# ARISTOTLE UNIVERSITY OF THESSALONIKI FACULTY OF HEALTH SCIENCES SCHOOL OF VETERINARY MEDICINE



## **SELF EVALUATION REPORT**

THESSALONIKI, DECEMBER 2021

#### **CONTENTS**

#### Introduction

Standard 1: Objectives and Organisation

Standard 2: Finances

Standard 3: Curriculum

Standard 4: Facilities and equipment

Standard 5: Animal resources and teaching material of animal origin

Standard 6: Learning resources

Standard 7: Student admission, progression and welfare

Standard 8: Student Assessment

Standard 9: Academic and support staff

Standard 10: Research programmes, continuing and postgraduate education

Standard 11: Outcome Assessment and Quality Assurance

12. ESEVT indicators

13. Covid -19 pandemic and the School of Veterinary Medicine Thessaloniki

14. Annexes

#### INTRODUCTION

### **Brief history of the Establishment**

The Aristotle University of Thessaloniki (AUTH) is a State institution established in 1925. AUTH is the biggest University in Greece and offers studies in the majority of the scientific disciplines. The number of students currently enrolled at AUTH is 74,000, comprising 65,000 undergraduate and 9,000 postgraduate students. At present, the AUTH academic (teaching and research) staff amounts to 2,024 individuals.

The School of Veterinary Medicine (SVMT) of AUTH was founded in 1950. Since 2013SVMT together with the Schools of Medicine, Dentistry, and Pharmacy form the Faculty of Health Sciences. The School offers a DVM degree in Veterinary Medicine, upon successful completion of 10 semesters of study, and MSc and PhD degrees in various specialisations, as part of its graduate studies programme.

Since it was founded, SVMT has offered 3,943 degrees in Veterinary Medicine and 342 PhD degrees. To date, 10 foreign scientists, who have contributed greatly to the development of the School, and the Veterinary Science in general, have been appointed Honorary Professors. Moreover, 27 scientists were appointed Readers to the Faculty, when this post was in effect, that is, from 1954 to 1982.

### **Brief history of previous ESEVT Visitations**

In November-December 2001the first EAEVE visitation took place. The evaluation committee concluded that the companion animal hospital did not operate full time on a 24-hour basis throughout the whole year. The School corrected this deficiency and was afterwards included in the list of Approved Establishments. In 2011, the Faculty of Veterinary Medicine was also evaluated by an experts' committee of the EAEVE. The evaluation found major deficiencies including lack of truly functioning emergency service for companion animals, insufficient level of hands-on training in equine medicine and surgery and poor student learning performance and the School received at first a non-approved status. All these deficiencies were promptly addressed and in 2014 the School was successfully re-evaluated and re-instated as an Approved Establishment.

#### **Main features of the Establishment**

- Well trained and highly dedicated academic, support and administrative personnel committed to accomplishing the SVMT's mission.
- Reputation for delivery of high-quality teaching, research and clinical/laboratory/consultancy services.
- High levels of graduate employability and recognition. Many of our graduates hold important positions in administrative bodies in governmental, academic and private organisations throughout the world. In fact, some hold very senior positions in big international pharmaceutical companies. SVMT graduates are members of the Executive Committees and Research Councils of State Organisations, and/or Presidents or Committee Members of Scientific Associations, European Specialisation Colleges and the European Board of Veterinary Specialisation.
- The School has full responsibility in designing its curriculum. Neither the University nor the Ministry may interfere with the actual content of the curriculum.
- The operation of the Farm Animal Clinic and the Dairy Sheep Farm in Kolchiko, in combination with the development and maintenance of collaborations with external farms, have improved significantly our students' training by providing practical knowledge in the fields of farm animal medicine and production.

#### Main developments since the last Visitation

Since the last visitation (2011) the main developments that occurred in the SVMT include:

- The establishment of the Laboratory of Development-Breeding of Animal Models and Biomedical Research (2017)that is located in the ground floor of the SVMT campus building and constitutes a state-

of-the-art facility for laboratory animal housing and research.

- The incorporation of the SVMT into the Faculty of Health Sciences.
- A new isolation box for equines.
- The implementation of an updated curriculum of studies.
- A new CT facility in the Laboratory of Diagnostic Imaging.
- The implementation of a new quality policy for the Clinics, Diagnostic Laboratory and Laboratory of Diagnostic Imaging.
- A new Medical Oncology section (Chemotherapy Room) in the Clinic of Companion Animals.

The major problems encountered by the SVMT are mainly related to the lack of sufficient funds for hiring technical and support staff and also for the appointment of new academic staff. Over the past years many staff members resigned or retired without being replaced. This situation is not expected to change in the near future, at least until the financial situation of the country improves.

The old buildings of the Department of Clinical Sciences as well as the main SVMT building in the University campus need restoration. However, relevant State funds are not anticipated in the near future. The School should seek ways to increase its funding and income from other sources (See also 1.3. Suggestions).

This report was based on the ESEVT Uppsala SOP May 2016

#### STANDARD 1. OBJECTIVES AND ORGANISATION

#### 1.1 FACTUAL INFORMATION

#### 1.1.1 Factual information

Name of the Faculty: SCHOOL OF VETERINARY MEDICINE

Address: ARISTOTLE UNIVERSITY OF THESSALONIKI, 54 124 THESSALONIKI GREECE

Telephone: + 30 2310995219

Fax: + 30 2310995218

Website: http://www.vet.auth.gr

E-mail: info@vet.auth.gr

### **School Management Structure:**

Chair: Prof. P. Fortomaris

Deputy Chair: Prof. I. Taitzoglou

Head Department of Animal Structure & Function: Prof. Maria Tsantarliotou

Head Department of Animal Production, Ichthyology, Ecology & Protection of Environment: Assoc.

Prof. G. Valergakis

Head Department of Infectious, Parasitic Diseases & Pathology: Prof. I. Papadopoulos

Head Department of Food Hygiene & Technology: Prof. A. Angelidis

**Head Department of Clinical Sciences:** Prof E. Kiosis

# **Veterinary Teaching Hospital Management:**

Farm Animal Clinic Director: Prof N. Panousis

Companion Animal Clinic Director: Prof L.G. Papazoglou Diagnostic Laboratory Director: Prof Z. Polizopoulou Diagnostic Imaging Laboratory Director: Prof M. Patsikas

### Official Authorities overseeing the Establishment (School):

Faculty of Heath Sciences (Dean: Prof T. Dardavesis)

Aristotle University of Thessaloniki (Rector: Prof N. Papaioannou)

Ministry of Education

# 1.1.2 Summary of the Establishment Strategic Plan with an updated SWOT analysis, the mission and the objectives

The **strategic goals** of the SVMT aim to:

- Maintain a centre of excellence for student veterinary training and education.
- Provide lifelong learning opportunities.
- Provide innovation in research methodology and development of scientific procedures.
- Provide advanced animal health care and welfare.
- Strengthen relationship with stakeholders.
- Maintain a high standard veterinary outreach programme.
- Implement a strategy for the continuous enhancement of quality and quality assurance.

The evaluation of the above objectives as well as the whole 10-year Strategic Plan of the School is an ongoing process. Changes and updates are instituted on a regular basis to ensure that every student is provided with the required knowledge, skills and experiences to successfully meet the up-to-date standards of the veterinary profession. Objectives also evolve in response to internal and external circumstances. The responsibility of determining, assessing and amending the SVMT objectives lies with its General Assembly. The Strategic Plan, including a SWOT analysis, of the SVMT is presented in Annex1.

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

The major goals for the coming (3-5) years include the following:

- 1. Regular reviews of the current curriculum for making the appropriate amendments when deemed necessary
- 2. Provision of advanced animal health care and welfare (case load increase, improved facilities & equipment) to ensure that SVMT is equipped with the teaching staff, infrastructure and facilities necessary to deliver high standards of veterinary education. In particular refurbishing the Companion Animal Clinic and Equine Unit, the Farm Animal Clinic and Farm at Kolchiko, moving the Equine unit to Kolchiko, constructing a new intensive care unit and purchasing of MRI equipment. The cost of these investments will be covered by State funds and AUTH Research Committee funds.
- 3. Strengthen the relationship with stakeholders

## 1.1.4 Organisational Charts of the Establishment

The organisational structure of the University and the SVMT is illustrated in Figures 1.1.4.1 and 1.1.4.2, respectively. More information about the University may be found in Annex 2, as well as on the AUTH's website (www.auth.gr)

# 1.1.5 List of departments/units/clinics and councils/boards/committees with a very brief description of their composition/function/responsibilities

- 1. Department of Animal Structure and Function
  - Laboratory of Anatomy, Histology and Embryology of Domestic Animals
  - Laboratory of Animal Physiology
  - Laboratory of Chemistry
  - Laboratory of Biochemistry and Toxicology
  - Laboratory of Pharmacology

# 2. Department of Animal Production, Ichthyology, Ecology & Protection of the Environment

- Laboratory of Animal Nutrition
- Laboratory of Animal Husbandry
- Laboratory of Ichthyology
- Laboratory of Ecology and Protection of the Environment
- Laboratory of Economics of Animal Production (including Epidemiology and Biostatistics)
- 3. Department of Infectious & Parasitic Diseases and Pathology
  - Laboratory of Microbiology and Infectious Diseases
  - Laboratory of Parasitology and Parasitic Diseases
  - Laboratory of Pathology

### 4. Department of Food Hygiene and Technology

- Laboratory of Animal Food Products Hygiene- Veterinary Public Health
- Laboratory of Food Technology
- Laboratory of Safety and Quality of Milk and Dairy Products

### 5. Department of Clinical Sciences

- Companion Animal Clinic
  - Unit of Companion Animal Medicine
  - Unit of Companion Animal Surgery and Obstetrics
  - Equine Unit
  - Unit of Anaesthesiology and Intensive Care
  - Exotic Animal Unit

- Farm Animal Clinic
  - Unit of Ruminants
    - ✓ Subunit of Medicine and Surgery
    - ✓ Subunit of Obstetrics and Reproduction
  - Unit of Monogastrics
    - ✓ Subunit of pigs
    - ✓ Subunit of poultry
    - ✓ Subunit of rabbits
  - Unit of other animals of economic importance
  - Ambulatory Unit
  - Biotechnology Unit (embryo transfer, artificial insemination)
  - *Unit of Bee Culture and Pathology*
- Diagnostic Laboratory
- Laboratory of Diagnostic Imaging
- Pharmacy

Each Department is coordinated by its Head and the Departmental General Assembly comprising all members of the academic staff of the Department, and representatives of the undergraduate students (3-5, depending on the number of the academic staff members of the Department) and 1-2 representatives of the technical staff working in the Department. The General Assembly of the Department coordinates teaching and research, allocates the funds among the Laboratories and/or Clinics, and makes proposals to the General Assembly of the Faculty.

The Head of the Department is elected for a one-year term by the General Assembly of the Department. The Head chairs the General Assembly and co-ordinates the function of the Department. The Directors of the Laboratories and the Clinics are elected for a three-year term by the academic staff of the Department, and are responsible for the operation of the respective Laboratory or Clinic. The Clinic or Laboratory Director decides on the management and allocation of the budget, the allocation of space to the various sections or units and co-ordinates the function of the Clinic or Laboratory and the educational and research activities of these units.

It is noted that the various Units and subunits of the two Clinics of the Department of Clinical Sciences have no administrative responsibilities.

Professional Veterinary Medical Associations often make proposals and suggestions to the General Assembly of SVMT on various professional issues.

# 1.1.6 Description of how and by who *the* strategic plan and the organisation of the Establishment are decided, communicated to staff, students and stakeholders, implemented, assessed and revised

The administrative bodies of the SVMT are the General Assembly, the Executive Committee and the Chair and Deputy Chair of the School who are elected by the academic staff and representatives of the undergraduate students and technical staff of the School. The Chair of the School heads the General Assembly and the Executive Committee, and is responsible for coordination of the administration of the School. It should be stressed, however, that the primary decision-making body is the General Assembly. The latter decides on the educational and financial policy, the organisation and the strategy of the School, the curriculum and other educational issues, conveys decisions to the appropriate committees, and determines the allocation of the University funding to the Departments of SVMT. The General Assembly makes proposals to the central administration of AUTH. It should be emphasised that the School has autonomy on educational issues including changes in the curriculum. Neither the University nor the Ministry of Education can change a decision on these matters made by the General Assembly of the School. The General Assembly consists of the Chair, the Vice Chair, the Heads of the Departments (5), and representatives of the academic staff from all Departments (30) the students (5), and the support staff (2). The Executive Committee consists of the Chair, the Deputy Chair, the Heads of the five Departments, and one representative of the support staff. The Executive Committee makes proposals to the General Assembly

of the School and decides mainly on individual matters of the technical staff and undergraduate and post graduate students.

Furthermore, a number of specialised committees are appointed to assist the functions of the School. For example, the Education Committee consists of the Chair and ten representatives of the academic staff, two from each of the five Departments, and two representatives of the undergraduate students. The academic staff members are appointed by the SVMT Chair. This Committee evaluates the curriculum and, after taking into consideration suggestions made by academic staff members via their Department or by students' representatives, proposes to the General Assembly of the School the necessary action.

Some of the other committees functioning within the SVMT include the Strategic Planning Committee, which deals with and proposes to the General Assembly the strategy of the Faculty, and the Research and Ethics Committee, which deals with the research strategy and policy and various ethical issues concerning this policy and also makes proposals to the General Assembly.

All major decisions of the General Assembly are listed on the School website.

Organisational changes relating to Departments, Clinics/Laboratories/Units are decided by the General Assembly, approved by the Deanery and the AUTH and finally by the Ministry of Education. However, the composition of various committees depends solely on the Chair and the General Assembly.

With regard to implementation, assessment and revision of the objectives, strategic plan and organization of the School, please see Standard 11, Chapter 11.1.1 and Fig. 11.1.1. Schematic illustrations of the organisational structured are presented in Annex 2.

#### 1.2 COMMENTS

The last ten years have been characterised by ongoing changes that have affected the objectives of the SVMT. The reorganisation of the curriculum and the restructuring of teaching facilities are now largely in place and are operating effectively in order to achieve the projected goals.

The SVMT objectives are met to a substantial degree as evidenced by the following facts:

- High levels of graduate employability and recognition: Unemployment among veterinary surgeons is still relatively low. Our graduates are often successfully competing for jobs or postgraduate studies abroad. Moreover, many of our graduates hold important positions in administrative bodies in governmental, academic and private organisations throughout the world. In fact, some hold very senior positions in big international pharmaceutical companies. Some graduates are members of the executive committees of State Organisations, while others are presidents or members of committees of scientific associations, European Specialisation Colleges, European Board of Veterinary Specialisation, etc. Graduates are often invited to speak at scientific national or international fora and serve as members of the editorial board of international peer reviewed journals.
- The SVMT, during its 70-years operation, has made a significant contribution to the central administration of the University, with four members of the academic staff having been elected Rectors and two vice-Rectors.
- Some of our graduates are involved in the protection of animal resources and public health, by participating in national management and disease eradication programmes as well as the design and application of schemes to ensure public health and safeguard the safety of food of animal origin.
- The operation of the Farm Animal Clinic and the Dairy Sheep Farm in Kolchiko, in combination with the development and maintenance of collaborations with external farms, have improved significantly our students' training by providing practical knowledge in the fields of farm animal medicine and production.
- Wildlife welfare and conservation is becoming a top priority throughout the country.
- The expansion of postgraduate education by introducing two-year MSc programmes in Small Animal Surgery and Medicine and Anaesthesia and Intensive Care provided new opportunities to veterinary graduates to pursue advanced studies in these areas.
- The commencement of residency programmes recognised by the European Board of Veterinary Specialisation (EBVS) in Veterinary Anaesthesia & Analgesia, Veterinary Dermatology and Poultry Science allowed further specialisation and advanced training of our graduates, and attraction of

- international graduates.
- A number of academic staff members have successfully organised international congresses, conferences, symposia, seminars and meetings.
- The delegation of all decisions to the General Assembly of the School, coupled with the limited decision-making authority of the Chair and the Executive Committee, results in a process that is relatively slow, but the structure is regulated by the Ministry of Education and there is no flexibility for the Universities, Faculties or Schools to implement unilateral changes in this regard.
- The scarcity of permanent administrative personnel, coupled with the practice of contracting staff from private companies, results in frequent replacements and inconsistencies in the delivery of some services. This becomes especially problematic because of the legal requirement that permanent staff must perform some vital administrative activities.
- The emerging culture of extroversion, openness and progressive thinking needs to be consolidated and further developed, manifested in international partnerships, participation in exchange training and visitation programmes, modernised services, and collaborative scientific research with other Schools in Europe and beyond.

### 1.3 SUGGESTIONS

To better achieve the stated objectives while capitalising on Strengths and Opportunities, addressing Weaknesses, and staving off Threats:

- The number of support staff (technicians, administrative, IT support, animal handlers) should be significantly increased.
- More financial support and funding for teaching and research, including further renovation of the old buildings and renewal of equipment, should be sought.
- More than seven years after the implementation of the present curriculum, the SVMT must intensify efforts for proper evaluation of the curriculum's results in view of ever-changing needs and circumstances nationally and globally.
- The provision of additional residency programmes through European Specialisation Colleges and MSc postgraduate programmes should be encouraged.
- Planned major investments of the school include refurbishing the Companion Animal Clinic and Equine Unit, the Farm Animal Clinic and Farm at Kolchiko, moving the Equine unit to Kolchiko, construction of a new intensive care unit and purchase of MRI equipment. The cost of these investments will be covered by State funds and AUTH Research Committee funds.

#### **Standard 2. FINANCES**

#### 2.1 FACTUAL INFORMATION

#### 2.1.1 Description

The higher education system in Greece is public and, by legislation, accessible free of charge to the students. This is a principle which accounts for the lack of any kind of tuition and fees for the Greek students, including free textbooks, free meals (<a href="https://www.auth.gr/en/units/8177">https://www.auth.gr/en/units/8177</a>) and low-cost accommodation (<a href="https://www.auth.gr/en/units/8181">https://www.auth.gr/en/units/8181</a>). Low-cost or free meals are provided for students with family income of less than about 45,000 € (depending on factors like number of children in the family, number of students in the family, place of residence etc.). Similar eligibility criteria also apply for the low-cost accommodation.

The operations of AUTH are financed mainly by the State. Funding covering *capital needs* (*public investment budget*), *salaries* of personnel, and *operating expenses* is determined by the Ministry of Education. In addition, the Property Development and Management Company of AUTH manages the University income from sources other than the state funds and research.

The amount covering the salaries is fixed since the salary of the tenured employees is determined by the rank, years of service and marital status. Thus, the University has no autonomy in this regard. In addition, these funds are provided directly by the Greek Ministry of Education through the Single Payment Authority. As far as the research staff of the Faculty is concerned, their salaries are covered from the research or scholarship grants. Certain educational needs are covered by the employment of non-tenured teaching personnel, whose remuneration is also covered by the Ministry of Education.

The amount provided for operating expenses is determined by the State each year, taking into account the specifics of each University (including number of Faculties and Schools, number of students, etc.). Following a decision by the AUTH Senate, the budget for operating expenses is divided into two major categories: *educational expenses*, handled at the Faculty level, and *other expenses*, handled at central University level.

The allocation of the educational budget among the Faculties and Schools is determined by a fixed algorithm taking into account the factors shown below. The SVMT, as a School providing practical, clinical and laboratory training, receives proportionally a higher budget than Schools providing mainly theoretical teaching (for example in Humanities disciplines). In particular, the educational budget allocation to each Faculty/School is based on the following criteria:

- 1. Science studies
- 2. Humanities/Classical studies
- 3. Number of students
- 4. Duration of studies
- 5. Number of staff members
  - 5.1. Number of academic staff
  - 5.2. Number of Special Technical and Laboratory Staff
  - 5.3. Number of Special Laboratory Teaching Staff

The budget (other expenses) at central University level is assigned by the Senate to different expense categories, including operational expenses (fuel, electricity, water, etc.), subcontracting for cleaning, maintenance, security, library expenses, and health coverage expenses. The University covers all costs for this sort of expenses for Faculties and Schools. The expenses for maintenance of the buildings and those for utilities (water, electricity, fuel, etc.) of the SVMT are covered directly by this budget. The Public Investment Budget is determined by the State and is covering the capital needs of the University. Once the amount of funding is determined by the State, the Rector's Council decides on fund allocation according to the contemporary applications and specific needs. In practice, the Public Investment Budget covers partially the cost of strategic initiatives related to the expansion and the modernisation of the University, for example funding building maintenance or repair works, and major equipment purchase or replacement. A

considerable amount of the Public Investment Budget is distributed among the Faculties of the University to cover expenses for purchasing equipment. The amount given to the SVMT from the Public Investment Budget in 2019 was approximately  $120,000 \in$ . This fund is provisioned for the supply of scientific equipment of value higher than  $30,000 \in$ , also contributing to the educational process.

Distribution of funds to the SVMT Departments follows a decision by the General Assembly after taking into account the number of Units and staff members in each Department. The responsibility for the further distribution to the various units within each Department (Laboratories/Clinics) rests on the Departmental General Assembly.

The students are eligible for free of charge textbooks (one textbook for each course). The amount covering this expenditure is in the order of  $115,000 \in$  yearly and is paid directly by the Ministry of Education. In particular, for the calendar year 2019 this expenditure amounted to  $127,199 \in$ .

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

The main source of non-state funding is from clinical, diagnostic and other services, and externally from research grants.

