniques, and writing skills of scientific papers with advisors.

are offered to participate to research programmes on a non-compulsory basis

Lecturers contribute to students awareness of the importance of scientific research. Undergraduate students of FVMEU can take part in scientific projects prepared by academic staff as observer in laboratories of departments and research centers (DEKAM, ERUTAM, GENKOK, TAUM etc.) and so they gain scientific practices.

10.1.4. Description of how the continuing education programmes provided by the Establishment are matched with the needs of the profession and the community

FVMEU has educational cooperation with ErciyesU Continuing Education Center (ERSEM). The course of “Experimental Animal Use” is organized every semester with the participation of FVMEU academic staff in ERSEM and participants get a certificate (<https://ersem.erciyes.edu.tr/icerik.aspx?IDE=13>, <https://dekam.erciyes.edu.tr/>). Some training course are given by academic staff such as Prevention of Animal Diseases and Calf Losses, Animal Husbandry and Management, HACCP, educational seminar to municipality personnel of veterinary departments, panels of antimicrobial resistance and food contaminants. The number of continuing education courses provided by FVMEU is given in Table 1.1.4.

10.1.5. Prospected number of students registered at post-graduate programmes for the next 3 academic years

Major changes are not expected in the number of students in postgraduate programs for the next 3 academic years in FVMEU.

10.1.6. Description of how and by whom research, continuing and postgraduate education programmes organised by the Establishment are decided, communicated to staff, students and stakeholders, implemented, assessed and revised

Researches: Research activities are mainly designed by academic staff in two ways

1. Researchers receive support by applying to BAP or TUBITAK national support programs with their independent scientific projects.

2. Researchers can participate in the national-international framework program calls such as TUBITAK, TAGEM and DPT on specific topics.

Researchers submit project proposals to the research units of the project institutions with the approval of the Dean. Referees and panelists determined by the institution, evaluate the project proposals. And the results of panel evaluations are announced via web sites and e-mail. Research projects and grants of the establishment are listed in Table 10.1.5 for 2017 academic year.

Projects of MSc and PhD students are firstly approved by the board of SAGENS and the projects are funded by BAP. Also, TUBITAK is a big opportunity for the young researcher to find out grants and fellowships. There are several programmes for PhD students and graduates. PhD candidates can apply to “TUBITAK-2214” programme for their studies. In addition, TUBITAK provides grants for PhD students and young post-doctoral researchers to pursue their research in Turkey called “2216 - Research Fellowship Programme for International Researchers”. Researchers who hold PhD can apply to TUBITAK-2218 fellowship for national studies or TUBITAK-2219 fellowship for international postdoctoral studies to gain new skills and techniques to improve their academic careers.

Postgraduate education programmes: Postgraduate programs are opened, implemented, assessed and revised according to the Organization and Operation of Education Guidelines of SAGENS (<http://sagens.erciyes.edu.tr/default.asp?sayfa=4>). Proposals of MSc and PhD programs are suggested by departments and presented to the institute and university senates.

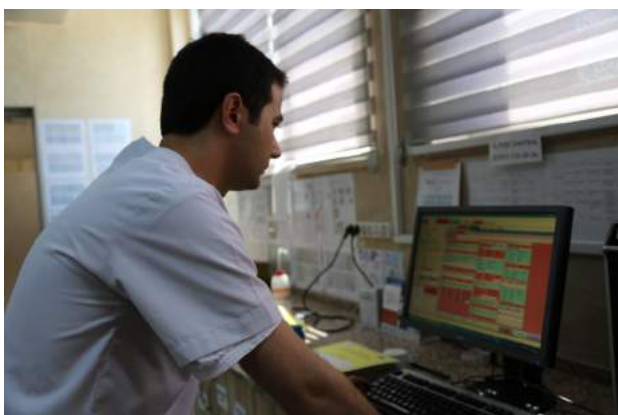
The number of MSc and PhD students are determined by academical board of the departments and sent to the SAGENS. Quotas are discussed and defined in the institute administration board and announced in ErciyesU website and Official Newspaper after the approval of the Rectorate.

MSc programme; it refers to a two-year/4 semesters education programme. Graduates can apply MSc programme only after graduating from university with either a relevant Bachelor’s (BSc) or DVM degrees. The number of BSc/DVM students registered at last three academic year are given in Table 10.1.1 and Table 10.1.2.

PhD programme; it refers to a four-year/8 semesters education programme. Graduates can apply for a PhD programme only after graduating from a university with either a relevant MSc or DVM degree. The number of MSc/DVM students registered at last three academic year are given in Table 10.1.1 and Table 10.1.3.

All the information about the FVMEU postgraduate training programmes is available on ErciyesU website. (<https://dbp.erciyes.edu.tr/Degree/Default.aspx?FakulteKod=402&Dr=Yes>, <https://dbp.erciyes.edu.tr/Degree/Default.aspx?FakulteKod=402&Dr=No>),

Cooperation with stakeholders towards undergraduate students is organized and encouraged to participate in various courses. Courses, seminars, symposiums, and workshops are organized by FVMEU through different departments according to the interests of undergraduate and graduate students, vet-



erinarians and stakeholders. They are informed about these organizations through announcements such as bulletin boards, ErciyesU and FVMEU websites, Facebook, Twitter and e-mail.

10.2. Comments

FVMEU aims to encourage research based medical education and training to enable students with existing clinics, research laboratories and centers. There is no research program and scholarship opportunity for the undergraduate students in ErciyesU however students voluntarily can participate in research projects conducted by academic staff. Undergraduate students are encouraged by academic staff to join research activities in different programmes during training period. The evaluation of the courses and the questionnaire studies have not been done yet. The Graduate and Occupational Training Comission has just begun to work.

10.3. Suggestions for improvement

Final year students are not required to prepare graduation thesis in FVMEU education system. In FVMEU, graduation thesis should be mandatory, and necessary regulations should be made for this purpose. FVMEU academic staff should be encouraged to involve more number of students to their scientific projects.

Table 10.1.1. Number of students registered at postgraduate clinical training (MSc and PhD)

	2015		2016		2017	
	Cont.	Graduate	Cont.	Graduate	Cont.	Graduate
CLINICAL SCIENCES (MSc)	20	1	18	4	19	5
Internal Medicine	5	1	5	1	8	4
Surgery	10	-	5	2	2	-
Obstetrics and Gynecology	4	-	3	1	4	-
Reproduction and Artificial Insemination	1	-	5	-	5	1
CLINICAL SCIENCES (PhD)	3	1	2	-	5	1
Internal Medicine	1	1	-	-	4	-
Surgery	1	-	1	-	-	1
Obstetrics and Gynecology	1	-	1	-	1	-
TOTAL	23	2	20	4	24	6

Table 10.1.2. Number of students registered at postgraduate research training (MSc)

MSc Programmes	2015		2016		2017	
	Cont.	Graduate	Cont.	Graduate	Cont.	Graduate
BASIC SCIENCES						
Anatomy	4	-	6	-	6	1
Anatomy*	-	-	7	-	-	-
Biochemistry	-	-	-	-	-	-
Histology and Embryology	-	-	1	1	1	3
Physiology	2	-	2	-	2	-
Physiology **	-	-	-	-	-	-
PRE-CLINICAL SCIENCES						

Pharmacology and Toxicology	8	3	18	2	23	4
Pharmacology and Toxicology ***	2	1	4	-	6	1
Parasitology	10	2	10	3	17	4
Parasitology ***	1	-	1	-	1	-
Microbiology	14	-	18	2	18	-
Pathology	5	-	9	-	15	-
FOOD HYGIENE & TECHNOLOGY						
Food Hygiene & Technology **	2	-	1	3	1	-
Food Hygiene & Technology	-	1	9	2	6	2
ANIMAL SCIENCE & ANIMAL FEED- ING						
Animal Nutrition and Nutritional Diseases	4	1	7	4	4	2
Zootech	6	3	4	4	7	2
TOTAL	58	11	97	21	107	19

*Collaboration with Selçuk University, Faculty of Veterinary Medicine, Konya

** Collaboration with Kırıkkale University, Faculty of Veterinary Medicine, Kırıkkale

PhD Programmes	2015		2016		2017	
	Cont.	Graduate	Cont.	Graduate	Cont.	Graduate
BASIC SCIENCES						
Anatomy	1	-	1	-	1	-
Anatomy*	-	-	-	-	-	-
Biochemistry	2	1	1	1	-	1
Histology and Embryology	-	-	1	-	-	-
Physiology **	4	-	4	-	4	-
PRE-CLINICAL SCIENCES						
Pharmacology and Toxicology	2	-	4	-	7	-
Pharmacology and Toxicology ***	2	-	2	-	4	1
Parasitology	1	-	4	1	6	-
Parasitology ***	1	-	1	-	-	1
Microbiology	2	-	3	-	6	-
Microbiology**	-	-	-	-	-	-
Pathology	2	1	1	-	1	-
Pathology*	-	-	-	-	-	-
FOOD HYGIENE & TECHNOLOGY						
Food Hygiene & Technology **	1	-	2	-	5	1
Food Hygiene & Technology	-	-	-	-	-	-
ANIMAL SCIENCE & ANIMAL FEEDING						
Animal Nutrition and Nutritional Diseases	1	-	-	1	1	1
Zootech	1	-	1	-	1	-
TOTAL	20	2	25	3	36	5

*** Collaboration with Cumhuriyet University, Faculty of Veterinary Medicine, Sivas

Table 10.1.4. Number of continuing education courses provided by the FVMEU

Courses	2016	2017	2018
Prevention of Animal Diseases and Calf Losses	-	-	1
Farmers at the University	-	-	1
Milk and milk products panel	1	1	1
Workshop: Introduction to Molecular Phylogenetics	-	-	1
Antimicrobial Resistance in One Health Concept	-	-	1

Table 10.1.5. List of the major funded research programmes in the Establishment which were on-going during 2017 academic year.