Funding originating from the University budget is managed through the Finance Office of the AUTH. However, funding from services and research grants is managed through the AUTH Research Committee (<a href="https://www.rc.auth.gr">https://www.rc.auth.gr</a>). The latter withholds overhead charges of 5,8% on funds originating from services provided by the two Clinics, the Diagnostic Laboratory and the Laboratory of Diagnostic Imaging of the Department of Clinical Sciences, and 10% on funds originating from research projects. Funding originating from other sources (such as donations) may be managed through either the Research Committee or the Property Development and Management Company of AUTH.

#### 2.1.3 Overheads

See 2.1.2 above.

#### 2.1.4 Annual tuition fee

National and international students pay no tuition fees to the University.

# 2.1.5 Utilities (e.g. water, electricity, gas, fuel) and other expenditures directly paid by the official authority and not included in the expenditure tables

These expenditures are entirely covered by AUTH and included in Table 2.1.1

#### 2.1.6 On-going and planned investments

Planned major investments of the School include refurbishing the Companion Animal Clinic and Equine Unit, the Farm Animal Clinic and Farm at Kolchiko, moving the Equine unit to Kolchiko, construction of a new Intensive Care Unit and purchase of MRI equipment. The cost of these investments will be covered by State funds and Research Committee funds.

#### 2.1.7 Expected expenditures and revenues for the next 3 academic years

For the next 3 years the annual budget is expected to be the same as the previous years.

#### 2.1.8 Finance allocation

State funds are allocated to AUTH by the Ministry of Education. The University then apportions funds to the different Faculties and Schools. The SVMT General Assembly partitions the allocated funds to the School's Secretariat and the five Departments, which, in turn, further cascade allocations to Laboratories and Clinics. The process and outcome are communicated via the SVMT website.

The total expenditure and revenue of SVMT for the last three calendar years is summarised in Tables 2.1.1 and 2.1.2

**Table 2.1.1** Annual expenditures during the last 3 academic years (in Euros)

Area of expenditure	2018	2019	2020	Mean
Personnel (State funds)	3,455,445	4,787,139	3,915,221	4,052,602
Personnel (School funds)	14,652	10,995	0	12,823
Utilities	473,032	405,541	398,925	425,833
Support of educational activities	36,708	41,923	56,853	45,162
Other	4,420	1,282	160	1,954
Total expenditure (School)	55,780	53,370	57,013	55,388
Total expenditure	4,040,037	5,300,250	4,428,172	4,593,762

**Table 2.1.2** Annual revenues during the last 3 academic years (in Euros)

Revenues source	2018	2019	2020	Mean		
Ministry of Education	20,200	18,757	28,342	23,550		
Personnel (State funds)	3,455,445	4,787,139	3,915,221	4,052,602		
Personnel (School funds)	14,652	10,995	0	12,823		
Utilities	473,032	405,541	398,925	425,833		
Tuition fee (standard students)		Non-anr	dicable			
Tuition fee (full fee students)	Non-applicable					
Clinical / Diagnostic services	474,554	568,860	340,845	461,420		
Textbooks	108,942	111,540	127,199	115,894		
Continuing Education	2,214	0	2,214	2,214		
Other sources	36,708	23,165	28,511	29,462		
Total revenues	4,585,747	5,925,997	4,841,257	5,117,667		

#### 2.2 COMMENTS

The State funding in total is deemed insufficient, with shortages in administrative personnel, especially at Departmental and Laboratory/Clinic level. In addition, there is significant bureaucracy posing a burden on the academic staff undertaking multiple administrative tasks. Nevertheless, several issues concerning funding are under the direct responsibility of the State, therefore solely determined and allocated by it. Still, the State and the University must recognise that veterinary education is more expensive than training in most other science-based disciplines

and, therefore, requires a higher level of funding. Notably, other similar professional training programmes, such as Medicine and Dentistry, are often subsidised by the National Health Service. Although State Universities in Greece possess a certain level of academic autonomy and independence, the Greek Constitution warrants State control upon the Universities, via the Ministry of Education, reflecting primarily the fact that Universities are State-financed institutions. It must be stressed, however, that SVMT has autonomy in deciding how to spend the money allocated to it in addition to the money earned from external services provided. The latter are charged lower overheads than the official rate following a special agreement with the Research Committee, recognising the specific nature of these programmes. However, the funds from services provided at present are restricted mainly to Clinics and certain Laboratories. There is ample scope to extend service delivery from all SVMT units, thereby increasing the generation of external funds. Still, the major prohibitive factor for this implementation is the lack of administrative and technical support personnel to underpin such activities.

There is inadequate provision for replacing and updating the necessary teaching, laboratory and clinical equipment, at regular intervals. In addition, the amount allocated to the School by the State for research is inadequate.

The salaries are lower than those of most of the veterinarians with similar qualifications working in industry and in private practice, and considerably lower than the salaries in Universities in most European countries. However, the academic career in veterinary medicine remains attractive since there is a demand to cover new positions; in fact, those already serving rarely resign to work at other places outside SVMT.

The expenditure for maintenance of the buildings and for utilities (water, electricity, fuel, etc.) of the SVMT is covered directly by the University.

During 2019 the income of the Companion Animal Clinic increased due possibly to Greek Economy improvements and increased provision of high-quality services related to increased admission of second opinion cases.

During 2020 the income of the Companion Animal Clinic decreased due to the Covid-19 lockdown.

#### 2.3 SUGGESTIONS

- Sufficient funds must be sought for the purchase of new equipment and for the replacement of relevant teaching, laboratory and clinical equipment.
- Concerning the personnel, the budget for new and existing positions should be increased.
- In view of the current and future financial constraints, the School should make an effort to increase fund generation, especially by pursuing external research grants.

Given the current financial situation, the opportunity to increase SVMT's income by increasing client service fees may lead to a decrease in demand, and therefore would not be recommended. Instead, the School should adhere to the policy that is being implemented for the last couple of years, namely to maintain top service quality at competitive prices and make efforts to increase its market share.

#### STANDARD 3. CURRICULUM

#### 3.1. FACTUAL INFORMATION

#### 3.1.1. Educational aims and strategy

The aim of the curriculum is to provide students with the knowledge, expertise, and clinical/ practical competences to achieve a successful career in the fields of diagnosis, treatment and prognosis of disease, animal health and production, food safety and public health, and animal welfare. We strive to offer a stimulating and friendly learning environment that will attract highly qualified and motivated students and produce veterinarians of the highest standards, and to provide lifelong learning opportunities and maintain a continuous professional development. On completion of the study programme, our new veterinary graduates will have acquired a thorough knowledge and understanding of the sciences on which the activities of veterinary surgeons are based, and should be able to undertake the tasks of the "Day-one skills" as described by the EAEVE. The current undergraduate curriculum has been in effect since the academic year 2013-14. Studies lead to a DVM degree after the attendance and successful examination on a fixed number of required ("core") and elective courses. The courses for each semester, teaching hours and ECTS are summarized in Annex 3.

### 3.1.2. Regulatory framework

The curriculum is designed by the Education Committee, approved by the SVMT General Assembly and the University Senate, and finally ratified by the Ministry of Education. However, this is the formal process and neither the University nor the Ministry may interfere with the actual content of the curriculum. Furthermore, the Education Committee proposes and the General Assembly decides on any issues related to the curriculum such as the partitioning of hours among the various subjects to avoid overlapping of educational material and optimise the balance between theoretical, practical and clinical teaching. Curricular amendments and corrections are approved by the General Assembly before the end of the academic year and uploaded to the SVMT website to be accessible to staff, students and stakeholders. Successful completion of seven "pre-requisite" core courses is required for the advancement of students to the 4<sup>th</sup> year of studies. These courses are: i) General Histology-Embryology, ii) Anatomy-Histology I, iii) Anatomy-Histology II, iv) Anatomy-Histology III, v) Physiology I, vi) Physiology II and vii) Physiology III. Students have the opportunity to be assessed in these courses in all three examination periods (January, June and September), whereas all other courses are examined twice, at the end of the semester they are taught (January or June) and September. More detail on student assessment is provided in Standard 8.

In every course, educational objectives are set by the academic staff and comprise the minimum expected skills acquired upon the completion of the course. Teaching of courses may not be spread evenly throughout the semester, but courses are often taught sequentially within a semester, in order to provide to the student, the opportunity to focus on a small number of subjects at any given time. In all cases, students have timely access to the educational resources of each course.

#### 3.1.3. Curricular development

The Education Committee continuously monitors the application of the programme. Any curricular overlaps, redundancies, omissions and lack of consistency, transversality and/or integration of the curriculum are identified and corrected.

#### 3.1.4. Core clinical exercises/practicals/seminars prior to the start of the clinical rotations

Prior to the commencement of clinical rotations, all 5<sup>th</sup> semester students are trained under the supervision of teaching staff on Propaedeutics including methods of restraining, clinical and laboratory examination and diagnosis for Companion Animals, Farm Animals and Equines. The students are divided in small groups to gain as much practical experience as possible. Students also practice suturing techniques performed in simulators. The duration of this practical training for each student, is 44 hours.

#### 3.1.5 Clinical rotations

In the context of their clinical training on companion animals, students of the 7<sup>th</sup>-10<sup>th</sup> semesters are grouped and rotate between internal medicine, dermatology, surgery, obstetrics, intensive care, anaesthesiology, ophthalmology, dentistry, diagnostic imaging and clinical pathology. Assisted by postgraduate trainees-veterinarians, they undertake the tasks of clinical examination, collection of diagnostic materials and interpretation of the results, pertaining to companion animals admitted in the Clinic (regular outpatient section or out-of-hour emergency admissions). They also participate in vaccination sessions of owned animals. Students of the 9th and 10th semesters participate in the round-the-clock operation of the hospitalization wards of the companion animal clinic. Students are responsible for receiving, taking history and performing clinical examination under the supervision of postgraduate students and staff. Students take blood samples from the patients and perform ancillary examinations.

During their diagnostic imaging rotation, students assist in radiographic positioning of the patients, help in radiographic evaluation, attend ultrasound examinations and participate in report writing. Administration of anaesthesia and peri-operative monitoring of the patients is performed by one student along with an anaesthesia resident or postgraduate student. Students also assist with diagnostic procedures and clinical pathology service examinations. Finally, they discuss differential diagnosis and treatment with the responsible postgraduate student and Faculty member. Students also assist in surgeries performed by postgraduate students and staff, propose the anaesthesia protocol, do anaesthesia induction and monitoring of the patient, perform hands-on cat spays and neuters under supervision, and assist in bitch spays and castrations. Students are responsible for their cases from receiving to the operating theatre and follow the patients to the wards until discharge. Sometimes, during afternoons, following the obligatory intra-curricular clinical training, students participate in daily rounds depending on the service, and weekly grand rounds of the different services, where they present cases. They also attend seminars presented by postgraduate students. The group of students trained in small animal medicine is divided into smaller subgroups, each working independently, assisted by postgraduate students and supervised by academic staff members. Each day, students actively participate in the examination of all first-or re-admitted cases, as well as the hospitalised animals. After the clinical workup of the cases is complete, each case is discussed with a group of students in the presence of an attending staff member.

Concerning equines, students begin their hands-on training during the 7<sup>th</sup> semester. During the 7<sup>th</sup> and 8<sup>th</sup> semesters, students are expected to take a complete history, fill out the proper documents, carry out a full basic clinical examination and generally familiarise themselves with the animals and learn to follow a case down to a narrow differential diagnosis. During the 9<sup>th</sup> and 10<sup>th</sup> semesters, students are encouraged to become involved in all aspects of a case, namely all the steps mentioned above, but also to perform ancillary testing, discuss diagnosis and treatment options, apply the treatment, and assist in surgical operations. Training in equines takes place either in the Clinic or in riding stables or in the farm of the School of Agriculture. Within the rotation system, the equine subgroup visits riding stables supervised by an equine clinician.

The Unit of Exotic and Wild Animals of the Department of Clinical Sciences was established in 2000. During this time more than 5,000 animals of the Greek wild fauna were treated and hospitalised in its facilities. The animals are brought to the Unit by the Forest and Veterinary Services, the Port Authorities, recognised non-governmental wildlife protection or care organisations or ordinary citizens and in many cases are endangered species protected by international conventions. Indicatively, wild animals that have received veterinary care include

birds of prey, waterfowl, primates, terrestrial and marine mammals. The operation of the Unit is based on the voluntary work of veterinarians, postgraduate and undergraduate students of the SVMT, as there is no permanent staff to deal with the treatment of these animals. The SVMT covers the cost of animal care (housing, medicines, medical supervision, surgeries) from the Hospital income and the *volunteers* cover the costs of feeding and transporting the animals. The unit is also a member of international organisations related to Marine Fauna and Wildlife. Expansion of the existing unit into a large wildlife hospital is under consideration. This facility will enable the treatment of *twice the* number of animals in safe conditions, both for the animals and for the people who work or visit the area.

With regards to clinical training, during the 4<sup>th</sup> and 5<sup>th</sup> year (semesters 7 to 10) of study, students are divided into 3 equally sized groups as follows: one group attends the Companion Animal Clinic, one follows the Farm Animal Clinic, and one group spends its time equally between Diagnostic Pathology and Food Safety. The rotation in the Department of Clinical Studies is the same for the 4<sup>th</sup> and 5<sup>th</sup> year students. Each semester lasts 13 weeks, with 5 working days each week. This means that every student receives 65 days of clinical training per semester. The 4<sup>th</sup> year students stay in the Clinic from 9:00-13:00; the 5<sup>th</sup> year students from 9:00-14:00.

For both semesters, the Companion Animal group is divided into three subgroups (normally 12-14 students each): One subgroup in companion animal medicine, one in companion animal surgery, obstetrics, equine medicine and surgery, and one that is further sub-divided into three subgroups namely a) ophthalmology and exotics, b) anaesthesia and intensive care, and c) diagnostic imaging. As an example, the rotation schedule for the first group of students (group A) of the 9<sup>th</sup> semester is shown in Table 1 (Annex 3). As mentioned before, the same principle applies to all four final semesters of study and all groups of students.

Moreover, students have to do out-of-hours service shifts in both the Companion Animal Clinic and the Farm Animal Clinic. As far as the Companion Animal Clinic is concerned, during the 4<sup>th</sup> year, the out-of-hours shift is from 13:00 till 22:00 and each student has to complete at least 5 shifts per semester (at least 45 hours per semester). At the same Clinic, during the 5<sup>th</sup> year the out-of-hours shift starts at 14:00 and finishes at 09:00 in the following morning; the minimum requirement is also 5 service shifts per semester (at least 95 hours per semester). Students of the 9<sup>th</sup> and 10<sup>th</sup> semesters are rotating daily, including weekends and holidays, on round-the-clock, on-duty shifts in the hospitalisation wards of the Companion Animal Clinic (Companion Animal Medicine, Surgery, and Intensive Care Unit, respectively). Students of the 7<sup>th</sup> and 8<sup>th</sup> semesters are rotating on 12-hour on-duty shifts in the same facilities.

Students of the 9<sup>th</sup> and 10<sup>th</sup> semesters are rotating daily, on round-the-clock, on-duty shifts in the Veterinary Teaching Hospital of the School's facilities at Kolchiko, Lagadas. Students of the 7<sup>th</sup> and 8<sup>th</sup> semesters are rotating daily on 4-hour shifts in the same facility. At the Farm Animal Clinic, students of the 9<sup>th</sup> and 10<sup>th</sup> semesters have to do out-of-hours service shifts in 4 working days per week (Monday to Thursday). The out-of-hours service starts at 14:00 and finishes at 09:00 in the following morning, whilst the minimum requirement is 1 shift per semester (at least 19 hours per semester. In conclusion, each student receives a total of 935 hours of clinical training during daytime and 318 hours from out-of-hours service.

Companion Animal Clinic receives emergency cases, both first and second opinion, 24 hours per day, 7 days a week, 46 weeks per year. Each day, 4 students and 4 postgraduate trainees along with 3 faculty members, a surgeon, an anaesthesiologist and an internist, joined by technical and support staff, run the emergency service. Students are obliged to participate in the aforementioned out-of-hours service shifts except during examination periods. During these intervals, participation in emergency service is voluntary.

The Farm Animal Clinic operates every day (7 days per week) year-round (44 weeks). Two mobile units (ambulatory service) [see also Standard 5] are available every day to visit farms. A member of the academic staff of the corresponding Unit of the Clinic with 1-2 postgraduate students are scheduled to be on duty every day together with a group of undergraduate students. Appointments with clients are scheduled and service is provided on a regular basis or upon request. Ambulatory service is obligatory (core course) for all students of the 9<sup>th</sup> and 10<sup>th</sup> semesters. Furthermore, there

is an out-of-hours emergency service [mobile clinic] (in the afternoon and at night, weekends, periods of examinations and holidays) provided by a member of the academic staff, a postgraduate trainee and volunteer undergraduate final year students. During the training period participation of undergraduate students is obligatory from Monday to Thursday and voluntary from Friday to Sunday. During the examination period it is voluntary.

In the Farm Animal Clinic, students of the 4<sup>th</sup> year of studies are divided in 3 subgroups (normally 12-14 students each) on Monday and in 2 subgroups (normally about 20 students each) from Tuesday to Thursday, whereas on Friday they merge into 1 group (normally about 40 students). The students are trained in the subjects of ruminant medicine, surgery, obstetrics and reproduction, porcine and poultry medicine, biotechnology of reproduction, and laboratory diagnostics. The detailed rotation schedule of the 7<sup>th</sup> and 8<sup>th</sup> semesters is shown in Tables 2 and 3 (Annex 3). Clinical training of the students in the 5<sup>th</sup> year of studies in the Farm Animal Clinic includes both visits to farms (ambulatory service) and in-clinic training for a 26-week period. Students visit ruminant, porcine, rabbit and poultry farms in SVMT vehicles and under the supervision of one faculty member and one-two postgraduate students or interns. Students are divided in 4 groups, each consisting of a maximum of 12 students, who rotate as shown in Tables 4 and 5. Particularly for the ambulatory service, students are rotating between: 1) obstetrics and reproduction, 2) bovine medicine and surgery, 3) small ruminant medicine, 4) porcine medicine, 5) poultry medicine, and 6) rabbit medicine; for on-site training they rotate between: 1) obstetrics, 2) ruminant medicine and surgery, and 3) poultry medicine. Moreover, students in Farm Animal Clinic participate in the activities of the mobile clinic. The mobile clinic's farm visits take place in emergency cases or clinical cases of high teaching importance, with the participation of 2-3 students. The total time students spend with the mobile clinic depends on the location of the farm and the problem that has to be investigated at herd or animal level.

In the context of their clinical training on farm animals, students of the 7<sup>th</sup>-10<sup>th</sup> semesters are grouped and rotate between medicine, surgery, and obstetrics and reproduction. Assisted by postgraduate students, they undertake the tasks of clinical examination, collection of diagnostic materials and interpretation of the results, and implementation of conservative or surgical/obstetric treatment, pertaining to farm animals admitted in the Clinic [regular outpatient or out-of-hour (emergency) admissions]. Students of the 9<sup>th</sup> and 10<sup>th</sup> semesters participate in the round-the-clock operation of the Veterinary Teaching Hospital of the Farm Animal Clinic. Moreover, a major part of their clinical training includes the on-site visit of ruminant, swine, poultry and rabbit farms in order to diagnose, treat and prevent diseases, as well as to assess and improve reproductive performance of the farm animals. More specifically students are trained in taking history and performing clinical examination of admitted cases, performing ancillary testing, discussing differential diagnosis and treatment options, and applying the treatment, performing lung lesion scoring in swine, assisting in surgeries such as exploratory laparotomy in cattle, coenurosis in sheep, displaced abomasum in cattle, hernias, amputations, castration etc. They are also trained in laboratory techniques and performing gross pathology for the diagnosis of avian diseases, in performing clinical examination of the genital tract and rectal palpations, in performing udder suturing (in udders from slaughterhouses), in assisting in caesarean sections, dystocia cases, fetotomies and udder operations (on incoming cases of ruminants). They also assist in herd investigations for ketosis, SARA, mastitis, lameness, failure of passive transfer of immunity in neonatal calves, diarrhoeas, respiratory disease, low fertility indices, low production, increased morbidity and mortality etc., and participate in reproductive management.

#### 3.1.6 Training at slaughterhouses and food processing units

Practical training in food hygiene and public health is organised in relevant facilities outside the SVMT, including slaughterhouses, markets, factories, processing units etc., based on long-established agreements with the Department of Food Hygiene and Technology. The training provides experience to all students in a variety of topics in inspection, processing and distribution of foods of animal origin. Training visits to dairy industries, meat-processing units, fish-processing

units, companies producing frozen foods and frozen ready-to-eat meals, and slaughterhouses are organised for the students of the 6<sup>th</sup>, 7<sup>th</sup>, 8<sup>th</sup>, 9<sup>th</sup> and 10<sup>th</sup> semester. The slaughterhouses for cattle, sheep and pigs, where students receive training during the 8<sup>th</sup> and 9<sup>th</sup> semester, are situated in Lagadas (Tachmazidi Bros), a small city between Thessaloniki and Kolchiko, and in Chalastra (Farma Chalastras S.A.), whereas the poultry slaughterhouse used for training students is situated at Galatista (Karagiannakis S.A.); these sites are within 30, 25 and 40 km, respectively, from Thessaloniki.

Students participating in slaughterhouse training are divided into groups of 8-10 and are trained under the supervision of a member of staff of the Laboratory of Animal Food Products Hygiene-Veterinary Public Health. The duration of each slaughterhouse visit is 3 hours. This practical training, necessary for the qualification of the undergraduate students in meat inspection, requires two semesters (8<sup>th</sup> and 9<sup>th</sup>) to be completed.

The students familiarise themselves with the meat inspection procedure. The students are required to perform standard meat inspection procedures during abattoir visits. They also follow all stages of slaughter, including anaesthesia, bleeding, dressing, evisceration and final preparation of bovine, porcine and small ruminants. During meat inspection, the students are required to perform standard inspection incisions on the head and offal of the animals slaughtered during the visit. Furthermore, during visit to the central fish market of Thessaloniki, the students are trained on the identification of different fish species and comment on the hygiene of the premises.

In the laboratory, the students are trained on the hygiene and spoilage assessment of animal products such as different types of sausages, eggs, fish and shellfish.

The students receive training in products that include different types of pasteurised milk, chocolate milk, sweetened and unsweetened condensed milk, UHT milk, milk powder, yogurt, cultured milk, cream, butter, infant milk formula, cheese and ice cream.

#### 3.1.7 Elective courses

Students can attend elective courses from the 4<sup>th</sup> to the 10<sup>th</sup> semester of study. These are independent courses and not part of any other core courses of the curriculum, although some elective courses can be attended by the students only if they have previously successfully completed certain core courses. The elective courses are described in further detail below. For the successful completion of the undergraduate curriculum at the SVMT, students must have successfully passed elective courses corresponding to a minimum of 20 ECTS; Applications for the attendance of an elective course are submitted in the Secretariat by the students at the beginning of each semester. In case of an excessive number of applications, selection of students is carried out by the academic staff based on student performance in relevant core courses. Students are also allowed to attend courses from other University Schools, not included in the SVMT curriculum, after the course content has been evaluated and approved by the Curriculum Committee of the SVMT.

#### 3.1.8 External (extramural) practical training (EPT)

Extramural practical training is offered to students at selected venues outside the SVMT grounds. This is a complementary educational form, additional to that stipulated by the curriculum of the SVMT. Training takes place during the summer months and collectively lasts three months. The first such session takes place during the summer period following the 4<sup>th</sup> semester of study and lasts one month, aiming at the students' familiarisation with the real conditions in animal production units. Students can choose the type of the farm from a list of collaborating private enterprises or public units which are checked for their ability to offer successful training. Students have to keep a weekly electronic diary of their activities and complete a 10-page questionnaire covering the scientific areas of farm management, animal husbandry, nutrition and environmental protection, which aims to their "directed self-education". Additionally, the students evaluate their extramural training as well as the farm unit with the use of electronic questionnaires. Students are

also evaluated by a person in charge on the farm. All these electronic data are kept, analysed and evaluated by the responsible professor of extramural education. A specific software is used in collaboration with Employment and Career Structure (ECS) office of the AUTH as well as the Centralised Internship Support System for Greek Higher Education Students. The second month of EPT is carried out between the 6<sup>th</sup> and 7<sup>th</sup> semesters and aims to strengthen clinical experience on Farm and Companion Animal Medicine. Extra-mural practical training of the students in companion animal medicine and surgery or Farm Animal Medicine and Surgery is provided in private veterinary practices and clinics; its major goal is to facilitate the introduction of the students to the Clinics (in the context of the forthcoming clinical semesters of the undergraduate curriculum). The third month of EPT is carried out between the 8<sup>th</sup> and 9<sup>th</sup> semesters and aims to increase experience on food hygiene and the industry of foods of animal origin. The student is required to keep an informed record (student logbook). The work is not subjected to grading but confirmation of completion by the supervising faculty member and veterinarian in charge is required for the successful outcome of the studies. External Practical training corresponds to 6 ECTS (300 hrs) in total.

In order to graduate students must complete at least 300 ECTS in 5 years of study (10 semesters), which comprises 274 ECTS in core subjects + 20 ECTS in electives + 6 ECTS in EPT.

#### 3.1.9 Student assessment on core practical/clinical activities

Each student attending the Clinics is provided with a logbook containing all the practicals they have to attend in order to obtain the required training and clinical skills before being allowed to take the final exams. Verification of the attendance of each practical is made by the signature of the faculty member responsible for the specific part of clinical training.

Students are eligible to participate in practical examinations of the Clinics if they:

- 1) Are current with the absence registry
- 2) Have an up-dated student logbook (should be demonstrated on the day of the examination).

Examination on a real clinical case is the major part of the evaluation of the clinical competency of a student. Clinical competency implies that the student is able to:

- Successfully perform diagnostic and therapeutic procedures including, but not limited to, "first day skills" listed below. Students who have exceeded the minimum clinical requirements (e.g., clinical cases, sampling procedures), may be credited in their final clearing grade.
- Make rational and meaningful medical decisions. To this end, the students are allocated in certain dates in the Clinics, to demonstrate their ability to handle a clinical case in the outpatient section of the Companion or the Farm Animal Clinic. Discussion may also extend to cases reported in the student's logbook.

\_

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

Acad. year	A	В	C	D	Е	F	G	Н
			COR	E COURS	ES			
Year 1	311	18		157	89			575
Year 2	319	18		156	176		6	675
Year 3	392	11		83		59	6	551
Year 4	392		28	49	18	394		881
Year 5	169		32	77	21	482	4	785
TOTAL	1,583	47	60	522	304	935	16 <sup>†</sup>	3,467
			EL	ECTIVES	*			
Year 1								
Year 2	54.5							
Year 3	54.5							
Year 4	54.5							
Year 5	54.5							
TOTAL	218							218
		EXTE	RNAL PE	RACTICA	L TRAINI	NG		
Year 1								
Year 2			100					
Year 3			100					
Year 4			100					
Year 5								
TOTAL			300					300
T. C	_	D :	C	. 1 101	CUMUL	ATIVE HO	DURS	3,985

Type of training: 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 (specify); H, total.

<sup>&</sup>lt;sup>†</sup> Visits in farms for hands-on training in biosecurity, sampling, evaluation of farm parameters in the development of infectious disease, and visits in food processing plants.

<sup>\*</sup>Average yearly hours per student, to take 20 ECTS from 2<sup>nd</sup> to 5<sup>th</sup> year of the undergraduate curriculum.

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

Subjects	A	В	С	D	E	F	G	Н
Medical physics	2							2
Chemistry (inorganic and organic	2			4				7
sections)	3			4				7
Animal biology, zoology and cell	10			-				1.0
biology	10			6				16
Feed plant biology and toxic	_							
plants	6							6
Biomedical statistics	18			16				34
Anatomy histology and	115			50	124			200
embryology				50	124			289
Physiology	99			45	6			150
Biochemistry	31			8				39
General and molecular genetics	22			13				35
Pharmacology, pharmacy and	62	10		7	0			07
pharmacotherapy	63	18		7	9			97
Pathology	100			32				132
Toxicology	10			4				14
Parasitology	43			32				75
Microbiology	72			54			6 <sup>†</sup>	132
Immunology	12			9				21
Epidemiology	24			12				36
Professional communication	1							1
Professional ethics	3							3
Animal ethology	4							4
Animal welfare	10							10
Animal nutrition	40			74				114
Obstetrics, reproduction and	110							110
reproductive disorders	110							110
Diagnostic pathology						148		148
Medicine and surgery including	252							252
anaesthesiology	352							352
Clinical practical training in all						722		722
common domestic animal species						733		733
Preventive medicine	30					5		35
Diagnostic imaging	30					2		32
State veterinary services and	12							12
public health	12							12
Veterinary legislation, forensic	13		1	13				27
medicine and certification	13		1	13				21
Therapy in all common domestic	20							20
animal species	20							20
Propaedeutics of all common	25	11		7		24		67
domestic animal species	23	11		,		∠4		07
Animal production, breeding and	96				126			222
welfare - Animal husbandry					120			<i></i>
Economics	20			8				28
Herd health management	39					2		41

Subjects	A	В	C	D	E	F	G	Н
Ecology and environmental protection	23			12				35
Food hygiene and food microbiology- Inspection and control of food and feed	68		2	66				136
Practical work in places for slaughtering and food processing plants					39		10 <sup>‡</sup>	49
Food technology including analytical chemistry	42		1	42				85
Professional ethics & behaviour*								0
Veterinary certification and report writing			13					13
Communication skills	1		43			21		65
Practice management & business	14			8				22
Information literacy & data management		18						18
TOTAL	1,583	47	60	522	304	935	16	3,467

Type of training: 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 (specify); H, total.

Table 3.1.3 Curriculum hours available as electives for the students (years 2-5)

Electives	A	В	C	D	E	F	G	H
Basic sciences	142	28		38	9			217
Clinical sciences	118					144		262
Animal production	46				20			66
Food safety and quality								
Professional knowledge								
TOTAL	306	28		38	29	144		545

Type of training: 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 (specify); H, hours to be taken by subject group.

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)	4	2 <sup>nd</sup>
Companion animals (clinical)	4	3 <sup>rd</sup>
FSQ &VPH	4	4 <sup>th</sup>

<sup>\*</sup>The subject of 'Professional ethics & behaviour' is being taught under 'Professional communication' and 'Professional ethics'.

<sup>&</sup>lt;sup>†</sup>Visits in farms for hands-on training in biosecurity, sampling, evaluation of farm parameters in the development of infectious disease.

<sup>&</sup>lt;sup>‡</sup> Visits in food processing plants.

Table 3.1.5 Practical and clinical rotations under academic staff supervision (excluding EPT)

Types	Discipline (species)	<b>Duration (days)</b>	Semester
Intramural (VTH)	Companion animals	20.2	$7^{\mathrm{th}}$
	Farm animals	21.6	$7^{ m th}$
	Companion animals	20.2	8 <sup>th</sup>
	Farm animals	21.6	8 <sup>th</sup>
	Companion animals	20.2	9 <sup>th</sup>
	Farm animals	16.6	9 <sup>th</sup>
	Companion animals	20.2	$10^{\text{th}}$
	Farm animals	16.6	10 <sup>th</sup>
Ambulatory clinics	Equines	1.5	$7^{\mathrm{th}}$
Ambulatory clinics	Equines	1.5	8 <sup>th</sup>
Ambulatory & mobile clinics	Farm animals	5	9 <sup>th</sup>
Ambulatory clinics	Equines	1.5	9 <sup>th</sup>
Ambulatory & mobile clinics	Farm animals	5	$10^{\text{th}}$
Ambulatory clinics	Equines	1.5	10 <sup>th</sup>
FSQ/VPH & Diagnostic pathology		21.6 (10.8 & 10.8)	$7^{\mathrm{th}}$
		21.6 (10.8 & 10.8)	8 <sup>th</sup>
		21.6 (10.8 & 10.8)	9 <sup>th</sup>
		21.6 (10.8 & 10.8)	10 <sup>th</sup>
Electives*		Duration (hours)**	
Rescue and rehabilitation of wild animals		6	9 <sup>th</sup>
Companion animal medicine I		8	9 <sup>th</sup>
Companion animal medicine II		10	10 <sup>th</sup>
Ophthalmology I		17	9 <sup>th</sup>
Ophthalmology II		17	10 <sup>th</sup>
Dentistry and maxillofacial surgery I		38	9 <sup>th</sup>
Dentistry and maxillofacial surgery II		28	10 <sup>th</sup>
Avian medicine		20	$10^{\text{th}}$

<sup>\*</sup>Elective courses are not included in the rotations and they are offered every Friday for 10 weeks. Each student may receive 1-2 elective courses per semester, and completion of a minimum of 10 elective courses (20 ECTS) are required for graduation.

#### 3.2. COMMENTS

The present curriculum prepares the graduate for the multiple components and requirements of the veterinary profession. Acquisition of "day-one" skills and competences is achieved by providing relevant scientific knowledge, training and clinical experience and by incorporating an assessment process that indicates whether the targets have been met. Furthermore, there is provision for participation of a veterinary surgeon (representative of the Hellenic Veterinary Association) in the Committee of Strategic Planning that may drastically influence the curriculum, by reflecting simultaneously the needs and trends of the profession in our country and of the society.

Concerning curriculum development initiatives, the Education Committee has already initiated (June 2018) an extensive survey among final year students that were asked to comment on various aspects of the current curriculum by filling out a questionnaire including moving certain course subjects to later semesters, the necessity of midterm exams, the number of teaching hours of each

<sup>\*\*</sup> For each elective course, only the total hours of practical and clinical training are listed (lecture hours are not listed).

course and the composition of each section, the volume of theoretical training in comparison to practical/clinical training and the placement and sequence of courses in the timetable to allow successful and meaningful training.

The curriculum guidebook of the SVMT lists the instructor(s) responsible for delivering each teaching hour's content, for all courses. The curriculum aims to confer both the theoretical and the practical knowledge to the students to ensure that the graduating veterinarians will be able to manage successfully the "Day One Skills" as stated and agreed upon by the EAEVE. Within SVMT there are various Committees that function successfully such as the Curriculum Committee, the Committee for Strategic Planning and the Research and Ethics Committee, to name but a few. There is considerable intra- and inter-Departmental co-ordination in teaching, although more can be done in this respect. The SVMT has modern audio-visual and information technology facilities, which improve the quality of teaching and the delivery of knowledge to students. Nevertheless, improvements in terms of equipment/facilities should be sought, for the benefit of both the students and the members of staff.

The pedagogical approach of the School includes the application of modern methods of teaching. Clinical, food hygiene (meat inspection) and special pathology (post-mortem examinations) courses are utilising "case-based teaching" methodology. "Interactive Computer-Assisted Learning" is another pedagogical tool that has also been used by some instructors. Clinical training takes place in groups that are small enough to ensure hands-on experience for all students. In non-clinical practical/laboratory training, groups consist of 20-30 students, however they are supervised by more than one staff members.

Extra-mural training and visits to outside bodies to support undergraduate teaching are considered sufficient. Students contribute to the design and quality assessment of courses and of the curriculum in general, through their participation in the Education Committee and the General Assembly of the School, as well as with the completion of the questionnaires for the evaluation of courses and teaching staff. Integrated teaching approaches, already implemented for several subjects within the SVMT, could possibly be further expanded to integrate pre-clinical and clinical courses.

During the Covid-19 crisis the School locked down its premises and classes and a few practical sessions (when possible) were performed only through the internet using different communication platforms from March 10<sup>th</sup> 2020 until May 25<sup>th</sup> 2020. The School opened again for practical/clinical training of final year students in May 25<sup>th</sup> – July 31<sup>st</sup> 2020. The 3-month closure of the School and the restricted opening thereafter resulted in a significant decrease of case load and income mainly derived from companion animals. However, AUTH closed its Schools and Faculties on November 4<sup>th</sup>, following the declaration of a national lockdown, and only internet teaching is now performed. The Clinical Department was also completely closed.

### 3.3. SUGGESTIONS FOR IMPROVEMENT

- The need for a core course content analysis should be considered, as students are complaining that there is a content overload in the curriculum, i.e. too much content within a given time, and also too much preparation time is needed to pass the various sections, and especially certain courses.
- An expansion of the current curriculum to 5.5 or 6 years to include tracks on clinical or practical training in small and farm animal veterinary medicine will be under consideration by the Education Committee. This expansion will comprise of clinical tracks only including a companion animal track and a farm animal (and equine) track. This expansion will increase the clinical training allowing the students to target on specific areas of clinical veterinary medicine.
- The present curriculum should be properly evaluated over the coming years and thoroughly compared to the old curriculum, for comparative reasons. Furthermore, after having drawn the necessary beneficial conclusions, the composition of each section could also be re-evaluated.
- Finally, relevant decisions should be made after a comprehensive evaluation of the system

specifics and performance has been completed. "Training of trainers" programmes need to be organised by the University on a more regular basis and with an increased scope. Incentives for Faculty members to participate in these programmes may need to be established.

#### **Standard 4. FACILITIES AND EQUIPMENT**

#### 4.1. FACTUAL INFORMATION

The SVMT began its operation in 1950 and was initially situated in the area where the Clinical Department is now located (outside the main University campus). The original building in the main campus was built during the early sixties, while the Clinical Department continued its operation at the original site. Premises for the Clinical Department were built by the end of the 60s. During early 2001 the on-campus building was significantly expanded. The premises at Kolchiko were founded a little earlier, but formal operation of the Farm Animal Clinic and Dairy Sheep Farm started in 2009.

# 4.1.1 Description of the location and organisation of the facilities used for the veterinary curriculum

The physical facilities of the SVMT comprise approximately 30,400 square meters of building surface area (coverage on land about 14,000 m²) and about 220 hectares of land. The building area includes 14,300 m² which are occupied by the Departments (offices, libraries, laboratories or clinics, hospitalisation places, etc.), 7,000 m² which are communal areas (lecture halls, teaching rooms, central administration services, etc.), 4,800 m² of basements (storage areas, rooms for rearing animals for teaching purposes, etc.) and 4,300 m² of buildings in the Kolchiko farm. The Faculty occupies the following sites and buildings.

- The main buildings at the Aristotle University of Thessaloniki main campus
- The buildings of Clinics in Thessaloniki
- The premises at Kolchiko

#### THE MAIN BUILDINGS

The main buildings of SVMT were constructed some 50 years ago and are situated within an area of 1.3 hectares at the University main campus, close to the city centre of Thessaloniki. Their total building surface area is about 11,500 m<sup>2</sup>, of which 6,700 m<sup>2</sup> are occupied by the four Departments (see below), 3,000 m<sup>2</sup> are communal areas and 1,800 are basements.

A new wing attached to the main building was opened in 2001, with a total building surface area of about  $3,200 \text{ m}^2$ . Apart from some Laboratories, it houses the SVMT Secretariat, the Library, a Lecture Hall, two classrooms for group work, office space for the student union etc.

#### THE BUILDINGS OF THE CLINICS

The buildings of the Clinics are situated in an area of 1.8 hectares, close to the Railway Station of Thessaloniki, about 4 km to the west of the main University Campus. The total building surface area is approximately 11,400 m<sup>2</sup>. These buildings were constructed about 40 years ago and have been operational since 1972. Some parts (e.g. the necropsy room) were built later, while the stables are much older, operating since the early 1950s. The following buildings comprise the SVMT Clinics: a) the main two-storey building, which is mostly used by the Clinic of Companion Animals and, partly, by the Farm Animal Clinic, the Laboratory of Diagnostic Imaging and the Diagnostic Laboratory, b) the Laboratory of Pathology (Necropsy Room), c) the Diagnostic Imaging building, and d) the three stables. One of the latter serves as an isolation room for equine patients.

#### THE PREMISES AT KOLCHIKO

The Kolchiko site is situated approximately 35 km north-east of the Thessaloniki city centre and comprises about 200 hectares of land, of which only 55 are suitably licensed for use due to Ramsar convention rules applying to a neighbouring wetland and waterfowl habitat. The site houses the following buildings:

- 1. The Farm Animal Clinic
- 2. A dairy sheep farm

- 3. A building for goat farm
- 4. Supporting rooms and areas
- 5. Isolation area for small ruminants

The **building of the Farm Animal Clinic** has a 2,500 m<sup>2</sup> surface area. It houses the clinical facilities for ruminants, office space for the academic staff, a small diagnostic laboratory, a small lecture hall (25 places), and two large animal isolation rooms accessed from a separate door outside the building. The building also houses two independent furnished apartments, one for the needs of the academic staff, PhD students and residents, and the other for the students who have to stay overnight, while on duty.

The **dairy sheep farm building** (operational capacity of 300 sheep and goats) encompasses an area of 2,171 m<sup>2</sup>. The building houses the main barn and animal handling facilities. It is divided into two main halls (approx. 1,000 m<sup>2</sup> each). One of them is used to house lactating ewes and the other is used for keeping rams, ewes in dry period and yearlings. The area between the two halls is occupied by an automated milking parlour (capacity of 24 ewes) of cutting-edge technology, which allows electronic recording of daily milk production for each ewe; there are also warehouses, offices for academic staff, and a room used to store supplies.

The **goats' farm building** (physical capacity of 350 goats) comprises an area of 900 m<sup>2</sup> and is designed similarly to the dairy sheep building. The goat building is currently not in operation.

Next to the sheep building there is a barn used for storing forages, and a construction made of concrete, which is used to prepare silage.

Among the Kolchiko premises there is also an autonomous building (140 m<sup>2</sup>), which serves as an **isolation room** for small ruminants.

#### 4.1.2 Premises used for lecturing, and group and practical work

**Table 4.1.2.1 Premises for lecturing** 

Hall	Capacity
In the main building of the SVMT	
Central Hall E. Tsiroyiannis	235
Central Hall T. Christodoulou	180
Central Hall S. Michail	90
Lecture Room N. Aspiotis	98
Lecture Room A. Panetsos	56
Lecture Room A	90
Lecture Room Animal Husbandry*	25
Lecture Room B*	24
Lecture Room E	96
In the premises of the Clinics in Thessaloniki	
Lecture Hall A. Spais	113
Lecture Hall K. Vlachos	115
Lecture Hall I. Vikelidis	98
Lecture Room at Kolchiko*	25

<sup>\*</sup> These rooms may also be used for group work.