Department	Grant Sources	Grant (€)	Duration(Years)
Internal Medicine	TUBITAK&EU-BAP	105.207	1-4
Reproduction and Artificial Insemination	TUBITAK, TAGEM& EU-BAP	103.598	2-6
Surgery	TUBITAK&EU-BAP	52.935	1-4
Anatomy	EU-BAP	37.712	1
Biochemistry	EU-BAP	38.803	2-5
Pharmacology and Toxicology	EU-BAP	27,452	1-4
Pathology	EU-BAP	47.211	2
Parasitology	TUBITA&EU-BAP	285.170	1-3
Virology	TUBITAK&EU-BAP	56.761	2
Food Hygiene and Technology	EU-BAP	40.822	1-4
Animal Nutrition and Nutritional Diseases	TUBITAK&EU-BAP	67.297	2-4
Animal Science	TAGEM&EU-BAP	497.537	2-9

*Research projects less than 20.000 € grants are not listed.

Table 10.1.6. The number of students attending to student scientific congress between 2015 and 2017

	2015	2016	2017
VetEBA-KAYSERİ	-	88	77
VetAnka-Ankara	-	9	17
Vet Student Education Congress	20	20	-
TOTAL	20	97	94

Table 10.1.7. The number of students registered for summer practice programme within last three year.

	2015	2016	2017
Veterinary Clinics	35	33	47
Farms	7	7	9
Research Laboratories	2	2	2
Animal Hospitals	18	14	4
TOTAL	62	56	62



11

OUTCOME ASSESMENT & QUALITY ASSURANCE





OUTCOME ASSESMENT & QUALITY ASSURANCE

11.1. Factual Information

11.1.1. Description of the global strategy of the Establishment for Outcome Assessment and Quality Assurance in order to demonstrate that the Establishment

- has a culture of QA and continued enhancement of quality
 - operates *ad hoc*, cyclical, sustainable and transparent outcome assessment, QA and quality enhancement mechanisms
 - collects, analyzes and uses relevant information from internal and external sources for effective management of its programmes and activities
 - regularly informs staff, students and stakeholders and involves them in the QA processes
 - closes the loop of the QA Plan-Do-Check-Act (PDCA) cycle
 - is compliant with European Standard and Guidelines (ESG) Standards
- has a culture of QA and continued enhancement of quality**

The FVMEU has a fully implemented QA system which is composed of Commissions as follows;

- Quality Assurance Commission
- Education&Training and Coordination Commission
- Internal Assessment Commission
- Measurement and Evaluation Commission
- Curriculum Commission
- Survey and SWOT Analysis Commission
- Graduates and Occupational Training Commission
- Strategic Plan Commission

Responsibility of the coordination and management of the QA System of the FVMEU is coordinated and reviewed by the Faculty Board which is moderated by the Dean.

FVMEU determines their QA according to official legislation called "Regulation on Academic Assessment and Quality Improvement at Higher Education Council of Turkey (YODEK)" that complies with criteria of ESG for QA in The European Higher Education Area which has been shaped by the Bologna Process and enacted in Turkey since 2015 (<http://www.yok.gov.tr/en/web/uluslararasi-iliskiler/kalite-guvencesi1>). The regulation policies consist of evaluating and improving the quality of educational, instructional and research activities and administrative services at higher education institutions. Improvement of education and QA of regulation is monitored by independent external assessment committee which is approved internal assessment of academic activities and administrative services of higher education institutions. Internal assessment is carried out every year which started at the beginning of 2015. An external independent assessment is carried out from the outside of ErciyesU once every five years.

This assessment reports are open to public. Based on this regulation every academic unit in ErciyesU has its own QA commission responsible for assuring the QA system implementation. QA of the FVMEU complies with the home university concepts for; quality assurance, teaching and education, research and development, management system and evaluation policies that established in 2015 and presents its assessment reports annually from this date (<http://kalite.erciyes.edu.tr/tr/kurum-ic-degerlendirme-raporlari/9/fakulteler>). Moreover, FVMEU is a member of VEDEK in Turkey which was established in 2010 under the regulation of "Academic Evaluation and Quality Improvement in Higher Education Institutions" prepared by YOK and intended to raise the quality of veterinary training in Turkey by carrying out accreditation, evaluation and informing activities for veterinary training institutions and programs.

Current topics, deficiencies and, improvements are discussed by QA committee and teaching staff is involved in the QA process. Curriculum committee assess the curriculum and the quality of education at the beginning and end of each semester and present their reports to Faculty Board with the

participation of the director of student council. FVMEU is composed of five major sciences; i) Basic Science, ii) Preclinical Science, iii) Clinical Science, iv) Food Hygiene and Technology, v) Animal Husbandry and Animal Nutrition. Every single unit assembles a meeting at the beginning and end of each semester to discuss the quality of education and also teaching and research activities (curriculum, exam programs, projects, scientific congress etc.). Heads of units are appointed by and are responsible to the Dean of FVMEU to share previous meeting outcomes, and they also plan future strategies.

The ErciyesU has been selected as a research university by YOK in Turkey regarding higher number of projects, scientific research articles, postgraduate students, patents and research centers. Research universities have to provide a number of criteria set by YOK. FVMEU has a strong impact on this success of ErciyesU (<http://apsis.erciyes.edu.tr/BapRaporlari2.aspx>).

Research laboratories and diagnostic services of VTH have been approved by Ministry of Agriculture and Forestry, and also Turkish Accreditation Agency.

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

Outcome Assessment and QA of FVMEU is under development process. In this context, VTH staff, technicians and also hospital service quality are evaluated by the animal owners' survey feedbacks. Moreover, the alumni office has been established to improve the curriculum and also to determine their working fields and conditions. Director of the student council attends the Faculty Board and the University Senate, therefore the transparency of decisions is provided (curriculum, social, scientific and academic activities etc. concerning students).

- collect, analyze and use relevant information from internal and external sources for the effective management of their programmes and activities

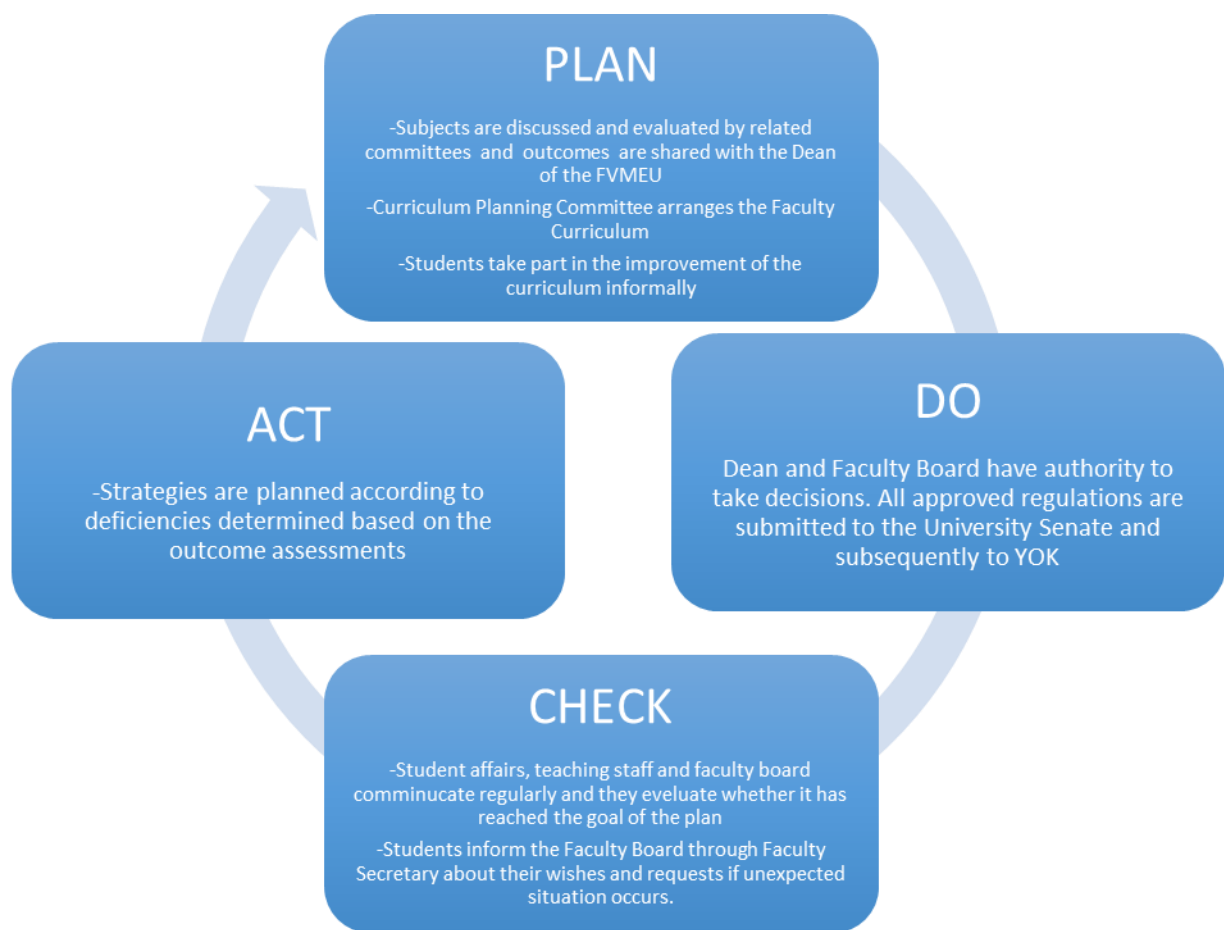
Each student assesses all of the examinations, and quality of education with a survey by using OBI-SIS. The results of the assessment of surveys provide information about students which also reflects our quality of education. Outcome assessments are evaluated by Education, Teaching and Coordination Commission to measure the efficiency of teaching staff.