**Table 4.1.2.2 Premises for group work** 

Room	Capacity
1. Companion Animal Room A	24
2. Companion Animal Room B	24
3. Companion Animal Room C	24
4. Reading Room Medicine	10
5. Reading Room Surgery	10
6. Reading Room Obstetrics	16
7. Necropsy Room	10
8. Reading Room Anatomy I	15
9. Reading Room Anatomy II	15
10. Reading Room Physiology-Pharmacology	20
11. Physiology-Pharmacology Room	30
12. Pathology Room	10
13. Parasitology Room	14
14. Reading Room Food Hygiene	10
15. Reading Room Animal Husbandry	10
16. Catering Room	24
17. PC Room A Main Building	12
18. PC Room Epidemiology & Economics	9

Table 4.1.2.3 Premises for practical work

	Laboratory	Capacity
1	Physiology-Pharmacology	30
2	Biochemistry-Toxicology	28
3	Physiology - Main Lab Laboratory	15
4	Cell culture Laboratory	5
5	Anatomy (room with samples, models etc. for student self-training)	20
6	Histology	30
7	Anatomy (4 dissection rooms x 25 places)	100
8	Animal Nutrition	32
9	Animal Husbandry	30
10	Sensory Analysis Room	12
11	Microbiology	28
12	Parasitology	36
13	Pathology	60
14	Food Hygiene	24
15	Food Technology	25
16	Milk Hygiene and Technology	30
17	Ichthyology	20
18	Necropsy Hall	36
19	Diagnostic Laboratory	18
20	Training Room Surgery (4 tables x 5 places)	20
21	Poultry Medicine	10
22	Artificial Insemination	28
23	Farm Animal Clinic	12
24	Farm Animal Clinic*	16

Laboratories 1-17 are in the main buildings, 18-23 in the Clinics (Thessaloniki) and 24 in Kolchiko. Some of these rooms may also be used for group work.

## 4.1.3 Description of the premises for housing healthy, hospitalised and isolated animals

<sup>\*</sup>One operating room for cattle is also used for hoof trimming.

In the basement of the main SVMT building, in addition to the Laboratory of Development-Breeding of Animal models (see page 30, Experimental Research Facilities), a main Laboratory of Anatomy is located where there is one animal host room with three cages with the capacity to house (for 48 hrs maximum) 12 sheep/goats, or 12 dogs, or1 horse, or 3 cows, or 6 pigs, or 30 birds for student training purposes (license number 428477/4225/January 30, 2014). The cell culture laboratory (Lab. of Physiology) is also located in the same area. There is also a room used for teaching and/or research on Ichthyology, with a preparation room and fish rearing facilities. The SVMT farm at Kolchiko (see description above).

Moreover, the following external facilities are also used for student training purposes, after the necessary agreements with the owners:

- The premises of the farm of the Institute of Reproduction at Ionia, Thessaloniki, approx. 7 km from the city, which belongs to the ELGO Demeter (former National Agricultural Research Foundation, NAGREF). This farm comprises stables for 41 bulls, 13 cows, 6 horses, 100 rams, 60 male goats, 20 boars, and 500 dairy ewes. The Institute also comprises laboratories for semen processing and cryopreservation, semen biochemical analyses, hormonal analyses, embryo manipulation and transfer, and cytogenetics.
- The premises of the farm in the American Farm School at Pylaia, Thessaloniki, ca. 10 km from the centre of the city. The farm houses premises for poultry (one hatchery for 100,000 eggs, 21,500 layers, 20,000 turkeys, and 3,800 broilers) and cattle (stables for 130 cows, lodgements for 130 cows, stables for 190 calves, lodgements for 50 female calves, lodgements for 60 dry-period cows, and one lodgement with eight parturition places, one milking area and one milk processing unit).
- The premises of the farm in the Agricultural Institute of Giannitsa, about 40 km from Thessaloniki, which is also a unit of ELGO Demeter (former NAGREF). The farm comprises stables for 100 cows, 20 new-born calves, and 2,000 sheep.

Table 4.1.3.1 Premises available for hospitalisation

Regular hospitalisation	Species	No. places
	Cattle (adult /calves)	$10^a + 20^b / 15^a + 10^b$
	Horses	10
	Small ruminants	$20^{a} + 10^{b}$
	Pigs	2
	Dogs	38
	Cats	9
	Other (exotics)	17
Isolation facilities	Farm animals and Horses	33
	Small animals	7
	Equines	1

<sup>&</sup>lt;sup>a</sup> Farm Animal Clinic at Kolchiko.

Table 4.1.3.2 Premises for clinical work and student training

Small animals	no. consulting rooms	13
	no. surgical suites	4

<sup>&</sup>lt;sup>b</sup> Farm Animal Clinic in Thessaloniki.

<sup>&</sup>lt;sup>c</sup> Exotic animal hospitalisation area, with a capacity to house terraria (4 places), small rodents (2 places), rabbits and hares (2 places), terrestrial and aquatic turtles (2 places), an aquarium, an ICU (1 place) and other (5 places).

Small animals	Endoscopy, otoscopy	2
Equine and farm animals*	no. examination areas	5 (2 cattle, 1 equine, 2 small ruminants)
	no. surgical suites	6 (4 cattle, 1 equine, and 1 for small ruminants with 4 surgical tables)
Other	no. pre-surgical preparation rooms no. intensive care units no. examination rooms (exotics)	1 (3tables) 1

<sup>\*</sup> Include premises at both Clinics (Thessaloniki) and Kolchiko.

# 4.1.4 Description of the premises for clinical activities, diagnostic services, FSQ &VPH (see also 4.1.2)

#### **SLAUGHTERHOUSE FACILITIES**

The practical training of undergraduate students takes place under the supervision of staff members in the following slaughterhouses: a) the Farma Chalastras S.A., about 25 km southwest of Thessaloniki with a total capacity of 6.451 cattle, 15.578 pigs and 16.605 small ruminants, annually, b) the Tachmazidi Bros (Lagadas), 30 km north-east of Thessaloniki with a total capacity of 2.000 cattle, 7.500 pigs and 26.600 small ruminants and 450 ostriches, annually, and c) the Poultry slaughterhouse (Karagiannakis S.A.), a modern facility comprising a slaughterhouse unit and a meat-processing unit. It is located in Galatista, approximately 40 km east of Thessaloniki.

#### FOODSTUFF PROCESSING UNITS

The Department of Food Hygiene and Technology of the SVMT has access to the following processing units, where the practical training of the undergraduate students takes place:

#### **Dairy industries**

The SVMT students visit a major milk plant, namely, Mevgal S.A. which is situated approximately 50 km west of Thessaloniki. The plant produces a wide range of products (pasteurised milk, yogurts, different types of cheese, butter, milk cream, etc.) and exports to many countries.

#### **Food processing Units**

The meat processing units that are visited by the students of the SVMT are Edesma S.A., and Zlatis S.A. The students also visit Boras (buffalo meat processing unit), Fotiadis farm (black pig meat processing unit), as well as the University Restaurant and the Food Market of Thessaloniki.

# 4.1.5 Premises for study and self-learning, catering, locker rooms, accommodation for on call students, leisure (see also Table 4.1.2.2)

Locker rooms are available in the Clinical Department (3 rooms in the Companion Animals Clinic and 1 in the Farm Animal Clinic). Accommodation for on call students is available in the Companion Animal Clinic (2 rooms) and in Kolchiko Farm Animal Clinic (2 rooms). Leisure rooms and resting areas are available in the Campus and Clinical Department.

# 4.1.6 Vehicles used for student transportation, ambulatory clinics, live animal transportation and cadaver transportation

The School owns two 18-seat mini-buses "Fiat" IVECO (for the ambulatory service) and 3 "Opel Zafira" cars (for mobile service), which are used for the transportation of students to farms for clinical training and services. Transportation of students to farms or other units for non-clinical training in farm animals, food hygiene and technology, fish diseases, and ecology and protection

of the environment is performed by rented buses (with drivers), the rental expenses being paid by the University. Ambulatory service is described in Standard 5. There are also 2 trailers used for horse transportation.

### 4.1.7 Equipment used for teaching purposes and clinical services

### **Diagnostic laboratories**

There is a central Diagnostic Laboratory on the first floor of the Unit of Internal Medicine at the Department of Clinical Sciences (Thessaloniki), which covers the needs of both the companion and farm animal clinics and has an independent administration. This is a fully equipped laboratory with haematology, cytology and clinical chemistry analysers. It performs analyses for approximately 16,500 biochemical parameters and 3,150 complete blood counts for 1,800 cases yearly (clinical cases and research). Since 2014, the diagnostic, teaching and research work of the Laboratory has been further expanded in the field of infectious disease diagnostics, thus performing approximately 3,000 molecular tests and 2,000 immunological tests yearly. It also performs analyses for customers outside the SVMT. Moreover, a small diagnostic laboratory has been established at the Farm Animal Clinic in Kolchiko, equipped with one biochemistry analyser (VETSCAN vs2) and one haematology analyser (VET ABC). Basic diagnostic tests can also be performed during the visits of the ambulatory clinic to the farms.

The Department of Clinical Sciences was recently equipped with a fully automated analyser for microbial identification and antimicrobial susceptibility testing (VITEK 2, Biomerieux), in order to further support its routine diagnostic work. The availability of this equipment is expected to result in more rapid results, targeted use of antimicrobials and enhanced antimicrobial stewardship. There is also a Laboratory of Diagnostic Imaging in an individual building inside the area of the clinics.

The old rooms of the Laboratory of Obstetrics are now being modified into a modern unit for Biotechnology of Reproduction and Sperm Technology.

The Laboratories of Microbiology and Parasitology provide diagnostic services for microbiological and parasitological analyses, while Pathology also provides necropsy and biopsy services. In addition, the Laboratory of Microbiology and Infectious Diseases possess ISO 9001 for microbiological/immunological tests for diagnostic and research purposes and provides diagnostic and research services for clients, clinics and teaching, and had been appointed as an official Training Centre for the European College of Veterinary Microbiology.

Samples for specific analyses (e.g. for hormones, enzymes, thyroid function tests etc.) are sent to other laboratories in Greece or abroad. For specific toxicological analyses the Veterinary Laboratories of the Ministry of Agriculture in Athens and Patras are used.

#### Central clinical support services

The Laboratory of Diagnostic Imaging is housed in an independent building that is situated between the buildings of the Surgery and Internal Medicine Units of the Companion Animal Clinic. It is a central diagnostic imaging service for the companion and farm animal clinics, equipped with digital radiographic and ultrasound equipment for companion and farm animals. Recently, a Scan Computed Tomography System (16 slices, Optima GE Healthcare, Germany) with Picture Archiving and Communication System (PACS), a new X-ray system with fluoroscopy (Axion Iconos R100, Siemens, Germany), and a portable ultrasonographic system (Midray M5) have been installed in the Laboratory.

The dental examination and treatment room is also equipped with a new dental unit and a dental radiography system, including a dental digital imaging system.

The anaesthesia preparation, recovery, and critical care rooms are equipped with modern facilities for the administration of local and general (injectable and inhalational) anaesthesia, to both small and large animals. A wide range of modern monitoring equipment is also available.

The unit of surgery is equipped with laparoscopic facilities as well as modern surgical technology devices (ligasure), a surgical microscope and phacoemulsification technology.

Other diagnostic facilities include video-based endoscopic (gastrointestinal, respiratory and lower urinary tract), electromyographic and video otoscopic equipment, as well as a retinograph. In addition, the ambulatory clinic offers some diagnostic imaging work (e.g. ultrasound) on the farm as well as for horses.

#### **Experimental Research facilities**

The Department of Microbiology and Infectious Diseases includes Laboratories of virology, bacteriology, serology, ELISA and molecular techniques, as well as a P3 negative pressure laboratory and an experimental high biosecurity complex with 24 negative pressure kiosks under the distinctive name "Kiosks for Restricted Infectivity Testing on Animals under Safety" (registration number EL-54-BIOexp-12).

The Laboratory of Development-Breeding of Animal Models and Biomedical Research was founded in 2017 (Government Gazette 1664/17-5-2017) and operates under the supervision of the Faculty of Health Sciences of the AUTH. The Laboratory is located at the ground floor of the SVMT main building. It was recently renovated and upgraded to a state-of-the-art facility, with improved conditions for laboratory animal housing and usage, as well as improved working and training conditions. Importantly this upgrade will improve the quality of the research carried out. The Laboratory occupies 400 sq. m., can host 900 rats, 4,500 mice and 18 rabbits and is equipped with a state-of-the-art infrastructure (individual ventilated cages, cage and rack washer, bottle filler, laminar flow chambers, sterilizer, deep freezer etc.).

# 4.1.8 Strategy and procedures for facility and equipment procurement, maintenance and upgrade

Maintenance and upgrading of current equipment are performed through the QA system of the Companion Animal Clinic, the Farm Animal Clinic, the Diagnostic Laboratory and the Laboratory of Diagnostic Imaging. The Quality Management System of the SVMT was certified as meeting the EN ISO 9001:2015 (Standard 11). Strategy for purchase of new equipment is decided every year and approved by the Directors of the Clinics or Laboratories. Purchase of high cost equipment is decided by the Department and approved by the General Assembly.

## 4.1.9 Waste management and biosecurity (see also standard 5)

The central administration of the AUTH (<a href="https://www.auth.gr/en/office/8296">https://www.auth.gr/en/office/8296</a>) has assigned the total management (collection and disposal) of waste and dangerous materials to contracted specialised companies. For this purpose, the waste materials are temporarily stored in specially designed containers (200 litres each), located in designated areas in the SVMT. The barrels are used for the storage of xylol, formaldehyde, liquids for x-ray development (although they are only rarely used for educational purposes), organic solvents (not halogens), other laboratory chemicals (waste from biochemical, haematological analyses etc.), and empty containers (chemical, pharmaceutical etc.). Whole carcasses, tissues and organs are kept in the freezer until processing by the contracted company.

Cadavers are obtained mainly after death or euthanasia of a) animals treated in the Clinics of the School of Veterinary Medicine, b) cadavers transported from different sites of death to be examined by necropsy, and c) animals destined to slaughter, transported and euthanised in the premises of the School of Veterinary Medicine. Handling and decontamination of materials follow the Biosafety & Biosecurity Standard Operating Procedures of the SVMT (<a href="https://www.vet.auth.gr/files/site\_docs/">https://www.vet.auth.gr/files/site\_docs/</a> bio\_guidelines.pdf). The cadavers of animals used for student training are kept under refrigeration and collected and decontaminated by incineration by the company Kafsis (<a href="http://www.kafsis.com/">http://www.kafsis.com/</a>), a contracted company by the Aristotle University of Thessaloniki. Smaller material of animal origin (less than 1 kg) is decontaminated (autoclave or equivalent) and further deposited in the University garbage collection system.

According to the relevant legislation, special guidelines on the collection and disposal of dangerous chemical and biological materials are available to all laboratories and clinics. Biosecurity measures are implemented in all laboratories and Clinics of the SVMT. Assessment

and revision of those measures is performed by the Biosecurity Committee of the SVMT.

#### **4.2 COMMENTS**

The available buildings are considered to be generally sufficient for serving the needs of teaching and training of undergraduate students. Since the previous EAEVE evaluation, several improvements have been made, as outlined above.

The rate of equipment renewal is generally considered moderate. Occasionally, renewal rate has been high, through external research funding or by using part of the income from services. Thus, a considerable part of the facilities and equipment is contemporary. In a recently conducted survey of all SVMT academic staff, the majority felt that the equipment is only partly sufficient for research purposes, while just one in four considered it completely sufficient. Evaluating the facilities and equipment for teaching purposes, the vast majority of the academic staff stated their partial or complete satisfaction.

The maintenance of buildings is dictated by the general policy of AUTH. The University comprises 42 Schools and Faculties and the majority of the buildings are old. Nevertheless, the old buildings of the Clinics and the old wings of the buildings in the University campus need better maintenance.

#### 4.3 SUGGESTIONS

Although the facilities at Kolchiko are sufficient for the time being, a potential increase in case load will lead to an increased need for additional buildings for other species of farm animals, and for rooms for educational purposes and for members of staff.

Transportation to Kolchiko is also an issue that needs to be satisfactorily addressed. At present, students have difficulties in accessing the farm, especially during non-working hours.

The School should continue its efforts to find ways to finance further renewal of its educational and especially research equipment.

Extensive refurbishing is required to the buildings of small animal clinics, which were built in the end of the sixties.

Purchase of Magnetic Resonance Imaging for the Laboratory of Diagnostic Imaging, as well as a flow cytometry instrument for the Unit of Biotechnology of Reproduction (Farm Animal Clinic) are under consideration.

# STANDARD 5. ANIMAL RESOURCES AND TEACHING MATERIAL OF ANIMAL ORIGIN (see also Standard 3 Curriculum)

#### 5.1 FACTUAL INFORMATION

#### **5.1.1 Purpose**

Live animals, carcasses and materials of animal origin are used for student training in order to acquire Day One competences.

#### **5.1.2 Strategy**

The following is a description of the process 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.

## **BASICSCIENCES**

#### **ANATOMY**

The following are used for practical anatomy training:

- Live animals: Students are trained in small groups, on anatomical features of live healthy horses at Ziogas animal farm, Lefkohori, cows at the American Farm School Perrotis College, as well as dogs at the 3<sup>rd</sup> Military Veterinary Hospital.
- Anatomical models: For Anatomy classes, plastinated specimens of the circulatory system and the brain are used as teaching material. All viscera are available for teaching either as plastinated or plastic specimens. In addition, whole skeletons and single bone specimens of scull, limbs and thorax from domestic animals are used both for teaching and studying. Radiographs are also used in conjunction with gross anatomy classes. Effort is made to purchase virtual anatomy software for complementing anatomy classes. Domestic animals (pigs, chicken) for Anatomy dissection classes are purchased from a licensed animal facility, from the competent authorities. Health certificate provided by a veterinarian, is mandatory for admission at the University premises. On admission at the Laboratory of Anatomy, Histology and Embryology, animals are inspected by the veterinarians of the Department. Sheep used for Anatomy dissection classes are provided by Kolchiko clinics, whilst dogs are offered by the necropsy department. Animals are euthanized by trained Anatomy staff, under deep anesthesia to minimize suffering, preferably on the same day of admission. Usually, most organs are well preserved, and can be stored for future use in Anatomy classes, or for the preparation of histological specimens for Histology classes, in order to minimize the total number of animals used for teaching purposes. Specimens kept in formalin are reduced to minimum. Formalin storing solution is gradually replaced with the alternative ANAPAT Formol gel (10% buffered in a jerry can), which is a nonvolatile agent.
- All procedures (including euthanasia) are strictly under the EU Directive 2010/63/EU on the protection of animals used for scientific purposes. The Laboratory of Anatomy, Histology and Embryology is a state licensed facility with code number: EL-54 BIOexp-24.

#### **CLINICAL SCIENCES**

All the units of the Companion Animal Clinic are fully operational for 46 weeks per year and Farm Animal Clinic for 44 weeks. Animal owners can admit their animals to the clinic preferably by making a telephone appointment for consultation. The number of consultation days is five per week and the admission hours for new small and large animal cases are from 09:00 to 13:00, although sessions last until 16:00.

Notably, following an agreement with the animal welfare societies (e.g. Municipality of Thessaloniki), the number of dogs and cats admitted to the companion animal clinic for neutering and, mainly, ovariohysterectomy (OHE) has recently considerably increased. Thus, the students

have the opportunity to be actively involved in the performance of an OHE as well as the administration of general anaesthesia in these animals.

The number of hospitalised animals is included in the respective numbers of animals received for consultation, therefore they are not considered in the calculations of the averages, which are used to derive the various ratios. Poultry cases admitted to the respective Unit are sick or more often dead animals to be examined and necropsied for diagnostic purposes. Therefore, these have been included in Table 5.5. It is noted that these numbers do not include cases admitted for reexaminations (1,064, 1,062 and 1,037 in 2017, 2018 and 2019, respectively). Although the latter are not considered to be new cases, they are mostly re-admitted a long time after the first admission and, therefore, examined by different students.

Transport of companion and farm animals to and from the relevant Clinic is the responsibility of the owners.

In the Clinic of Companion Animals, only second-opinion emergency cases may be admitted outside the regular admission hours. However, re-admission as emergencies of patients examined and treated in the clinic, is allowed on a 24-hour basis, seven days a week. On-call 24-hour emergency service is also offered to equine patients; owners or referring veterinarians may contact the attending faculty member and send the equine patient to the clinic.

Concerning farm animals, animal owners can contact on-duty postgraduate students or interns at any time, 7 days a week, in case of an emergency. This service is free of charge for the animal owners who collaborate with the Clinic for teaching purposes. If deemed necessary, a Faculty member accompanied by 2-3 students (among those on-duty in the Farm Animal Clinic) and by 1 postgraduate student or intern, visit the farm using one of the mobile ambulances of the Clinic to provide care to the sick animals. As far as equines are concerned, emergency cases can be admitted on a 24-hour-basis, 7 days per week.

Apart from live animals used for training students, organs and parts of carcasses are used as teaching materials in order to increase hands-on-practice of the students. Occasionally, whole or part of dead animals (mainly dogs) from the necropsy room is used for training of both under- and post-graduate students in surgery. The material is either unfixed or frozen and thawed before the training course. Moreover, dead young calves are collected by the mobile clinic and are deepfrozen for future use. During classes, these calves are thawed and put in a special apparatus resembling the uterus of a pregnant cow in various faulty dispositions. The students are asked to handle these dispositions and pull out the calf. After completing this exercise, the students fetotomise the carcasses. Organs or parts of carcasses are also used for other teaching purposes. Udders, uterus, ovaries and digits of ruminants are being collected from the abattoirs for intramammary injections, suturing, palpation, and claw trimming. The level of clinical services offered by the Faculty to companion and large animals (horses and food animal species) is superior to that of private practitioners in terms of facilities, equipment, hours of service, expertise and responsiveness.

The School accepts first and second-opinion cases. The proportion of first- and second-opinion cases varies among the species and the different clinics (Table 5.1.5).

The School has a very good collaboration with local associations of private practitioners of all animal species. Practitioners are encouraged to communicate with staff members and refer cases for consultation, treatment, hospitalisation or special diagnostic procedures (endoscopy, diagnostic imaging, electrophysiology etc.). On certain occasions, the School organises continuing education seminars with practical training for private practitioners or makes the premises of the clinics available for organising similar events. Furthermore, private practitioners, who are well acknowledged in a particular specialisation area, are invited annually to lecture to students.

There is a number of Diplomates of European Colleges of Veterinary Specialisation among the academic staff and several others that have expertise in a particular field of Veterinary Medicine without having board certification. In companion animals, faculty members are specialised in internal medicine, dermatology, diagnostic imaging, anaesthesia analgesia and intensive care,

orthopaedic and soft tissue surgery, haematology, clinical oncology, endocrinology, neurology, gastroenterology, cardiology, endoscopy, dentistry, ophthalmology, and exotic animal medicine. European board-certified specialists exist for dermatology, anaesthesia and analgesia, diagnostic imaging, clinical pathology, animal reproduction, bovine health management, small ruminant health management, porcine health management, veterinary parasitology, pharmacology and toxicology, veterinary public health and veterinary microbiology.

The School maintains collaborations with the following institutions, with the aim of providing students with practical training on their premises (see also chapter 6.3):

- The National Agricultural Research Foundation at Ionia, Thessaloniki.
- The American Farm School at Pylaia, Thessaloniki.

#### ON-FARM TEACHING AND OUTSIDE PATIENT CARE

#### AMBULATORY AND MOBILE CLINIC

The Clinic of Farm Animals offers consultation services to selected cattle, small ruminant, pig and poultry farms that collaborate with the SVMT and allow to be visited by students and Faculty members in return. Occasionally, farms that are serviced by private practitioners are also visited. The ambulatory and mobile clinics operate 5 and 7 days per week, respectively, for 44 weeks. Three vehicles that have been modified as mobile ambulances and two mini-buses are used for the farm visits. One faculty member and 1-2 postgraduate students/interns are on duty every day. A small group of 5<sup>th</sup> year students (following a rotation schedule) are on-duty from Monday to Thursday.

A list of the farms to which the mobile units have access is given in Annex 4. It is estimated that across all mobile units, approximately 90% of farm visits take place during normal working hours, while the remaining 10% refers to out of hours emergency services. In the companion animal clinic, emergency cases account for about 5% of the case load.

#### **ANIMAL PRODUCTION**

Training in Animal Production takes place at the VEE farm as well as other collaborating institutes and farms and covers all farm animal species. A detailed list of the training venues by species can be found in Annex 4.

The VEE farm was established in 2009 in the premises of Kolchiko, consisting of a dairy sheep flock. The flock (currently ca. 150 sheep) is used for the practical training of students, which has now been incorporated into the undergraduate curriculum, starting as early as the first year of studies (see Chapter 4). During this training, students gain competence in the management of dairy sheep and acquire important knowledge on key husbandry issues in sheep production (animal handling, housing and feeding regimes, preventive veterinary medicine and management of epidemic diseases, application of prophylactic schemes and treatment on individual animal and herd level, reproduction, growth, milk production, and disposal of animals and their products). Particular emphasis is given to ensure that all actions are performed humanely and competently, and make students aware of the risks to human health by inappropriate animal approach and handling. In addition to achieving the required competencies, special consideration is given to the welfare of animals used in practical training as well as the health and safety of teaching staff and students.

In particular, the animal husbandry course at the Kolchiko farm aims at developing the following skills and competencies:

- A good understanding of the structure, types and main components of dairy sheep enterprises (including their economics e.g. cost of milk production, cost of specific diseases etc.).
- Techniques for approaching, catching, moving, handling young and adult sheep.
- The ability to examine the animals' teeth and to assess age.
- The ability to evaluate body condition score.
- The ability to examine the animals' feet and to perform routine paring.
- Familiarisation with the use of drenching gun, administration of boluses and anthelminthics.

- The offering of lambing assistance; active involvement in the care of new-born lambs and application of basic husbandry procedures (marking, tail docking, feeding of colostrum).
- Familiarisation with the injection of medicines and vaccination protocols (all treatments and vaccinations are performed by students).
- Familiarisation and understanding of the normal behaviour of healthy male and female sheep.
- Familiarisation of reproductive techniques and the management of male and female sheep during the mating season (e.g. insertion and removal of intravaginal sponges and injection of melatonin boluses).
- Familiarisation with the operation of the milking parlour and its technical characteristics as well as the practical assessment of biosecurity measures to produce high quality milk.

One 3-hour practical training session in "Farming and Pathology of Aquatic Organisms" is held every year for the students of the  $6^{th}$  semester at the rearing facilities of the Ichthyology Laboratory, in the main building of the SVMT (using live fish or other aquatic organisms). This Laboratory consists of three rooms, equipped with aquariums, where fish and shellfish can be maintained. Students have the opportunity to visit these aquarium rooms, see the operation of the recirculation systems, perform clinical manipulations (application of treatments, blood sampling, vaccination, anaesthesia) and familiarise themselves with shellfish species, especially those that are not farmed (horse mussel, oysters, clams). The students also visit commercial farms located close to Thessaloniki and have the opportunity to see all the necessary installations and equipment for fish and shellfish farming. Students of the 6<sup>th</sup> semester, following the elective course "Specific topics on Farmed Aquatic Animals Pathology", are trained in the same facilities for an additional 6 hours. Basic principles of bee diseases and apiculture are taught as a separate course. Training is provided in bee anatomy, bee hives and collection of specimens for laboratory examination, and diagnosis of infectious and parasitic diseases, as well as toxicoses. Practical training takes place in the Laboratory of Parasitology and Parasitic Diseases and in the farm of the Faculty of Agriculture (AUTH), following an agreement between the two institutions. Additional training on this subject is offered to those students enrolled in the two respective elective courses.

### 5.1.3 Cadavers and material of animal origin for training (see also 5.1.1)

Cadavers are obtained mainly after death or euthanasia of a) animals treated in the Clinics of the School of Veterinary Medicine, b) cadavers transported from different sites to be examined by necropsy, and c) animals destined to be slaughtered, transported and euthanized in the SVMT premises. Handling and decontamination of materials follow the Biosafety & Biosecurity Standard Operating Procedures of the School of Veterinary Medicine (https://www.vet.auth.gr/files/site\_docs/bio\_guidelines.pdf); see details in 4.1.9.

### 5.1.4 Hands-on student involvement in clinical procedures

Detailed information related to this paragraph is provided in Standard 3 CURRICULUM.

5.1.5 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)

Detailed information is provided in Standard 3.

5.1.6 Procedures used to allow the students to spend extended periods in discussion, thinking and reading to deepen their understanding of the case and its management

Detailed information is provided in Standard 3.

### **5.1.7 Patient Record System**

Since 2009 in the Companion Animal Clinic and 2010 in the Farm Animal Clinic case records are kept using an electronic system (e-vet). Each Clinic also keeps detailed individual records of each patient. The electronic system provides the opportunity for easy retrieval of the data. The system is accessible to all students for teaching purposes. In the Companion Animal Clinic, a new database (i-vet) has been implemented in the past 2 years (2019 and onwards), with more advanced features such as an appointment scheduler and financial transactions log, as well as an easier and more comprehensive interface.

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

The Ethics and Welfare Committees of the SVMT are responsible for issues of animals used for education and research. Permission of the Committees is required to proceed in educational or research activities.

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

The procedures concerning the above matters are proposed by the Education Committee and the relevant Department and decided by the General Assembly. All procedures are described in the curriculum and in schedules issued by each clinic or laboratory are uploaded to the website of the SVMT. The Education committee along with Department Heads and Clinic Directors are responsible for implementation, assessment and revision of the training. Final decisions are taken however by the General Assembly. Revisions and amendments of the programme are decided in the May meeting of the General Assembly.

Table 5.1.1 Number of materials used in practical anatomical training per student

Dog	2018	2019	2020		
Live animals <sup>1</sup>	0.03	0.03	0.03		
Cadavers <sup>2</sup>	0.07	0.07	0.07		
Cadaver parts	limbs, brain, l	iver, lung, stomach, small i	intestine, heart		
Specimen	0.04 (skeletons) 0.04 (skeletons) 0.04 (skeletons)				
Disconnected	bones disconnected from four skeletons				
skeletons (bones)					
Radiographs		all, fore limb, hind limb, tru			
Anatomical models	animal n	nodels and models of various	us organs		
Computer assisted		Novartis Animal Health			
teaching		Tio vario i initiai i ioanii			
Ruminants		T	T		
Live animals <sup>3</sup>	cow 0.03	cow 0.03	cow 0.03		
Cadavers <sup>4</sup>	sheep 0.10	sheep 0.10	sheep 0.10		
Cadaver parts	limbs, brain, l	iver, lung, stomach, small	intestine, heart		
Specimen	0.08 (sheep skeletons)	0.08 (sheep skeletons)	0.08 (sheep skeletons)		
Specimen	0.02 (cow skeletons)	0.02 (cow skeletons)	0.02 (cow skeletons)		
Disconnected	bones disconnected	bones disconnected	bones disconnected		
skeletons (bones)	from 4 sheep and 4 cow	from 4 sheep and 4 cow	from 4 sheep and 4 cow		
skeletolis (bolies)	skeletons	skeletons	skeletons		
Anatomical models	animal n	nodels and models of various	us organs		
Other					
Cadavers <sup>5</sup>	pig 0.03	pig 0.03	pig 0.03		
Cauavers	chicken 0.07	chicken 0.07	chicken 0.07		
Cadaver parts	limbs, brain, l	iver, lung, stomach, small i			
	pig skeletons 0.04	pig skeletons 0.04	pig skeletons 0.04		
	cat skeletons 0.03	cat skeletons 0.03	cat skeletons 0.03		
Specimen <sup>6</sup>	rabbit skeletons 0.03	rabbit skeletons 0.03	rabbit skeletons 0.03		
Specimen	chicken skeletons 0.03	chicken skeletons 0.03	chicken skeletons 0.03		
	monkey skeleton 0.01	monkey skeleton 0.01	monkey skeleton 0.01		
	human skeleton 0.01	human skeleton 0.01 human skeleton 0.01			
Circlatons (honos)	bones disconnected	bones disconnected	bones disconnected		
Skeletons (bones)	from 4 pig skeletons	from 4 pig skeletons	from 4 pig skeletons		
Anatomical models	animal m	nodels and models of various	us organs		
Four dogs at the clinical department					

<sup>&</sup>lt;sup>1</sup>Four dogs at the clinical department.

<sup>&</sup>lt;sup>2</sup>Three dissected animals in formalin and 3-5 animals from the necropsy room.

<sup>&</sup>lt;sup>3</sup>Four cows at the SVMT Clinical Department or the American Farm School Perrotis College.

<sup>&</sup>lt;sup>4</sup>Twelve sheep purchased specifically for dissection purposes.

<sup>&</sup>lt;sup>5</sup>Four (4) pigs and eight (8) chicken purchased specifically for dissection purposes.

<sup>&</sup>lt;sup>6</sup>The total number of complete skeletons of all species is 31. There are also individual bones disconnected from 20 skeletons of all species.

Table 5.1.2 Healthy live animals used for preclinical training (animal handling and production, physiology, propaedeutics)

Species	2018	2019	2020	Mean
Cattle	15	15	15	15
Small ruminants	80	80	80	80
Pigs	3	3	3	3
Companion animals	6	6	6	6
Equine	1	1	1	1
Poultry and Rabbits	39+5	39+5	12+5	35
Physiology: Wistar rats and New Zealand rabbits	60+12	60+12	60+12	72
Pharmacology: New Zealand rabbits	25	25	0	16.7

Table 5.1.3 Number of patients seen intra-murally

Species	2018	2019	2020	Mean
Food-producing animals				
Cattle	12	16	18	15.3
Small ruminants	58	120	66	81.3
Pigs	-	-	1	-
Other farm animals				
Equine	107	115	72	98
Poultry	495	654	582	577
Rabbits	-	_	-	_
Companion/exotic animals				
Companion animals	4,008	3,653	1,218	2,959.7
Exotics	112	141	110	123
Birds	86	64	8	52.7
Wild animals	32	34	43	36.3

Table 5.1.4 Number of patients seen extramurally (seen by the ambulatory/ mobile clinic) in the past three years

Species	2018	2019	2020	Mean
Food-producing animals		•		
Cattle <sup>1</sup>	235	374	342	317
Small ruminants <sup>2</sup>	103	77	119	99.7
Pigs	327	349	384	353.3
Other farm animals				
Equine	271	252	202	241.7
Poultry (flocks)	10	10	10	10
Rabbits (production units)	92	101	88	93.7
Aquatic animals	80	100	38	72.7

<sup>&</sup>lt;sup>1</sup>During the visits to cattle farms, students are also trained in pregnancy and infertility diagnosis by rectal palpation. The number of diagnoses is 474, 619, and 846 for 2018, 2019 and 2020, respectively. Moreover, a faculty member together with doctoral and postgraduate students visit regularly cattle farms to perform functional and corrective claw trimming. Number of cows trimmed are 275, 665 and 887 for 2017, 2018 and 2019, respectively.

<sup>&</sup>lt;sup>2</sup>During the visits to small ruminant farms, students are also trained in vaccinating the animals, and in oestrus synchronization by injecting melatonin.

Table 5.1.5 Percentage (%) of first opinion patients used for clinical training (both in VTH and ambulatory clinics)

Species	2018	2019	2020	Mean
Cattle	90	90	90	90
Small ruminants	50	50	50	50
Pigs	90	90	90	90
Companion animals	40	30	30	40
Equine	20	20	20	20
Poultry and Rabbits	90+90	90+90	90+90	90+90
Exotic pets	80	80	80	80
Aquatic animals	90	90	90	90

Table 5.1.6 Number of necropsies over the past 3 years

Species	2018	2019	2020	Mean
Farm animals				
Cattle	23	21	17	20.3
Small ruminants	94	111	91	98.7
Pigs	48	23	18	29.7
Other farm animals				
Equine	11	14	9	11.3
Poultry	495	654	582	577
Rabbits	23	49	31	34.3
Total farm animals	694	872	748	771.3
Companion/exotic animals				
Dogs	250	283	191	241.3
Cats	63	65	65	64.3
Exotics-Wild animals	22	25	14	20.3
Total companion/exotic animals	335	373	270	326

Table 5.1.7 Number of visits to farms per student for training in Animal Production and Herd Health Management

Species	2018	2019	2020
Ruminant and Pig herds	15	15	15
Poultry and farmed Rabbit units	7	7	7

**Detailed schedule in current program of studies** 

Animal anguing	Year of	Type of	No of visits
Animal species	studies	training	per student
Pig	1 <sup>st</sup>	herd visit	1
Pig	2 <sup>nd</sup>	herd visit	3
Ruminant (dairy cattle, sheep)	1 <sup>st</sup>	herd visit	3
Ruminant (dairy and beef cattle, goat, sheep)	2 <sup>nd</sup>	herd visit	8
Poultry (broiler, layer)	1 <sup>st</sup>	unit visit	1
Poultry (broiler, layer)	$2^{\text{nd}}$	unit visit	3
Rabbit	$2^{\text{nd}}$	unit visit	2
poultry (turkey-elective course)	3 <sup>rd</sup>	unit visit	1
Equine	2 <sup>nd</sup>	unit visit	2
Equine (elective course)	3 <sup>rd</sup>	unit visit	1
Companion animals (canine)	2 <sup>nd</sup>	unit visit	1

Table 5.1.7.1 Number of farms visited (and number of visits) by the ambulatory/mobile clinics in the past three years

Species	2018	2019	2020	Average/ annum
Food-producing animals				
Cattle	18 (48)	21 (70)	19 (59)	19.3 (59)
Small Ruminants	17 (25)	8 (15)	14 (25)	13 (21.7)
Pigs	8 (34)	8 (28)	5 (31)	7 (31)
Other farm animals				
Equine	27 (33)	45 (32)	34 (21)	35.3 (28.7)
Poultry	10 (87)	10 (90)	10 (85)	10 (87.3)
Rabbits	3 (13)	3 (14)	3 (12)	3 (13)
Aquatic animals	8 (3)	12 (6)	5 (3)	8.3 (4)

Table 5.1.8 Number of visits in slaughterhouses and related premises for training in Food Safety and Quality (incl. Veterinary Public Health) species

Species	2018	2019	2020	Mean
Food-producing animals				
Ruminants and Pig abattoirs <sup>1</sup>	72	72	72	72
Poultry abattoirs	6	6	6	6
Other <sup>2</sup>	24	24	24	24

<sup>&</sup>lt;sup>1</sup>The abattoirs visited are licensed for both ruminants and pig slaughtering.

All years mentioned above are referred to academic years 2017-2018 (2018), 2018-2019 (2019) and 2019- 2020 (2020).

### **5.2 COMMENTS**

The Covid-19 pandemic forced the SVMT to close its premises for students and the public in accordance with the Ministry of Health and the Ministry of Education directives. This 3-month closure followed by a restricted opening resulted in a significant decrease of caseload during the academic year 2020. Hopefully, this situation will change in the future but it is not easy to predict when the SVMT will return to a fully normal function.

### **5.3 SUGGESTIONS**

The number of teaching and support staff should be increased to provide better training to the students.

<sup>&</sup>lt;sup>2</sup>These involve twelve visits in the Central Fish Market of Thessaloniki (9<sup>th</sup> semester), six visits in a meat plant (10<sup>th</sup> semester) and six visits in a dairy plant (10<sup>th</sup> semester).

### STANDARD 6. LEARNING RESOURCES

### **6.1 FACTUAL INFORMATION**

### 6.1.1 Description of the main library of the Establishment

The Aristotle University Library is housed in the Library building at the centre of the main University campus. Together with the Departmental libraries it makes up the Aristotle University Library and Information Centre, which provides access to approximately 1,127,406 book titles, 490,000 e-books, 25,000 electronic journals and 22 annual subscriptions of printed journals.

The AUTH Library System offers access to electronic journals either through direct subscriptions or the HEAL-Link Consortium (HELLENIC ACADEMIC LIBRARIES LINK, <a href="www.heal-link.gr">www.heal-link.gr</a>). All subscriptions and material available through the HEAL-Link Consortium can be found at <a href="www.lib.auth.gr">www.lib.auth.gr</a> under "sources". This consortium has established agreements with publishers of scientific journals and electronic sources of information, which provide online access to full text of scientific journals, books and to bibliographic and full-text databases. HEAL-Link resources include SCOPUS and Elsevier (Science Direct), Cambridge University Press, Springer Nature, Taylor & Francis, Wiley and others. Access to those resources by AUTH (hence SVMT) students and staff is provided using computers that are physically located in the University through IP recognition, or remotely, using VPN access.

Other databases and collections that are available through the AUTH Library System include ProQuest Central, JSTOR, Periodicals Archive Online, Gale (AUTH selection), Cochrane, Web of Science, Proquest Dissertation & Theses Global, Journal Citation Report and Journal of Visualized Experiments.

The Central Library has a reading room with a capacity of 1,300 seats, which is used solely for studying. It also has a scientific reading room with the capacity of 180 seats, which can be used by students, Faculty members and external users, to search for bibliography listings, and two computer labs, one of which offers IT services. A total of 27 computers are available to users of the Library through which available resources can be accessed.

Finally, the AUTH Library, in collaboration with the Social Policy and Health Committee (SPHC), the Inclusion Policy Centre and the Accessibility Committee, provides students with print disabilities, the following:

- 1. Workstations with the following tools:
- a. Workstations equipped with Braille display, a device for displaying Braille characters. The device has very small pins, which raise up and down through holes on a flat surface. Blind computer users, who cannot use a normal computer, use it to read text output.
- b. Brailleembosser (printer)
- c. Super Nova Software that works as a magnifier and screen reader.
- d. Closed-circuit television (CCTV) with zooming, magnifiers, and colour-switching functions, which provide aid to the visually impaired.
- e. PIAF (Picture in a Flash (PIAF) Tactile Graphic Maker). The device produces high quality tactile graphics using heat sensitive capsule paper. Ideal for geometric shapes, graphs, maps, pictures, music.
- 2. Requests for course books in electronic form. Students with visual impairment have the opportunity to apply for their academic course books in accessible formats. Library staff contacts the editors, converts and modifies the material into accessible formats, and uploads it to the Accessible Multi-modal Electronic Library (AMELib).
- 3. Access and use of AMELib (Accessible Multi-modal Electronic Library). Access to AMELib is achieved by controlled passwords only for users with print disabilities. The material is accessible to all active registered users.

The AUTH Library's annual operating budget was 545.242€ in 2019. There are 50 fulltime employees, excluding employees for cleaning and security services. For reference questions and interlibrary loans, the AUTH Library offers the online reference service "ask the librarian". Using

a web form, students and staff members can submit a question or a request for books or journal articles, not included in the collection of the AUTH Library. In such cases, it is possible to order the requested material from other collaborating libraries in Greece or abroad.

The mission of the Library Instruction Service is to instruct AUTH faculty members and students on matters related to available library services, by offering seminars to the AUTH community. Personal help and consultations are also available to all AUTH community members, by appointment.

The Central Library is open during working days throughout the year. The administrative services are available daily from 08:00 to 15:00 and the reading room from 08:00 to 22:00. During examination periods, the reading room opening hours are extended until midnight, while the scientific section is open from 08:00 to 20:00. During the summer months and during Christmas and Easter holidays, the working hours of the reading room are regulated accordingly

The SVMT Library is specific to the School of Veterinary Medicine

In the SVMT main library there are one photocopier, two scanners, one projector, and an A/V system (DVD, Video, TV). There are 84 video tapes, 75 of which have been transferred to DVDs for easier access. There are also 76 CDs and 24 slide collections, each one of which includes an audio cassette tape. This material is available to the students who can use it either in the Library, where three PCs are available for this purpose, or in the computer laboratory located close to the Library, next to the SVMT Secretariat. In the SVMT there are two computer laboratories with 24 computers (in the main building) with internet access. All computers in the clinics have internet access. One of the two computer laboratories in the main building is run by the Laboratory of Animal Production Economics. This is used for the teaching needs of the courses offered by the Laboratory (undergraduate, graduate and elective courses in the areas of Biostatistics, Epidemiology and Economics of Animal Production

- Number of full-time employees: 2
- Number of journals received each year as hard copies: 67

Adjacent to the SVMT, there is a reading area with 85 student reading places, which remains open on weekdays only, from 09:00 to 20:00 on Monday and Wednesday and from 08:00 to 16:00 on Tuesday, Thursday and Friday; this facility is closed from the 1<sup>st</sup> to the 15<sup>th</sup> August.