Students are free to express their opinions and requests about the quality of education, improvement of curriculum and objectivity of examinations through the director of student council who attends the University Senate regularly. Academic performance evaluations are obtained according to performance reports about research outputs of each department and clinics quantitatively.

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

Teaching staff, students and stakeholders are informed about QA processes by regular reports shared on the faculty website (<https://veteriner.erciyes.edu.tr/>)

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



- is compliant with ESG Standards

FVMEU and its home university are part of YOK and hence compliant with ESG standards. ECTS information package has been applied by ErciyesU according to Bologna Process criteria.

11.1.2. Description of the form by which the strategy policy and procedures are made formal and are publicly available (websites, paper documents).

FVMEU has its own strategy policy and procedures which have been decided and discussed at responsible commission meetings and made formal by the Faculty Council headed by the Dean. All faculty members are informed about reports and decisions via e-mail and electronic document management system (EBYS). Students are informed through OBISIS about reports and decisions (<https://obisis.erciyes.edu.tr/>). The strategy policy of the FVMEU is published on <https://veteriner.erciyes.edu.tr/ckfinder/userfiles/files/Birim%20Stratejik%20Plan%20De%C4%99Ferlendirme%20Raporu.pdf> for 5 years.

11.1.3. Description of all regular publications of up to date, impartial and objective information, both quantitative and qualitative, about the educational programmes and awards the establishment is offering.

Academic plan of FVMEU which is approved by ErciyesU Senate and verified by Faculty Board is available on website <https://veteriner.erciyes.edu.tr/ogrenci/AKADEMIK-TAKVIM/Veteriner-Fakultesi/135/137> and course information package (<https://dbp.erciyes.edu.tr/Program/P3.aspx>) before next academic year. Hence students can organize their own plan for the academic year.

11.1.4. Description of the QA processes not yet described in the other 10 standards

All the QA processes of the FVMEU have already been described in corresponding standards.

11.1.5. Description of how (procedures) and by whom (description of the committee structure) the QA strategy of the Establishment is decided, communicated to staff, students and stakeholders, implemented, assessed and revised.

The QA strategy of the FVMEU has been described under the Regulation on Academic Assessment and Quality Improvement of YOK and ErciyesU.

All the information about our QA system is available online (<http://kalite.erciyes.edu.tr/tr/birim-ic-degerlendirme-raporlari/9/fakulteler>).

The strategy is revised according to internal self-evaluation reports based on commission documents (<https://veteriner.erciyes.edu.tr/kurullar/KURUM-IC-DEGERLENDIRME-KURULU/Veteriner-Fakultesi/172/184>). The QA committee is composed of internal and external stakeholder commissions with the participation of academic staff the head of student council and external stakeholders, to improve the quality culture of FVMEU.

Comments

The QA regulations of FVMEU were established in 2015 and presents their reports annually since then. Feedback surveys from students and graduates based on exams, curriculum and quality of education assessments are major deficiencies of quality assurance of FVMEU. Participation of external stakeholders is insufficient in terms of quality assurance process. The quality of exams is not assessed by FVMEU. Obviously, there are some deficiencies in outcome assessment and QA. However, internal self-evaluation reports of FVMEU show a continuous improvement in the QA level and is still going on.

Suggestions for improvement

Assessment of feedback should be implemented in FVMEU in order to enhance QA. Graduates must take a part in improving the education quality and curriculum by using feedback surveys. Curriculum quality should be evaluated through surveys from students who visited the FVMEU within the context of student exchange programmes or summer schools. In accordance with this evaluation reports, the curriculum should be revised periodically according to national and international standards. Besides, results of all oral and written exams should be analyzed by related committee and this outcome should be applied at both student and teaching staff level in order to monitor the quality of examinations. External stakeholders should play a more active role during the evaluation process of quality assurance.

12

ESEVT INDICATORS





ESEVT INDICATORS

12.ESEVT Indicators

12.1. Factual information

	Name of the Establishment:	Faculty of Veterinary Medicine, Erciyes University			
	Name & mail of the Head:	Prof. Dr. Abdullah INCI, ainci@erciyes.edu.tr			
	Date of the form Filling:	30.09.2018			
	Raw data from the last 3 full academic years	2016	2017	2018 (until October)	Mean
1	n° of FTE academic staff involved in veterinary training	79	82	82	81,0
2	n° of undergraduate students	375	378	392	381,7
3	n° of FTE veterinarians involved in veterinary training	75	77	77	76,3
4	n° of students graduating annually	53	57	58	56,0
5	n° of FTE support staff involved in veterinary training	15	16	16	15,7
6	n° of hours of practical (non-clinical) training	1442	1442	1442	1442,0
7	n° of hours of clinical training	638	638	638	638,0
8	n° of hours of FSQ & VPH training	280	280	280	280,0
9	n° of hours of extra-mural practical training in FSQ & VPH	29	29	29	29,0
10	n° of companion animal patients seen intra-murally	2971	5765	5851	4862,3
11	n° of ruminant and pig patients seen intra-murally	812	1489	1866	1389,0
12	n° of equine patients seen intra-murally	16	21	67	34,7
13	n° of rabbit, rodent, bird and exotic patients seen intra-murally	241	511	513	421,7
14	n° of companion animal patients seen extra-murally	0	0	54	18,0
15	n° of individual ruminants and pig patients seen extra-murally	25	27	40	30,7
16	n° of equine patients seen extra-murally	2	3	5	3,3
17	n° of visits to ruminant and pig herds	59	38	48	48,3
18	n° of visits of poultry and farmed rabbit units	8	8	8	8,0
19	n° of companion animal necropsies	4	3	7	4,7
20	n° of ruminant and pig necropsies	68	79	60	69,0
21	n° of equine necropsies	0	0	1	0,3
22	n° of rabbit, rodent, bird and exotic pet necropsies	53	52	76	60,3
23	n° of FTE specialized veterinarians involved in veterinary training	0	0	0	0,0
24	n° of PhD graduating annually	9	6	8	7,7