### 6.1.2 Subsidiary libraries of the School

There is a total of 105 student reading places in 10 out of the 18 specialised Subsidiary Libraries located in the various Departments of SVMT. Undergraduate students have access to these Libraries during working days and hours. A member of the teaching or support staff is responsible for the operation of each of those libraries. The Subsidiary Libraries of the SVMT are located at the following Laboratories or Clinics:

- 1. Laboratory of Anatomy, Histology and Embryology
- 2. Laboratory of Physiology
- 3. Laboratory of Biochemistry and Toxicology
- 4. Laboratory of Pharmacology
- 5. Laboratory of Nutrition
- 6. Laboratory of Animal Husbandry
- 7. Laboratory of Ichthyology
- 8. Laboratory of Ecology and Protection of the Environment
- 9. Laboratory of Animal Production Economics
- 10. Laboratory of Microbiology and Infectious Diseases
- 11. Laboratory of Pathology
- 12. Library of Avian Medicine
- 13. Laboratory of Parasitology and Parasitic Diseases
- 14. Laboratory of Animal Food Products Hygiene-Veterinary Public Health
- 15. Diagnostic Laboratory at the Department of Clinical Sciences
- 16. Clinic of Companion Animals, Unit of Internal Medicine

- 17. Clinic of Companion Animals, Unit of Surgery
- 18. Clinic of Farm Animals

Titles, call numbers, location, status and other details as well as statistics of use for all the books of the subsidiary libraries are available through a centralised system

### **6.1.3 Learning IT facilities**

Wireless Internet access is available throughout the campus. Instructions can be found at <a href="https://it.auth.gr/el/Services/netAccess">https://it.auth.gr/el/Services/netAccess</a> and <a href="https://it.auth.gr/en/access-library-eresources">www.lib.auth.gr/en/access-library-eresources</a>. Remote access (from outside the University) is also possible, following connection to the University Network via VPN. Moreover, users can connect to Scopus, Science Direct (Elsevier) and other publishers/providers, using a computer that is not physically located in the University campus, by using the login and password details that allow access to the AUTH account.

Other library resources which are available and searchable online include "Psifiothiki" (<a href="http://digital.lib.auth.gr/?ln=en">http://digital.lib.auth.gr/?ln=en</a>), a digital repository, which allows access to rare publications, archived material, material from the personal collections of benefactors of the Library, and other material. Specifically, Psifiothiki includes digital collections bearing the name of the donor or previous owner or their subject matter, and its material consists of manuscripts, books, newspapers, magazines, postcards, maps, photographs, works of art, and more. Doctoral and Masters Theses are searchable through the repository server that holds the publications of AUTH faculty members. Also, the Library has acquired and made available to the AUTH community access to Mendeley, an online reference management, writing and collaboration tool, and the web-based course management system "Moodle", which has more than 11,000 active users and 949 topics, of which 477 active users visit the 74 topics that are taught by 44 teachers at the SVMT.

AUTH teaching staff have also access to 'Turnitin', an online plagiarism detection tool which uses a database containing 58 billion web pages, 570 million student papers and 150 million articles from academic books and publications.

Several commercial software programmes are also available to the AUTH community, free of charge, through special arrangements and licenses. Support related to the AUTH network and internet access is provided by the AUTH Network Operations Centre.

Instruction on using computers and performing bibliographical searches is provided to undergraduate students during the subjects of "Elements of Information Technology" "Introduction to Veterinary Education", "Biostatistics", "Economics of Animal Production" and "Epidemiology". Additionally, there is a continuous cooperation between the undergraduate students and the teaching staff about the use of such self-learning recourses, throughout the entire period of studies.

Teaching at the SVMT is in Greek, therefore students usually study from notes written by the course instructors or from books that are written in the Greek language. Printed books are available to students through "EUDOXOS' (<a href="https://eudoxus.gr/">https://eudoxus.gr/</a>) an integrated book management electronic service responsible for provision of the books of the undergraduate students.

Since all required course material (notes and books) is distributed to students free of charge there is no need to keep many copies at the library. Nevertheless, textbooks that are used for instruction at the SVMT are available (in multiple copies) in the main library of the School. Many books written in English are available in the main and subsidiary libraries of the SVMT, including several classical reference books, which are available in multiple copies. Students can also use 'Kallipos' (<a href="https://www.kallipos.gr/en/">https://www.kallipos.gr/en/</a>) an open access repository link, which constitutes a comprehensive effort to introduce electronic interactive, multimedia textbooks in Higher Education. The total number of books in the Libraries of the Faculty is 18,000 (2,000 are in the main library and the remaining are in the subsidiary libraries).

The elearning.auth.gr platform hosts the digital undergraduate and postgraduate courses of all Schools of AUTH, as well as courses of other University structures (Lifelong Learning, School of Modern Greek Language, etc.). Access is available to all AUTH members and external users who are certified as external partners. The platform is supported by the Information Technology Centre and the Library & Information Centre of AUTH. All course presentations and notes of SMVT faculty members are uploaded in the e-learning platform and all students have access to them.

### **6.1.5** Accessibility to electronic learning resources

All staff members have direct access to the AUTH Library for online services from their office and home. Students also have access not only from the PCs in the two computer labs of the SVMT, but also from their private laptops. There are also three PCs and one netbook inside the SVMT Library that are available to students for online literature searches, through the AUTH Library website. Students also have access to the printed journals and books in the Library. There is adequate WIFI coverage in the establishment and access to VPN services.

### **6.1.6 Library Training Service**

The Library Training service offers to all AUTH members a series of seminars that are repeated every month all through the academic year and relate to:

### - AUTH Library electronic sources and services

This seminar aims at familiarising users with electronic sources and services, helping them to determine their information needs and to identify, locate, evaluate and effectively use the needed information.

### - Creation of a personal electronic bibliography

This seminar aims at teaching users to use a special programme for the management of bibliographic references. The programme enables users to add an individual bibliographical reference or a whole bibliography to a text in the citation style of their choice (e.g. Harvard Citation Style, APA Citation Style, MLA Citation Style, etc.)

### - Plagiarism and other Intellectual property issues

This seminar aims at introducing what plagiarism is and how to avoid it, citation styles, open licenses, creative commons, search for open content

### - Presentation of the AUTH Library online learning environment

This seminar aims at presenting the AUTH Library online learning environment and training students to use it.

### **6.1.7** Management of learning resources

The SVMT Library is managed by the Library Committee, which consists of three members of the academic staff of the Faculty and the Librarian. The President and the members of the Committee are appointed by the SVMT General Assembly for a term of two years, which is renewable. The SVMT Library is part of the AUTH Library System and operates in accordance with its Policies and Procedures that are set-up and approved by the Senate of the University.

#### **6.2 COMMENTS**

Learning resources are considered adequate for students. Specialised subsidiary libraries are mainly used by staff and postgraduate students.

### **6.3 SUGGESTIONS**

Library budget should increase to include more journals and books made available for postgraduate students and staff. A new single library of the Schools of Medicine and Veterinary Medicine that will be housed in the veterinary library building is under consideration.

### STANDARD 7. 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 educational programme is uploaded to the website of the SVMT and all students have access to it. In the beginning of each academic year, the programme is introduced to the new students in a one-day seminar.

### 7.1.2 Description of the admission procedures for standard students:

- Selection criteria
- Policy for disable and ill students

during their high school studies.

- Composition and training of the selection committee
- Appeal process
- Advertisement of the criteria and transparency of the procedures

The academic year begins on the 1<sup>st</sup> of September and ends on the 31<sup>st</sup> of August of the following year. The minimum admission requirement is a High School Diploma (Greek Lyceum). Entrance to the SVMT must satisfy the general matriculation requirements of the University, which include a nation-wide qualification examination. Performance in this examination is the standard criterion for anyone who wishes to enter Greek Universities. This examination is highly competitive and conducted once a year, under the responsibility and coordination of the Ministry of Education. Admission to the SVMT is granted only for the fall semester of each academic year and only on a full-time basis. The number of students admitted each year is determined by the Ministry of Education. Because of the nature of the admittance examination system, in general, first year students in the SVMT have a sound basic knowledge in biology, physics and chemistry, obtained

As already mentioned, admittance of students in the various University Schools in Greece is competitive and is based on the overall score obtained in the national exams. This results in the admission to the SVMT of some students who may have obtained a high score, but their first choice of area of studies was not necessarily veterinary medicine. These students usually take the national exams again and, if they succeed in getting admitted to another school in Health Sciences, they leave the SVMT. The percentage of students re-sitting the national exams and leaving the SVMT is about 10-15%.

The number of undergraduate students admitted to the SVMT each academic year consists of a "standard" intake of about 74-86, and a "supplementary" intake of around 47-67 students (Table 7.2). The supplementary intake is legislated in the Greek laws regarding admission and enrolment of students to Greek Universities.

This supplementary intake may include students of Greek origin from foreign countries or from Cyprus, and, in addition, from the School of Veterinary Medicine in Karditsa (University of Thessaly, Greece), students with disabilities or serious illnesses, students belonging in low income families or in families with more than three children, and graduates of other Schools of Greek Universities desiring to obtain a second degree. Students of the latter category have to take a special examination, and if they are successful, they may be admitted to one of the first semesters, depending on their previous studies.

A number of scholarships awarded by the AUTH are available to foreign students. It is necessary that foreign students have an adequate command of the Greek language in order to benefit fully from their studies in SVMT. The common practice is that all non-native speakers attend a Greek language course, offered by the School of Modern Greek, before commencing their studies.

Following enrolment, all students receive the SVMT Curriculum Guidebook containing

comprehensive information on curricular elements, unit allocation and other information about their studies. In addition, all the support facilities offered by the University may be found in the AUTH website.

## 7.1.3 Description of the admission procedures for full fee students (if different from standard students)

NA

## 7.1.4 Description of how the Establishment adapts the number of admitted students to the available educational resources (facilities and equipment, staff, healthy and diseased animals, material of animal origin) and the biosecurity and welfare requirements

The Education Committee is scheduling annually the student rotations charts depending on the number of admitted students and the available educational resources. Amendments are performed to manage occasionally increased numbers of students.

# 7.1.5 Description of the services available for students (i.e. registration, teaching administration, mentoring and tutoring, careers advice, listening and counselling, assistance in case of illness, impairment and disability, clubs and organisations)

Details on services provided to students may be found in the AUTH's website: https://www.auth.gr/en/edu

https://www.auth.gr/en/life and

https://www.auth.gr/en/admininstration.

Student registration is performed via the internet by the SVMT administration office.

Essential hygiene and safety practices and measures for undergraduate students include education and training for health and safety, provided in every Clinic and Laboratory of the SVMT, where students are made aware of and completely understand the potential risks associated with the handling of potentially hazardous substances (biological or chemical), and the importance of consistent use of personal protection equipment. For hand hygiene, convenient washing facilities are available at all the premises of the Clinics and the Laboratories of the SVMT. Special precautions taken to prevent injuries, as well as management operations concerning disposal of wastes and cleaning and disinfection, are practiced under the supervision of the members of staff. Special guidelines concerning these issues (Biosafety and Biosecurity Standard Operating Procedures [SOP]) are distributed to all students entering the SVMT and are also available on the SVMT website (<a href="http://www.vet.auth.gr/">http://www.vet.auth.gr/</a>). In addition, in compliance with the legislation on safety and hygiene at work, a protocol of response to injury and exposure to a hazardous substance has been established, that includes emergency preparedness and actions that must be taken when necessary. Protocols for the isolation of infected animals, including suspected infected animals have also been elaborated.

Furthermore, a Civil Protection Office is operational within the University, which provides guidelines on actions to be taken in cases of natural disasters (earthquakes, fires, floods etc.) and technological accidents, and proper labelling. This Office organises yearly training seminars to all personnel and students in general, and more specifically to those responsible for the management of such situations. Within this Office a special voluntary Team of Management of Disasters has been organised.

Other Committees such as the Standing Committee for Epidemics Management and the Committee of Social Policy and Health also contribute to the AUTH policy related to personnel and student safety and welfare issues. All SVMT students undertaking extramural practical work outside the premises of the School are provided with insurance by the AUTH for injury, covering transportation, hospitalisation and pharmaceutical care.

The state provides a set of administrative, financial and other services to students to facilitate their studies. These services include scholarships, catering and accommodation (for students with low

family income), health care, counselling and psychological support, access to the Internet, lower fares for public transportation etc. Additionally, the AUTH offers financial support to students who are in need. These needs may include:

- a) Financial help to students suffering from serious illnesses and who are either hospitalised or in the recovery process,
- b) Financial grant in case of unexpected needs to students who are facing major financial difficulties, even temporarily, due to family problems, which may put at risk the continuation of their studies, and
- c) Financial support through part time employment at the University.

The financial provisions also include free textbooks to all students, and access to university libraries, while administrative provisions are mainly related to a deferral of the obligatory military service for male students due to studies.

Moreover, AUTH provides specialised information and advice on undergraduate and postgraduate studies in Greece and abroad, and career issues. Examples of the relevant existing facilities include:

- Students' Club
- Student Halls of Residence
- Foreign Student Hostels
- Sports and Recreation-University Sports Centre
- University Camping Facilities
- Student Counselling and Guidance Service
- Career Services Office
- Students' Association of the SVMT
- International Veterinary Students' Association –Hellas (I.V.S.A. –Hellas)
- Scholarships (from the State Scholarship Foundation, AUTH or other funding bodies)
- Cultural Groups

Participation in the European Educational Programmes (Erasmus)

The Educational Programmes Section of the University is responsible for the implementation of the SOCRATES Programme and other European Educational Programmes (TEMPUS, LINGUA, JEAN MONNET etc.). The SVMT coordinate 12 Inter-institutional agreements between programme countries. Approximately 4-5 students of the SVMT visit Faculties abroad, while 5-6 students from other countries visit the SVMT every year. Also, more than 10 students use the opportunity to go abroad in the frame of the Erasmus + mobility, while 3-4 students from other countries visit the SVMT for traineeship every year.

## 7.1.6 Prospected number of new students admitted by the Establishment for the next 3 academic years

The prospected number of new students is a responsibility of the Ministry of Education and may change every year.

7.1.7 Description of how (procedures) and by who (description of the committee structure) 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

See chapters 7.1.1.1-7.1.5 above.

Table 7.1.1 Number of new veterinary students admitted by the Establishment

	2020	2019	2018	Mean
Students	153	142	136	143.6

Table 7.1.2 Number of veterinary undergraduate students registered at the Establishment

Year of study	2020	2019	2018	Mean
First	153	146	137	145.3
Second	103	124	105	110.7
Third	104	100	121	108.3
Fourth	107	120	112	113.3
Fifth	126	136	133	131.7
Total	593	626	609	609.3

Table 7.1.3 Number of veterinary students graduating annually

	2019	2018	2017	Mean
Students	72	80	93	81.7

Table 7.1.4 Average duration of veterinary studies

Duration of studies of the students who graduated in 2019	% of students
0 year*	11.11
+ 1 year	54.16
+2 years	15.27
+ 3 years or more	19.46

<sup>\*</sup> The total duration of the studies matches the minimum number of years (5) of the program.

Table 7.1.5 Number of students registered at postgraduate clinical training

Training		2019	2018	Mean
MSc students				
Companion Animal Surgery	10	12	12	11.3
Companion Animal Internal Medicine	8	8	8	8
Companion Animal Anaesthesiology and Critical Care	2	2	0	1.3
Total	20	22	20	20.6
Residents EBVS				
Veterinary Anaesthesia Analgesia	-	-	1	0.3
Dermatology	1	1	-	0.6
Poultry Veterinary Science	2	-	-	0.6
Total	3	1	1	1.5

#### 7.2 COMMENTS

The students entering the SVMT are of a very high standard. The School is among the most highly rated choices of students in Greece, which means that students need to obtain high scores in the national exams in order to be admitted. Students contemplating a career in veterinary medicine have a sound basic knowledge in biology, physics and chemistry, obtained during their high school studies as well as in the use of computers.

The SVMT is advocating strongly to the Ministry of Education the need to keep the number of students entering each year low. Unfortunately, during the last few years, the number of students admitted to the SVMT has been growing. The School has no autonomy to control the annual student intake, which is further increased each year by ca. 70% through "supplementary" intake. Currently, SVMT faculty members are making a big effort to minimise the negative impact that the increased number of students has on the quality of training. It should be mentioned, however, that training in elective courses is not affected, since the number of students that can be enrolled in each elective course is fixed by the instructors.

Critical metrics such as "duration of studies" and "graduation grade" are improving under the new curriculum but more data are needed to draw safe conclusions.

### 7.3 SUGGESTIONS

The number of students admitted to the School needs to be kept low for the benefit of the students' education and training. The School should continue advocating strongly to the Ministry of Education the need to keep the number of admitted students low (both for new students and for those that comprise the "supplementary intake"). The average duration of studies has been improving but should be further decreased in the future.

### STANDARD 8. STUDENT ASSESSMENT

### 8.1 FACTUAL INFORMATION

### 8.1.1 Description of the global student's assessment strategy of the Establishment

Assessment of student performance in each course is based on a combination of examinations (mid-term and final) and independent study; the latter is optional in most cases. The examinations are designed to evaluate the student's overall knowledge of the subjects taught during the preceding semester. By law, University teachers have the right to use any form of examination they consider most appropriate. There are three 3-week special examination periods during the year: the winter period (January-February), the summer period (June) and the autumn period (September). Students are not allowed to enrol in the 4<sup>th</sup> year of studies unless they have successfully passed the so-called pre-requisite courses. Only after passing all courses are students considered to have successfully completed all the core subjects of the curriculum.

### 8.1.2 Description of the specific methodologies for assessing

In general, examinations take place at the end of each semester and are usually written, especially in the preclinical subjects. Essay questions, short answer questions and multiple-choice questions are the forms of examination that are used. In many courses there are oral and/or practical exams, especially in farm animal production, clinical subjects and meat inspection, while some other courses hold small written tests at various intervals along the courses. In some clinical subjects, assessment of students is continuous throughout the term period.

Marking/grading is based on a scale of zero to 10 points: excellent from 8.5 to 10, very good from 6.5 to 8.4, good from 5 to 6.4, poor from 2 to 4, and bad. The passing mark for each examination is 5. There is no use of external examiners in the Greek Universities. However, if a student fails three times in a subject, he/she may apply to be re-examined by a group of three examiners (including the initial examiner). By Greek legislation, a student can retake the examination as many times as needed to obtain a passing mark in each course.

The final grade of a course that has both practical and theoretical parts is the combination of two passing grades ( $\geq 5$ ). Each passing grade may have a percent (%) contribution to the final grade at the discretion of the teaching staff. The practical examinations that take place in the Companion and the Farm Animal Clinics do not have a theoretical part and a passing grade is always required ( $\geq 5$ ).

Students achieving a passing grade in one part of a course (practical or theoretical) are entitled to retaining the grade, until a successful outcome of the other part of the course has been achieved. Students are examined on the first half of the course material during a mid-term examination. The remaining of the course curriculum is examined at the end of the corresponding semester, during the official examination period. The final grade is the combination between the grades allocated in mid-term and final examinations. Participation of the students in the mid-term examination is optional. For every course, students wishing to participate in the mid-term are requested to apply within the first week of the courses. Only the students enrolled in a course for the first time are entitled to participate in the mid-term exam. Students who do not sit in or fail the mid-term examination are examined on the entire course material at the end of the semester.

The final grade for the course is announced after the regular examination session. In case of a failure to achieve a passing grade, the student is eligible to be examined at the regular examination session in September of the current academic year.

The attendance of the practical training in each course is mandatory. Due to particularities in each course, the individual details of the student evaluation will be determined by the corresponding instructors. It should be noted that students can be examined in the laboratory part of the course, irrespective of the outcome of their examination in the theoretical part of the course.

Concerning practical examinations in the Companion Animal Clinics the students are eligible to

participate if they are compliant with the absence registry and have an updated student logbook (which should be demonstrated on the day of the examination).

Examination on a real clinical case is the major part of the evaluation of the clinical efficiency of a student. Clinical efficiency implies that the student is able to:

- Successfully perform diagnostic and therapeutic procedures including, but not limited to, "first day skills" listed below. Students who have exceeded the minimum clinical requirements (e.g. clinical cases, sampling procedures), may be credited in their final pass grade.
- To make rational and meaningful medical decisions. To this end, the students are allocated in certain dates in the Clinics, so as to be able to handle a clinical case in the outpatient section of both animal clinics. Discussion may also extend to cases reported in the student's logbook.

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

The existing conditions related to the implementation of student evaluation are the following: i) in every course, educational objectives are set by the academic staff (e.g. the minimum expected skills acquired upon the completion of a certain course), ii) courses are not spread evenly within the semester, but they are taught sequentially, in order to give the student the opportunity to focus on a small number of courses at a given time period, iii) students have timely access to the educational resources of every course and iv) the mid-term and final examinations will be scheduled at a reasonable time in the academic semester. Overall assessment methodology is such as to ensure that every graduate has achieved the minimum level of competence as prescribed in ESEVT Day One Competences.