	Name of the Establishment:	Faculty of Veterinary Medicine, Erciyes University			
	Name & mail of the Head:	Prof. Dr. Abdullah INCI, ainci@erciyes.edu.tr			
	Date of the form Filling:	30.09.2018			
	Raw data from the last 3 full academic years	Establishment	Median Values¹	Minimal Values²	Balance³
I1	n° of FTE academic staff involved in veterinary training / n° of undergraduate students	0,21	0,16	0,13	0,09
I2	n° of FTE veterinarians involved in veterinary training / n° of students graduating annually	1,36	0,87	0,59	0,77
I3	n° of FTE support staff involved in veterinary training / n° of students graduating annually	0,28	0,94	0,57	-0,29
I4	n° of hours of practical (non-clinical) training	1442,00	905,67	595,00	847,00
I5	n° of hours of clinical training	638,00	932,92	670,00	-32,00
I6	n° of hours of FSQ & VPH training	280,00	287,00	174,40	105,60
I7	n° of hours of extra-mural practical training in FSQ & VPH	29,00	68,00	28,80	0,20
I8	n° of companion animal patients seen intra-murally / n° of students graduating annually	86,83	70,48	42,01	44,82
I9	n° of ruminant and pig patients seen intra-murally / n° of students graduating annually	24,80	2,69	0,46	24,34
I10	n° of equine patients seen intra-murally / n° of students graduating annually	0,62	5,05	1,30	-0,68
I11	n° of rabbit, rodent, bird and exotic seen intra-murally / n° of students graduating annually	7,53	3,35	1,55	5,98
I12	n° of companion animal patients seen extra-murally / n° of students graduating annually	0,32	6,80	0,22	0,10
I13	n° of individual ruminants and pig patients seen extra- murally / n° of students graduating annually	0,55	15,95	6,29	-5,75
I14	n° of equine patients seen extra-murally / n° of students graduating annually	0,06	2,11	0,60	-0,54
I15	n° of visits to ruminant and pig herds / n° of students grad- uating annually	0,86	1,33	0,55	0,32
I16	n° of visits of poultry and farmed rabbit units / n° of stu- dents graduating annually	0,14	0,12	0,04	0,10
I17	n° of companion animal necropsies / n° of students gradu- ating annually	0,08	2,07	1,40	-1,32
I18	n° of ruminant and pig necropsies / n° of students graduat- ing annually	1,23	2,32	0,97	0,26
I19	n° of equine necropsies / n° of students graduating annually	0,01	0,30	0,09	-0,09
I20	n° of rabbit, rodent, bird and exotic pet necropsies / n° of students graduating annually	1,08	2,05	0,69	0,38
I21 *	n° of FTE specialised veterinarians involved in veterinary training / n° of students graduating annually	0,00	0,20	0,06	-0,06
I22 *	n° of PhD graduating annually / n° of students graduating annually	0,14	0,15	0,09	0,05
1	Median values defined by data from FVMEU with Approval status in 2018				
2	Recommended minimal values calculated as the 20th percentile of data from FVMEU with Approval status in 2018				
3	A negative balance indicates that the Indicator is below the recommended minimal value				
*	Indicators used only for statistical purpose				

12.2. Comments

The hours of clinical training (I5) is below the minimal value. There are significant negative balances in number of equine necropsies (I19), number of equine patients seen extra-murally (I14) and number of equine patients seen intra-murally (I10).

The negative balances for the number of individual ruminants and pig patients seen extra-murally (I13) and number of companion animal patients seen extra-murally (I12) were prominent. The number of visits of poultry and farmed rabbit units (I16) were also in negative balance.

12.3. Suggestions for improvement

Although the indicators in FVMEU are at a satisfactory level, the negative balance in the indicators can be eliminated with various revisions, tenderness and attention.

The negative balance of the hours of clinical training (I5) was due to the low number of practical clinic hours in internship training (5th class). A training plan was prepared to improve the hours of practical training. After the coming training year, practical training hours will be increased to 30 hours.