### **8.1.4 Description of the processes for:**

- ensuring the dissemination and transparency of the assessment criteria/procedures;
- awarding grades, including explicit requirements for barrier assessments;
- providing to students a feedback post-assessment and a guidance for requested improvement;
- appealing

Assessment methodology and appropriate guidelines are shown in the SVMT curriculum in the internet so as all students are aware of these processes including evaluation criteria, grading system and feed-back post assessment.

# 8.1.5 Description of how (procedures) and by who (description of the committee structure) the student's assessment strategy is decided, communicated to staff, students and stakeholders, implemented, assessed and revised

Student assessment strategy is formed by the Education Committee and decided by the General Assembly. Communication to the staff, students and stakeholders is made through the internet in the uploaded curriculum of the SVMT. In all semesters, the veterinary students are asked to evaluate the quality of the courses and the efficiency of the teaching staff, aiming to improve the quality of their studies. More information is available on the website of the Quality Assurance Unit (MODIP) of the AUTH (<a href="http://qa.auth.gr">http://qa.auth.gr</a>) and at the website of the SVMT. Student evaluation of the faculty performance is taken into consideration for faculty promotion.

Students are also involved in day-to-day monitoring of the quality of teaching through their representatives in the Education committee or General Assembly. If problems arise, either with respect to the educational infrastructure (e.g. classroom adequacy) or with respect to the teaching performance of academic staff, students are entitled to voice their concerns and demand corrective actions. Students are also encouraged to discuss such issues with the SVMT Chair and/or the Head of the Department.

### 8.2 COMMENTS AND SUGGESTIONS FOR IMPROVEMENT

Student evaluation may become more effective if the total number of students admitted to the SVMT becomes lower than the current situation. Increase of the duration of the programme may allow Faculty members to establish a more objective and effective evaluation of each student as the time spent and the contact between teachers and students will be increased especially during of practical/clinical teaching. More flexible evaluation tests during practical clinical training should be implemented to allow for a more objective evaluation.

### Standard 9. ACADEMIC AND SUPPORT STAFF

### 9.1 FACTUAL INFORMATION

# 9.1.1 Description of the 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 up-to-date e-learning resources, biosecurity and QA procedures)

Universities are self-governed legal entities under the supervision of the State. Personnel salaries are covered by the State. Each Faculty/School is independent as regards the selection of its academic staff and also the determination of the scientific fields of the positions to be filled and the planning for human resources. However, the Ministry of Education has the authority to decide the number of new posts to be filled every academic year in all Greek Universities. Furthermore, the Ministry of Education has the authority to monitor the selection process in order to avoid procedural irregularities before appointing academic staff selected by the Faculties/Schools. Briefly the Universities have full autonomy for the academic part of the selection process, but the Ministry of Education has complete control on the economic and legal part of the selection and appointment process. SVMT teaching staff are prepared for good teaching and assessing practices, knowledge of learning resources and student assessment policies, biosecurity and QA procedures.

## 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

Ever year the Ministry of Education decides on the number of new positions to be allocated to each Institution of Higher Education in the country, and then each such Institution determines the allocation of these positions to its Faculties/Schools. For the SVMT, further allocation of new positions to the Departments and then to the Laboratories and Clinics is determined by the General Assembly of the Faculty, following a proposal from the Strategic Planning Committee and, in principle, based on the teaching burden (hours of lectures and practical sessions) and the number of undergraduate students trained each year in the various Laboratories/Clinics. Additionally, the School can seek to advertise and refill any position that becomes vacant because of retirement or resignation of a member of the academic staff. Filling of a position following retirement or resignation for any reason may be made in the same or different discipline and rank. From the 12 faculty vacancies due to retirement or resignation during the last 3-4 years, 7 new faculty members have been elected but their formal appointment is still pending, while the remaining 5 vacancies have already been advertised and the process has been initiated. However, because of the present difficult financial situation this process has been delayed.

Tenure is associated with Professor, Associate Professor or Assistant Professor ranks. Assistant Professors may become tenured after spending 3 years at this rank. Members of the academic staff not obtaining tenure are released from the University.

The selection procedure for a position at the rank of Professor, Associate Professor or Assistant Professor can be initiated by the School, either within the context of yearly planning of the Departments (provided the posts have been allocated to the School) or following an application of a faculty member for promotion to a higher rank. The position opening and description is publicised in the daily press and on the website of the University. After the end of the deadline for submission of applications, the General Assembly of the School appoints a special electorate for each post consisting of 15 members. Seven members originate from the School of Veterinary Medicine and eight from other Schools of the same or other Universities. The electorate consists of Faculty members of the same or superior rank to that of the position to be filled. The electorate appoints a Committee consisting of 3 members (of which at least one from other Faculties/Schools), who submit a written recommendation to the electorate. A PhD is required for appointment to any rank. Candidates are evaluated using a variety of criteria, including the number

and quality of publications, especially in internationally refereed scientific journals, adequate teaching ability and experience, and other scientific and administrative accomplishments of the candidates, depending on the rank of the post. Moreover, the personality of the candidates and their contribution to the society are also taken into consideration. Any candidate participating in a selection process for an academic position in any School, may appeal the decision, on grounds of procedural irregularities.

## 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

Criteria for the selection and recruitment of support staff are set by the Ministry of Education and implemented by the SVMT. The Support staff is regularly following continuing education seminars organised by the AUTH.

## 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

See 9.1.2

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

Teaching staff of the University is classified in two categories: full time and part time. The full-time staff is allowed to undertake outside work, such as consultations or private practices, but the Research Committee of the University reserves 7 % of the income from outside work, while there exists a limit on the amount of this income that is permitted by law. On the other hand, the part time staff members are not obligated to reside in the city where the School operates, but they have to be present in the University at least three days per week. In this case the monthly salary they receive is equivalent to 70% of that of the full-time staff. In addition, the General Assembly of the School approves formal leave of absence for staff members to visit other academic institutions in Greece or abroad to gain experience in teaching or research activities that are similar to those of their own. Maximum allowable duration of sabbatical leave is 6 months for every 3 years of service or one year for every six years of service. Nevertheless, members of the academic staff receive very little financial support for meeting or conference attendance.

## 9.1.6 Description of the formal programme of the Establishment for the assessment of instructors by students and its outcome

Students can evaluate the teaching performance of the Faculty members through MODIP system. In all semesters, the veterinary students are asked to evaluate the quality of the courses and the efficiency of the teaching staff, aiming to improve the quality of their studies. More information is available on the website of the Quality Assurance Unit (MODIP) of the AUTH (<a href="http://qa.auth.gr">http://qa.auth.gr</a>) and at the website of the SVMT. Student evaluation of the faculty performance is taken into consideration for faculty promotion.

## 9.1.7 Prospected number of FTE academic and support staff of the veterinary programme for the next 3 academic years

See 9.1.2- 9.1.4

Type of contract	2020	2019	2018	Mean
Permanent (FTE)	$84^{1}$	$90^{2}$	$89^{2}$	86.3
Temporary Scientific Teaching staff and Temporary	$6^{3}$	$6^{3}$	63	$6^{3}$
Interns (FTE)				
Total (FTE)	90	96	95	92.3

Academic staff 84 in total; one full professor and one assistant professor work on a temporarily part time status (50%)

Table 9.1.2 Percentage (%) of veterinarians in academic staff

Type of contract	2020	2019	2018	Mean
Permanent (FTE)	75/84=0.89	81/90=0.9	81/89=0.91	90%
	89%	90%	91%	
Temporary (FTE)	5/6=0.83	5/6=0.83	5/6=0.83	83%
	83%	83%	83%	

Table 9.1.3 Support staff of the veterinary programme Type of contract AY\* AY-1 AY-2 Mean Permanent (FTE) Total (FTE)

Type of contract	2020	2019	2018	Mean
Animal carers	6 <sup>1</sup>	6 <sup>1</sup>	6 <sup>1</sup>	6
Administrative	$1^2$	$1^2$	$1^2$	1
Other permanent employees	$1^3$	$1^3$	$1^3$	1
Temporary employees	$4^{4}$	$4^{4}$	$4^{4}$	4
Drivers	$2^{5}$	$2^{5}$	$2^{5}$	2
Security personnel	4 <sup>6</sup>	46	46	4
Cleaning personnel	87	87	87	8
Gardeners	18	18	18	1
Total support staff	27	27	27	27

<sup>\*</sup> The last full academic year prior the Visitation.

<sup>&</sup>lt;sup>2</sup> Academic staff 90 and 89 in total during AY-1 and AY-2 respectively; one full professor and one assistant professor work on a temporarily part time status (50%); one assistant professor was on a temporarily leave status.

<sup>&</sup>lt;sup>3</sup>Two (2) temporary teaching academic staff with a fixed term contract at the level of adjunct Assistant Professor; one assigned in the Laboratory of Animal Nutrition (non-veterinarian); one assigned in the Laboratory of Food Hygiene. These two positions are renewed on annual basis. Four (4) temporary scientific staff are located in the companion animal clinic (post-doctoral fellows).

<sup>&</sup>lt;sup>1</sup> Animal carers: 2 are located in the Department of Animal Structure and Function and 2 in the Department of Clinical Sciences.

<sup>&</sup>lt;sup>2</sup> Located in the Department of Infectious & Parasitic Diseases, and Pathology.

<sup>&</sup>lt;sup>3</sup> Located in the companion animal clinic.

<sup>&</sup>lt;sup>4</sup> 3 located in the companion animal clinic; 1 in the farm animal clinic.

<sup>&</sup>lt;sup>5</sup>Located in the farm animal clinic.

<sup>&</sup>lt;sup>6</sup> 3 are located in the companion animal clinic; 1 in the main building in Campus.

<sup>&</sup>lt;sup>7</sup> 4 in the companion animal clinic; 2 in the farm animal clinic; 2 in the main building in Campus.

<sup>&</sup>lt;sup>8</sup> Located in the Department of Clinical Sciences.

Table 9.1.4 Research staff of the Establishment Type of contract AY\* AY-1 AY-2 Mean Total (FTE)

Type of contract	2020	2019	2018	Mean
Technical Scientific Staff	41	$4^{1}$	$4^{1}$	4
Scientific Teaching staff	$8^2$	$8^2$	$8^2$	8
Permanent total (FTE)	12	12	12	12
Postgraduate students (FTE)	$31^{3}$	$31^{3}$	$31^{3}$	31
PhD students (FTE)	55 <sup>4</sup>	55 <sup>4</sup>	55 <sup>4</sup>	55
Practitioners (FTE)	3	3	3	3
Temporary total (FTE)	89	89	89	89
Total Research staff (FTE)	101	101	101	101

<sup>\*</sup> The last full academic year prior the Visitation.

Twenty faculty members of the SVMT are diplomates of the EBVS colleges (Table 9.1.5).

Table 9.1.5 Faculty members that holding an EBVS diploma

College	Number of Faculty members
ECBHM	1
ECPHM	3
ECPVS	3
ECSRHM	4
ECVCP	1
ECVD	1
ECVDI	1
ECVPT	1
ECVPH	3
EVPC	1
ECVM	1
Total	20

ECBHM: European College of Bovine Health and Management, ECPHM: European College of Porcine Health and Management, ECPVS: European College of Poultry Science, ECSRHM: European College of Small Ruminant Health and Management, ECVCP: European College of Veterinary Clinical Pathology, ECVD: European College of Veterinary Dermatology, ECVDI: European College of Veterinary Diagnostic Imaging, ECVPT: European College of Veterinary Pharmacology and Toxicology, ECVPH: European College of Veterinary Public Health, EVPC: European Veterinary Parasitology College, ECVM: European College of Veterinary Microbiology.

### 9.2 COMMENTS

The ratio of teaching staff to students is generally satisfactory. However, given the heavy teaching and training schedules, and clinical and service workloads, the number of veterinary faculty members should be increased. It should be mentioned that about 90% of the academic staff of the SVMT are qualified veterinarians. According to the average national standards the salary levels of the various categories of the teaching staff may be considered generally satisfactory when

<sup>&</sup>lt;sup>1</sup> 1 located in the Department of Food Hygiene and Technology and 3 in the Department of Clinical Sciences.

<sup>&</sup>lt;sup>2</sup> 1 located in the Department of Animal Structure and Function; 1 in the Department of Infectious & Parasitic Diseases, and Pathology; 1 in the Department of Food Hygiene and Technology; 4 in the Department of Clinical Sciences.

<sup>&</sup>lt;sup>3</sup> 28 are located in the companion animal clinic; 1 is located in the diagnostic laboratory; 2 in the diagnostic imaging laboratory.

<sup>&</sup>lt;sup>4</sup> 23 are located in the Department of Clinical Sciences; 4 in the Department of Animal Structure and Function; 11 in the Department of Animal Production, Ichthyology, Ecology and Protection of the Environment; 15 in the Department of Infectious & Parasitic Diseases, and Pathology; 2 in the Department of Food Hygiene and Technology.

compared to those of other categories of State employees. However, when compared with salaries paid in industry and in practice, as well as Universities in other EU countries, academic compensation is considered very unsatisfactory.

### 9.3 SUGGESTIONS

Of particular concern is the decreasing number of the support staff, especially animal technicians and secretaries. As a result, the SVMT is forced to hire additional employees on short-term contracts from its own budget (mainly research projects and clinical income), with a negative impact on the School finances. Furthermore, faculty members are burdened with administrative and technical tasks, which considerably increases their workload and is a very inefficient use of their time. It would be desirable to have two tracks (clinical and research professors) for the clinical academic staff members. The bureaucracy related to faculty evaluation and promotion procedures, although improved over the last years, still results in significant delays in their promotions, which may have a negative effect in academic staff psychology and work. This should become a matter of priority for the SVMT.

## STANDARD 10. RESEARCH PROGRAMMES, AND CONTINUING AND POSTGRADUATE EDUCATION

### 10.1 FACTUALINFORMATION

## 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

In addition to the educational program there is rigorous scientific research being conducted within the SVMT on cutting-edge scientific fields. Research is mostly funded from external national and international sources.

Research in the SVMT follows the principles and rules set by the Research and Ethics Committee. All research projects in the SVMT are conducted by the Faculty members and often involve students enrolled in PhD or MSc programmes. Research is often performed in cooperation with outside veterinary or other bio-medical researchers. However, there are no staff members holding purely research positions.

The SVMT makes a significant contribution to the quantity and quality of research conducted within the Aristotle University of Thessaloniki. This contribution is also evident in the satisfactory level of research productivity through international collaborations, and in the number of influential publications in peer-reviewed journals. The research work carried out in the SVMT reflects its multidisciplinary character, covering in a balanced way basic, applied and clinical research.

Education should rest on up-to-date, evidence-based knowledge, which is best gained by conducting scientific research. Therefore, involvement in active research projects enhances the students' professional skills, and sharpens their skills of critically evaluating scientific articles. Moreover, this involvement enlarges the pool of students interested in undertaking an MSc or a PhD after completion of their undergraduate studies. While the primary focus of the SVMT is to train the future veterinarians, one of the parallel goals and commitments is to encourage undergraduates to get involved in research.

Over the past few years, a University-wide programme has provided an opportunity for undergraduate students to receive financial assistance for conducting research under the supervision of a faculty member. Unfortunately, the number of students supported this way is very small. However, a number of students is involved in research, mainly by assisting in the experimental work of ongoing research projects, in the various Laboratories and Clinics of the SVMT.

Acquaintance of students with research is also attempted through the organisation of seminars given by academic staff that are aiming at informing students about their research interests and scientific methods applied and by providing the opportunity to undergraduates to attend public presentations of PhD or MSc theses, and to participate in local scientific meetings, workshops or seminars.

# 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 (see also Standard 3)

Postgraduate clinical students constitute a critical part of the Companion Animal Clinic. These students are actively involved in clinical management of the cases, out of hour duties and also in training of undergraduate students. Each postgraduate and undergraduate student are responsible for every case admitted in the clinic. The undergraduate student is taking the history and doing basic clinical examination and the postgraduate student completes the examination, discuss the differential diagnosis with the student, further examinations and help the undergraduate student to draw blood for analysis etc. Both students are in close cooperation but undergraduates know their limitations described to them during the first day in the Clinic.

### 10.1.3 Description of how undergraduate students:

- are made aware of the importance of evidence-based medicine, scientific research and lifelong learning;
- are initiated to bibliographic search, scientific methods and research techniques, and writing of scientific papers (e.g. through a graduation thesis);
- are offered to participate to research programmes on a non-compulsory basis

Undergraduate students working with postgraduate or PhD students doing their projects are introduced into scientific research. Many of them, if they want to, prepare small review articles or doing bibliographic search for senior postgraduate students. Graduation thesis is not included in SVMT curriculum. A few of them are offered to participate in research projects performed by PhD students or Faculty members.

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

The SVMT has been hosting continuing professional development seminars, wet labs, courses and conferences for veterinary practitioners, state veterinarians and medical doctors, for many years. These continuing education courses are organised by the Faculty alone or in association with various veterinary and medical societies, professional organisations and pharmaceutical companies. The facilities of the School are also used for continuing education courses for veterinary practitioners, state veterinarians and medical surgeons, organized by other bodies. More specifically:

- 1. Continuing Professional Development courses and wet labs for veterinary practitioners or state veterinarians are organised regularly on topics including:
- Small animal emergency procedures
- Small animal anaesthesia & intensive care
- Large animal hoof surgery
- Animal breeding, husbandry and nutrition
- Small animal diagnostic imaging & ultrasonography
- Gastrointestinal endoscopy
- Laboratory animal husbandry and healthcare
- Reproductive problems in production and companion animals
- Small animal clinical neurology
- Small animal dermatology
- Small ruminant medicine
- 2. Continuing Professional Development courses and wet labs, in association with the AUTH School of Medicine and other national medical surgical societies, addressed to general and thoracic surgeons. These include:
- Laparoscopic wet labs in pigs for human general surgeons
- Thoracoscopic wet labs in pigs for human thoracic surgeons
- Stapling wet labs in pigs for human general surgeons
- 3. Furthermore, every year SVMT is involved in organising wet labs in association with various veterinary clinical associations, on several topics of interest to practicing veterinarians, including:
- Small animal orthopaedic surgery
- Small animal dermatology wet labs
- 4. Recently, the SVMT has established a formal cooperation with the Hellenic Companion Animal Veterinary Society, in order to co-organise seminars and workshops on various topics. In addition, a member of the academic staff of the companion animal clinic is responsible for the organization of a series of workshops in various venues around Greece, in cooperation with the Hellenic Veterinary Medical Society. Finally, a similar long-standing cooperation exists with the Association of Veterinary Surgeons of Northern Greece, based in Thessaloniki.

In addition, members of the academic staff, especially of the Departments of Clinical Sciences and Food Hygiene and Technology, are invited to present lectures in many congresses, seminars, refresher courses etc. organised by relevant professional bodies and organizations all over Greece. Moreover, many faculty members participate frequently in the organising and/or the scientific committees of such activities. Several members of the Farm Animal Clinic and the Department of Animal Production are often invited to speak on various topics to members of local associations of farmers, animal breeders etc. Finally, faculty members have been invited to speak to refresher courses for veterinary practitioners and/or veterinary authorities in other countries.

Over the last 5-6 years, the SVMT has organised an average of 3-4 continuing education courses each year, and many other courses co-organised with or organised by external organisations, where staff members of the SVMT are the main speakers.

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

Each postgraduate programme (MSc) accepts 6-4 students per year.

# 10.1.6 Description of how (procedures) and by who (description of the committee structure) research, continuing and postgraduate education programmes organised by the Establishment are decided, communicated to staff, students and stakeholders, implemented, assessed and revised

The SVMT offers one-year internship programmes in various specialties including surgery, anaesthesia, critical care, neurosurgery, internal medicine, diagnostic imaging, dentistry, clinical pathology, equine medicine and surgery, farm animal medicine and reproduction. Interns, residents receive no grant or salary. Furthermore, the clinic covers all expenses of MSc students, residents and PhD students incurred in relation to their training, research and publications.

The candidate postgraduate student applies through the relevant link at the website of the School: <a href="https://www.vet.auth.gr/en/studies/postgraduate-studies">https://www.vet.auth.gr/en/studies/postgraduate-studies</a> where all the needed documents are listed. Having sent all the necessary documents to the School, the Selection Committee of Qualifications of the candidate postgraduate students is reviewing the applications.

The Selection Committee of Qualifications of the candidate postgraduate students is composed of Faculty members who decide by reviewing the documents and the student starts his/her studies upon approval of the application. The selection criteria are presented in the SVMT web site.

SVMT also runs a programme for Postgraduate Studies entitled: "Companion Animal Medicine". The programme awards Master of Sciences degrees in "Companion Animal Medicine" with the following three areas of specialisation:

- a. Companion Animal Surgery
- b. Companion Animal Internal Medicine
- c. Companion Animal Anaesthesiology and Critical Care

Each specialisation offers a 2-year programme of postgraduate clinical training, which leads to an MSc. Each specialisation accepts a maximum of 6 students. Students are required to complete a short thesis before graduation. The candidate postgraduate student applies through the relevant link at the website of the School: <a href="https://www.vet.auth.gr/en/studies/postgraduate-studies">https://www.vet.auth.gr/en/studies/postgraduate-studies</a>

Holding an MSc diploma (or equivalent postgraduate clinical training, see table 12.1.1) is a prerequisite for pursuing a PhD. In exceptional cases and at the discretion of the Faculty, non-MSc holders may pursue a PhD but in these cases the duration of the PhD programme should be at minimum 4 years (6 years at maximum).