The negative balance in number of equine necropsies (I19) and number of equine patients seen intra-murally (I10) is expected to be increased with construction of the large animal necropsy room and large animal clinic rooms. These negative balances can be reduced by modernisation and expansion of VTH and necropsy facilities. Besides, providing mobile clinic and transfer vehicle for large animal will be necessary. Our cooperation protocol with JAKEM is still going on. The horses in JAKEM and widespread horse farms in Kayseri city and Cappadocia region can be reached by large animal ambulance and horse carrier vehicle and negative balances in I19 and I10 can be improved.

The negative balance in number of companion animal patients seen extra-murally (I12) can be increased via increased recognition of VTH services. However, the number of companion animal patients seen intra-murally (I18) has a good balance.

The negative balance for the number of individual ruminants and pig patients seen extra-murally (I13) can be improved by large animal ambulatory service. Besides, we implemented a cooperation protocol with Saray Halı Farm, which produces calf, heifer and dairy cattle, in Kayseri City. The negative balance in I13 can be eliminated with this cooperation protocol.

The negative balance in the number of visits to poultry can be improved by the protocols signed with ERUTAM. Although ERUTAM has previously been regularly visited for poultry practices of undergraduate students, the number of visits (I16) have not been recorded by FVMEU. Apart from all these, FVMEU plans to construct facilities for housing pigs and rabbits for practical trainings. With this approach, negative balances can be eliminated for these animal species.



GLOSSARY

ADEK: Academic Evaluation and Quality Improvement Board

AHS: The Services Of The Class Attorney

AVESIS: Academic Data Managment System

AYT: The second step, Field Qualification exam

BAP: Scientific Research Projects Coordination Unit

CT: Computing Tomography

DEKAM: Experimental Research and Application Center

DOC: Day One Competences

DPT: Ministry of Development Research Project

EAEVE: European Association of Establishments for Veterinary Education

EARF: Experimental and Applied Research

EBYS: Electronic Documentation System

ECCVT: European Coordination Committee on Veterinary Training

ECOVE: European Committee on Veterinary Education

ECTS: European Credit Transfer System

EHEA: European Higher Education Area

ELISA: Enzyme-Linked Immunosorbent Assay

EPT: External Practical Training

ER: Emergency Room

ERAGEM: Vaccine Research and Development Application and Research Center

ErciyesU: Erciyes University

ERNAM: Erciyes University Nanotechnology Research Center

ERSEM: Erciyes University Continuing Education Center

ERUTAM: Erciyes University Agricultural Research and Application Centre

ESEVT: European System of Evaluation of Veterinary Training

ESG: European Standards and Guidelines

ETTO: Erciyes Technology Transfer Office

EU: European Union

EUBAP: Erciyes University Scientific Research Project Unit

FSQ: Food Safety and Quality

FTE: Full-Time Equivalent

FUYOS: International Students Examination Office

FVE: Federation of Veterinarians of Europe

FVM: Faculty of Veterinary Medicine

FVMEU: Faculty of Veterinary Medicine of Erciyes University

GENKOK: Genome and Stem Cell Research Center

GIH: General Administrative Services

GMP: Good Manufacturing Practices

GPA: Grade Point Average

HACCP: Hazard Analysis and Critical Control Points

HADYEK: Local Ethics Committee for Animal Experiments

IM: Intramuscular

IP: Intraperitoneal

IT: Information Technology

IV: Intravenous

IVSA: International Veterinary Students' Association

JAKEM: Gendarmerie Horse and Dog Training Center

KHCL: Kadir Has Central Library

LYS: Undergraduate Placement Examination

MRI: Magnetic Resonance Imaging

MSc: Master of Science

OBISIS: Student Information System

OBK: Student Scientific Club

ORAN: Central Anatolia Development Agency

OSYM: Student Selection and Placement Centre

PCR: Polymerase Chain Reaction

PDCA: Plan-Do-Check-Act

PDCA: Plan-Do-Check-Act

PFGE: Pulsed Field Gel Electrophoresis

PhD: Doctor of Philosophy

PO: Peros

QA: Quality Assurance

QAC: Quality Assurance Commission

QAP: Quality Assurance Program

SAGENS: Erciyes University Graduate School Health Science

SC: Subcutaneous

SEM: Scanning Electron Microscope

SER: Self Evaluation Report

SOP: Standard Operating Procedure

SWOT: Strengths, Weaknesses, Opportunities, Threats

TAGEM: General Directorate of Agricultural Researches and Policies

TAUM: Technology Research and Application Center

TEM: Transmission Electron Microscope

TFCR: Teaching Farm Conference Room

THE: Times Higher Education System

THS: Class Technical Services

TJK: Jockey Club of Turkey

TUBITAK: Scientific and Technological Research Council of Turkey

TURKAK: Turkish Accreditation Agency

TYT: Basic Qualification exam

UBYT: International Scientific Publication Programme of Turkey

ULAKBİM: Turkish Academic Network and Information Center

ULAKBİM: Turkish Academic Network and Information Center

USIP: University-Industry Cooperation Foundation

VEDEK: Association for the Assessment and Accreditation of Veterinary Educational Institutions and Programs

VETBAK: Scientific Research Club of Veterinary Faculty

VetEBA: The Student Council of Veterinary Education Science and Research

VM: Veterinary Medicine

VPH: Veterinary Public Health

VSOT: Veterinary Students' Health Club

VTF: Veterinary Teaching Farm

VTH: Veterinary Teaching Hospital

WA: Wheelchair Accessible

YGS: Higher Education Transition Examination

YHS: Utilities Class

YKS: Higher Education Institutions Examination

YODEK: Regulation on Academic Assessment and Quality Improvement at Higher Education Council of Turkey

YOK: Council of Higher Education

YOS: Foreign Student Examination

YTB: Overseas Turks and Relatives Communities Exam



FACULTY OF VETERINARY MEDICINE
DEPARTMENT OF CLINICAL SCIENCE

STUDENT APPLICATION TRACKING CHART

APPLICATIONS IN THE DEPARTMENT OF SURGERY			
	Date	Date	Instructor
Physical Examination			
IV injection			
IM injection			
SC injection			
Bandage			
Radiography	Shot		
	Bath		
Entubation			
Follow Anesthesia			
Operation Preparation			
Operation			
Postoperative Care			

APPLICATIONS IN THE DEPARTMENT OF SURGERY			
	Date	Date	Instructor
Physical Examination			
IV injection			
IM injection			
SC injection			
Bandage			
Radiography	Shot		
	Bath		
Entubation			
Follow Anesthesia			
Operation Preparation			
Operation			
Postoperative Care			

Name,	
Surname:	
Class:	
Number:	
Adviser:	

PET ANIMAL APPLICATIONS IN DEPARTMENT OF BIRTH AND GYNECOLOGY				
	Date	Date	Instructor	
Physical Examination				
External Genital Organ Examination				
Breast Examination				
USG Examination	Dog			
	Cat			
	Other			
Vaginoscopy				
Vaginal Cytology	Take sample			
	Coloring			
	Evaluate			
Injection	SC			
	IM			
	IV			

FARM ANIMALS APPLICATIONS IN DEPARTMENT OF BIRTH AND GYNECOLOGY				
	Date	Date	Instructor	
Physical Examination				
External Genital Organ Examination				
Breast Examination				
CMT Examination				
Strip Examination				
Vaginoscopy				
Rectal Examination	Cow			
	Other			
USG Examination	Cow			
	Small Rum.			
	Other			

Fluid Therapy				
Dressing/Bandage				
Operation Preparation				
Entubation				
Follow Anesthesia				
Operation	Cat OHE			
	Dog OHE			
	Other			
Postoperative Care				
Birth Aid	Dog			
	Cat			
	Other			
Theoric/Seminar				

Injection	SC			
	IM			
	IV			
Fluid Therapy				
Operation	Cow			
	Small Rum.			
	Other			
Postoperative Care				
Intervention in Hard Birth				
Theoric/Seminar				

FARM ANIMALS APPLICATIONS IN DEPARTMENT OF INTERNAL MEDICINE			
	Date	Date	Instructor
Anamnesis			
Handling restraining			
Conjunctiva and Mucosa Examination			
Get Body Temperature			
Examination of Lymph Nodes			
Oscultation and Percussion of the Heart			
Taking Heart Rate			
CFT Examination			
Cough Examination			
Tracheal Palpation			
Oscultation and Percussion of the Lung			
Anterior Stomach Examination in Ruminants			

PET ANIMAL APPLICATIONS IN DEPARTMENT OF INTERNAL MEDICINE			
	Date	Date	Instructor
Anamnesis			
Handling restraining			
Conjunctiva and Mucosa Examination			
Get Body Temperature			
Examination of Lymph Nodes			
CFT, Pulsation, Oscultation of the Heart			
Mouth, Abdominal Palpation, Intestinal Oscultation			
Cough Examination, Lung Oscultation, Respiration			
Laboratory Examination			
Routine Hemogram Examination			
Total Leucocyte Examination			
Hematocrit			

Abomasum Examination			
Apply Rumen Probe			
Rectal Examination			
Stool Examination			
Rumen Content Examination			
Urine Examination (Physical, Chemical, Sediment)			
I.V. injection			
I.M. injection			
S.C. injection			
Oral Medication			
Prescription			
Ambulatory Clinic			

Blood Smear Examination			
Leather Scrap Examination			
Urine Examination (Physical-Chemical-Microscopic)			
Stool Examination			
USG Preparation			
Take urine of a Dog			
Take urine of a Cat			
Take blood			
Injection (I.V, I.M, S.C.)			
Oral medication			
Prescription			
Take an EKG			
Preparation for Ecocardiography			

Handwriting practice lines consisting of 10 horizontal dotted lines.

Breeding Bull Selection				
Organ Examination				
Preparation of Artificial Insemination				
Storage of Sperm for a short Term (+4°C)				
Storage of Sperm for a long Term (Freeze)				
Take Sperm (Dog)				
Slaughterhouse - Rectal Examination				
Artificial Insemination in different Species				