Most students are supported financially by grants from the State Scholarship Foundation, AUTH, or other research grants. A few students are self-funded. Students pursuing a PhD in the Clinics, most often also do clinical work on the subject of their thesis (e.g. surgery, anaesthesia/intensive care, ophthalmology, obstetrics etc.) and participate in undergraduate training. In return, all their research expenses are covered by the clinic.

At least one publication in a peer reviewed journal is required for awarding a PhD degree at the SVMT.

There are also five postdoctoral researchers in the School the last three years supported financially from the Research committee of AUTH.

Table 10.1.1 Number of students registered at postgraduate clinical training

Training		2019	2018	Mean
MSc students				
Companion Animal Surgery	10	12	12	11.3
Companion Animal Internal Medicine	8	8	8	8
Companion Animal Anaesthesiology and Critical Care	2	2	0	1.3
Total	20	22	20	20.6
Residents EBVS				
Veterinary Anaesthesia Analgesia	-	-	1	0.3
Dermatology	1	1	-	0.6
Poultry Veterinary Science	2	-	-	0.6
Total	3	1	1	1.5

**Table 10.1.1.1 Clinical Internships** 

Clinical discipline	2020	2019	2018
Small Animal Internal Medicine	3	3	3
Clinical Pathology	3	3	3
Diagnostic Imaging	1	1	1
Dentistry	1	1	1
Ophthalmology	1	1	1
Exotic Animal Medicine	1	1	1
Small Animal Surgery	3	3	3
Orthopaedics	2	2	2
Equine Medicine& Surgery	2	2	2
Veterinary Anaesthesia & Analgesia	3	1	1
Farm Animal Medicine, Surgery& Reproduction	_	5	7

Table 10.1.1.2 Number of interns and residents registered by SVMT in 2018-2020

Year	2020	2019	2018	Mean
No of interns	20	23	25	22.6

Year	2020	2019	2018	Mean
No of residents	3	1	1	1.6

Table 10.1.2 Number of students registered at postgraduate research training

**Degrees: AY\* AY-1 AY-2 Mean** 

Number of PhDs registered by SVMT in 2018-2020

Year	2020	2019	2018	Mean
No of PhD theses	12	6	15	11

<sup>\*</sup> The last full academic year prior the Visitation.

Table 10.1.3 Number of students registered at other postgraduate programmes (including any external/distance learning courses)
NA

Table 10.1.4 Number of attendees to continuing education courses provided by the Establishment

NA

Table 10.1.5 List of the major funded research programmes in the Establishment which were on-going during the last full academic year prior the Visitation  $(AY^*)$  Scientific topics: grant/year  $(\mathcal{E})$  Duration (Yrs)

All the research programmes run by SVMT that started since 2017 are presented in Annex5. Data are drawn from the Research Committee and include the title, the duration, the grant source, the budget and the framework.

### **10.2 COMMENTS**

As mentioned in Standard 1, a strategic goal of the SVMT is to provide the means for lifelong learning and contribute to continuous professional development of veterinarians in Greece and abroad. Towards this goal the SVMT is organising or participating in high quality continuing education programmes. These programmes are very popular among practicing veterinarians, as evidenced by the large numbers of participants. Except for specialised workshops where the number of attendees is regulated, refresher courses are usually attended by large numbers of practitioners. The SVMT is the main "source" of speakers in such activities in Greece. Support provided by local pharmaceutical and other companies is invaluable. Furthermore, these activities also contribute to the increase of the income of the School.

There is an increased demand for postgraduate research or postgraduate training (especially clinical) programmes. Approximately 10% of the total number of students graduating each year

are participating in postgraduate research training programmes. If the number of interns or students working towards an MSc or EBVS Diploma is taken into account, the percentage rises to greater than 25%. It should be noted that the number of applicants for any position of postgraduate education, especially in clinical subjects, is much greater than the number of places offered.

The existing MSc programme is giving the opportunity to the students to deepen their knowledge of clinical companion animal veterinary medicine. There is need and room for more Master programmes covering farm animals and laboratory animals as well. The MSc programme is recognised by the Royal College of Veterinary Surgeons of the United Kingdom as equivalent to the respective Certificate for accreditation of Advanced Practitioners Status.

The number of PhD students is high making our Institution a good target for postgraduate studies at the level of PhD. More financial support is needed to broaden the subjects of research at PhD level along with the creation of a network between the existing PhD students and postgraduate researchers.

Research grants are numerous and diverse. More interaction is necessary among the different sectors in the form of informative daily seminars in order to link the existing research fields (from basic science to surgery and pathology).

There is another challenge emerging from the number of faculty members scheduled to be retired in the near future and the reduced number of colleagues expected to replace them; alternative methods in veterinary education, including the benefit of reducing the number of animals needed e.g. for dissection. An academic model based on intertwined educational and research activities and involvement, supported by external funding for research and capacity building might alleviate the problem.

### 10.3 SUGGESTIONS

The SVMT should continue this active involvement in continuing education to the benefit of both its staff and the veterinary professionals in Greece.

The number of scholarships provided to research students should be increased towards a final goal of every postgraduate student being completely supported financially by a scholarship or research grant, for the entire duration of their studies.

The number of postgraduate diplomas, PhD and certificates awarded annually could be considered as satisfactory.

There is a need for increasing EBVS recognised residency programmes by encouraging existing Diplomates to apply to have their centre approved. In addition, more members of the academic staff need to apply to obtain the Diplomate status. National recognition of EBVS Diplomas will definitely facilitate the increase of offered residency programmes.

Tuition-based post-graduate training programmes should be established within the SVMT addressing key areas of demand.

### STANDARD 11. OUTCOME ASSESSMENT AND QUALITY ASSURANCE

### 11.1. FACTUAL INFORMATION

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

- has a culture of QA and continued enhancement of quality;
- operates ad hoc, cyclical, sustainable and transparent outcome assessment, QA and quality enhancement mechanisms;
- collects, analyses and uses relevant information from internal and external sources for the effective management of its programmes and activities (teaching, research, services);
- informs regularly 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 ESG Standards.

Towards achieving its goals regarding outcome assessment, QA and quality enhancement, the SVMT has made the arrangements so that:

- it commits itself to the development of a culture, which recognises the importance of quality, and quality assurance, in its activities, and to achieve this, it develops and implements a strategy for the approval, periodic review and monitoring of the standards and quality of its programmes, services and research activities;
- any specified experience requirement is clearly defined, relevant to the objectives of the School, and amenable to evaluation;
- it undergoes external quality assurance in line with the ESG on a cyclical basis;
- it interacts with its stakeholders and the wider society;
- it has a well-organised approach for delivering a clear operational procedure on biosafety and biosecurity;
- A full description of the QA in SVMT is found in Annex 6.

### The QA Plan-Do-Check-Act cycle is depicted in Figure 11.1.1.

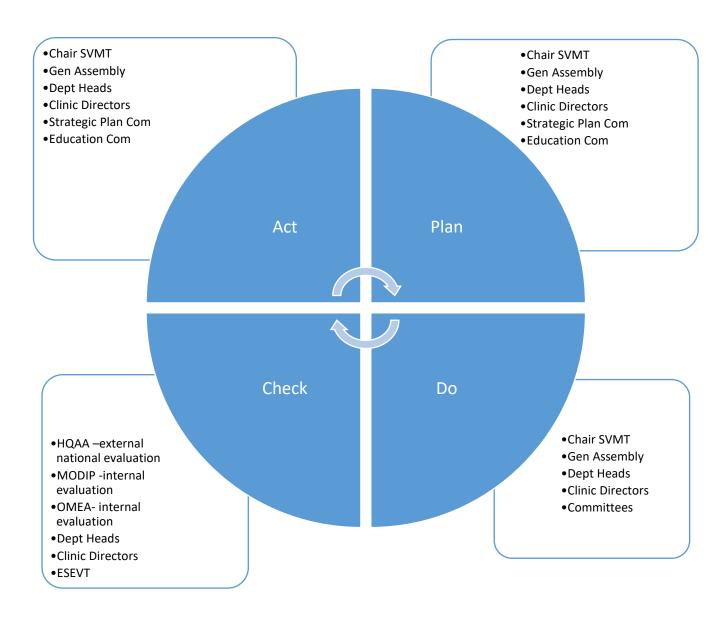
The "Plan" section consists of receiving feedback from students, faculty and staff, graduates, professional associations, and internal and external evaluators. All this information is assessed by the various committees, who propose accordingly to the School Chair and General Assembly.

The "Do" section refers to implementation of tasks and procedures by the School Chair, Department Heads, and Clinic/Laboratory Directors who are responsible for overseeing the implementation of all decisions made by the General Assembly.

The "Check" section implies reviewing the strategic plan concerning all SVMT's activities by the pertinent evaluation authorities and the SVMT's Committees.

The "Act" section aims at communicating the results to School staff members and students through the General Assembly. The objectives are well defined and follow-up measures are in place.

Fig. 11.1.1 The QA Plan-Do-Check-Act (PDCA) cycle in the SVMT



Both **internal** and **external** systems exist for the evaluation of the outcome and QA activities (including accountability and improvement) of the SVMT, described below.

The National Quality Assurance system comprises the Hellenic Quality Assurance and Accreditation Agency (HQAA; <a href="www.ethaae.gr">www.ethaae.gr</a>), the University's Quality Assurance Unit (MODIP; <a href="www.modip.AUTH">www.modip.AUTH</a>), and a Quality Assurance Unit (OMEA) in each School. HQAA is a member of the European Association for Quality Assurance in Higher Education (ENQA). The procedures of the evaluation of Greek Universities is coordinated and supported at national level by the independent administrative Authority (HQAA). MODIP is established in every Institution of Higher Education by the University Senate to coordinate and support the evaluation procedures of the institution. MODIP convenes under the chairmanship of the Vice Rector for Academic Affairs of each Institution. The structure, function and responsibilities of MODIP are determined by decision of the Senate of each Institution.

The most recent external evaluation of AUTH by a committee of external experts, under the coordination and responsibility of HQAA in accordance with relevant legislation. Our

University was awarded an overall «Worthy of merit» mark, which is the highest mark, having been individually awarded «Worthy of merit» on 10 sections and «Positive evaluation» on 15 sections; this is regarded an excellent evaluation. The next external evaluation is scheduled for April 2021.

The **internal evaluation group (OMEA)** of the SVMT is composed of distinguished faculty members, preferably with experience in quality assurance procedures. A student representative also participates. The OMEA is responsible for:

- Conducting, in cooperation with MODIP, the internal evaluation procedure inside the academic unit;
- Monitoring the completion of the inventory forms and questionnaires and informing the bodies and members of the academic unit for the results;
- Gathering and analysing all necessary data of the evaluation,
- Writing the Internal Self Evaluation Report, which is forwarded to MODIP and then to HOAA;
- Collaborating with the HQAA for organising and carrying out the external evaluation.

In addition to the general Quality Assurance policy applied at SVMT (<a href="www.modip.AUTH">www.modip.AUTH</a>), the Quality Management System for the Companion Animal Clinic, for the Laboratory of Diagnostic Imaging and the Diagnostic Laboratory and for the Farm Animal Clinic was certified as meeting the EN ISO 9001:2015 for the Laboratory of Diagnostic Imaging and the Diagnostic Laboratory (Annexes 7, 8, 9). This external certification is evidence that the Clinics and Laboratories operate a management system for continuous improvement, which translates into an improvement in the services offered to our students and hospital clients. This system includes the design, implementation and evaluation of procedures for each of the following areas:

- Reception
- Clinical Services
- Special Services
- Hospitalization
- Diagnostic Laboratory
- Operating Theatre
- Anaesthesia
- 24-hour emergency services
- Diagnostic imaging Laboratory
- Assistance in Veterinary Medicine teaching
- Biosecurity

The above attests to compliance with all conditions for external quality assurance in line with the ESG requirements.

### 11.1.2 Publication of SVMT strategy, policy and procedures

The strategic plan of SVMT is published on <a href="https://www.vet.auth.gr/en/the-school/evaluation">https://www.vet.auth.gr/en/the-school/evaluation</a>. Policy and procedures conform to the regulations of ETHAEE and AUTH (<a href="https://www.ethaae.gr/el/">https://www.ethaae.gr/el/</a>; <a href="www.modip.AUTH">www.modip.AUTH</a>). Quantitative and qualitative information concerning the curriculum is disseminated following protocols of the School committees and the General Assembly.

### 11.1.3 Publication of the SVMT educational programme and award description

Information about the educational programmes and awards is made publicly available via SVMT's website (<a href="http://www.vet.auth.gr">http://www.vet.auth.gr</a>). Relevant quantitative and qualitative information concerning the curriculum is disseminated following protocols of the School committees, Department Assemblies and the General Assembly.

All students are regularly informed about the examination schedule and curriculum updates. The latter is ratified by the General Assembly before the end of each academic year.

## 11.1.4 Description of the QA processes not yet described in the other 10 Standards NA

### 11.1.5 Communication of the QA strategy

The strategy for QA is decided by the General Assembly of the School, approved by MODIP and ratified by HQAA. The SVMT strategy is disseminated following protocols of the School committees and the Assemblies of the Departments and the School.

### 11.2 COMMENTS

Despite the economic crisis of the last years QA regulations were fully applied to ensure good standards of training within SVMT.

After the last evaluation of 2015, national external quality assessment of Greek Universities did not take place due to reasons beyond the control of SVMT and AUTH.A new national quality assessment and assurance is expected within 2021.

Assessment of specific activities within the SVMT continued after the last EAEVE evaluation (2011). For example, OMEA finalised a new curriculum proposal, which was approved by the School's General Assembly in 2012 and implemented in 2013. Amendments were also made to the Postgraduate programme of SVMT. Furthermore, a QA system was implemented for the Diagnostic and Diagnostic Imaging Laboratories, and was certified as meeting the EN ISO 9001:2015.

### 11.3. SUGGESTIONS

Outcome Assessment and Quality Assurance should be applied regularly to the whole of SVMT. This will improve training activities and services provided to stakeholders and the public.

### 12. ESEVT INDICATORS

### **12.1 FACTUAL INFORMATION**

N		2018-2019	2017-2018	Mean
1	n° of FTE academic staff involved in	96	95	95.5
	veterinary training			
2	n° of undergraduate students	500	602	551
3	n° of FTE veterinarians involved in veterinary	85	86	85.5
	training			
4	n° of students graduating annually	72	80	76
5	n° of FTE support staff involved in veterinary	27	27	27
	training			
6	n° of hours of practical (non-clinical) training	949	949	949
7	n° of hours of clinical training	935	935	935
8	n° of hours of FSQ & VPH training	300	300	300
9	n° of hours of extra-mural practical training in	48	48	48
	FSQ & VPH			
10	n° of companion animal patients seen intra-	3,653	4,008	3,830.5
	murally			
11	n° of ruminant and pig patients seen intra-	136	70	103
	murally			
12	n° of equine patients seen intra-murally	115	107	111
13	n° of rabbit, rodent, bird and exotic patients	205	198	201.5
	seen intra-murally			
14	n° of companion animal patients seen extra-	0	0	0
	murally			
15	n° of individual ruminants and pig patients	800	665	732.5
4.5	seen extra-murally	252	251	251.7
16	n° of equine patients seen extra-murally	252	271	261.5
17	n° of visits to ruminant and pig herds	113	107	110
18	n° of visits of poultry and farmed rabbit units	104	100	102
19	n° of companion animal necropsies	348	313	330.5
20	n° of ruminant and pig necropsies	155	165	160
21	n° of equine necropsies	14	11	12.5
22	n° of rabbit, rodent, bird and exotic pet	708	540	624
	necropsies	4.5		4 -
23	n° of FTE specialised veterinarians involved	19	19	19
	in veterinary training	10		. ~
24	n° of PhD graduating annually	10	3	6.5

### **12.2 COMMENTS**

The number of SVMT support staff remains low. Hours of practical and clinical training have increased with the implementation of the new curriculum. A number of support staff is paid by service income.

### 12.3 SUGGESTIONS FOR IMPROVEMENT

The number of support staff should be increased.

### The Covid -19 pandemic and the SVMT

Greece is being affected by the worldwide pandemic of coronavirus disease 2019 (COVID-19) caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). The first case in Greece was confirmed on 26 February 2020. Health and State authorities issued precautionary guidelines and recommendations, while measures up to early March were taken locally and included the closure of schools and the suspension of public events in the affected areas. On 10 March 2020, with 89 confirmed cases and no deaths in the country, the Ministries of Education and Health decided to suspend the operation of educational institutions of all levels nationwide. The Aristotle University of Thessaloniki closed down all Faculties and Schools. Classes were offered only through internet using different communication platforms supported by the University, including WebEx, Zoom or Microsoft teams. On 25 May 2020, the Ministry of Education issued a new directive and allowed universities to re-open only for practical and clinical work. The SVMT opened the Department of Clinical Sciences for training of the final semester students. Strict precautions were taken based on Ministry of Health directives (small groups of students wearing masks, keeping distance, and using hand and surface antisepsis) to ensure safe and efficient work conditions for students, clients and staff. Students were not included in out-of-hours duties. In the SVMT Clinics, clients wearing masks were kept outside the receiving areas for history taking. Clients were not allowed to step inside the examination, treatment and hospitalisation areas. Animals were taken in the examination rooms by the students and staff for further examination and treatment. Appointments were kept to a minimum of 4 cases for each service or unit. The nearly 3-month closure of the school and the restricted opening thereafter resulted in a significant decrease of number of cases and financial income. The academic semester ended on 31 June 2020. Between July 1st and 31st 2020 student examinations and assessment took place. Students of all semesters except 10<sup>th</sup> were examined through internet using the e-learning platform. Students of the 10<sup>th</sup> semester were examined in small groups orally outside the clinical buildings. During this 5-month period (March-July 2020), no case of covid-19 was detected in the SVMT. On 1 Sept 2020 the SVMT started full operation following the precautions and guidelines issued by the Ministries of Health and Education. Classes were taught remotely via internet but practical and clinical training was offered physically to small teams of students. The Department of Clinical Sciences was fully operational throughout this time in terms of diagnosis and treatment of small and large animals. However, inNovember2020, covid-19casesinthe region of Thessaloniki increased dramatically. This was followed by a local and the national lockdown. The University stopped all educational activities offered physically and since November 4 only internet-based teaching has been performed. The Department of Clinical Sciences also closed the service operations. During the period late October to early November one faculty member and a few undergraduate and postgraduate students were tested positive and subjected to self-isolation.

#### **ANNEXES**

#### Annex 1

#### The Strategic Plan, including a SWOT analysis, of the SVMT

The **Mission** of the School of Veterinary Medicine of the Aristotle University of Thessaloniki (SVMT) is to maintain a center of excellence for student veterinary training and education so as to ensure that improved optimal veterinary medical services will be provided to the public. A 10-year strategic plan has been defined in order to achieve the above mission.

From the educational point of view, the aims of the programme are:

- To provide students with the knowledge, know-how, skills and competences to pursue a successful career in the fields of diagnosis, treatment and prognosis of disease, animal health and production, food safety/public health, and animal welfare.
- To offer a stimulating and friendly learning environment that will attract highly qualified and motivated students and produce veterinarians of the highest standards.
- To provide lifelong learning opportunities and maintain a continuous professional development of the alumni.
- To ensure that, on completion of the study programme, our graduates have acquired a thorough knowledge and understanding of the scientific disciplines on which the activities of veterinary practitioners are based, and possess the required "Day-one skills", and are in a position to carry out the responsibilities safely and ethically.
- To ensure that SVMT is equipped with the teaching staff, infrastructure and facilities necessary to deliver high standards of veterinary education.
- With regards to scientific research, SVMT is aiming at:
- Fostering an enthusiastic interest in veterinary and biomedical research via graduate research programmes and periods of elective study.
- Forging collaborations with other research institutes worldwide.
- Conducting fundamental and applied research at the frontiers of veterinary medicine and veterinary science.
- Providing opportunities for faculty development.
- Expanding the scientific base of knowledge.

Concerning the services offered by the School, the objectives are:

- To provide a wide range of veterinary medical services of high standards to the public, including animal production and health management, clinical services (farm and companion animals), and diagnostic laboratory services.
- To provide continuous professional development courses, seminars and conferences for veterinarians and the general public.

#### Additional objectives include:

- To enhance rural diversity and promote innovation in the farm and related enterprises, while ensuring the protection of the environment. The Faculty provides advice and consultation together with scientific and business services to farm enterprises and related processing, manufacturing and supply industries.
- To maintain monitoring programmes on animal disease prevalence and promote public appreciation of the veterinary profession and its contribution to national prosperity. The SVMT has established a comprehensive strategy of engaging in integrated research that supports both Greek and European Government bodies with advice on existing and emerging diseases and providing a diagnostic service to practicing veterinarians in Greece.

#### **SWOT** analysis

#### Strengths

- Well trained and highly dedicated academic, support and administrative personnel committed to accomplishing the SVMT's mission.
- Wide alumni circles, having been the only School of Veterinary Medicine in the country for 50 years and currently the biggest of two.
- Reputation for delivery of high-quality teaching, research and clinical/laboratory/consultancy services.
- Full responsibility in designing its curriculum. Neither the University nor the Ministry may interfere with the actual content of the curriculum.
- Strong connections with research institutes and universities worldwide.
- Strong connections with the primary livestock production industry, food processing companies and the companion animal sector.
- Strong support from the University Research Committee in the implementation of scientific research programmes.
- Strong support from the University Central Administration.
- Technological expertise and infrastructure in the areas of Networks, Communications, Information systems and Services, and Electronic governance for the delivery of objectives.

#### Weaknesses

- Decreasing number of nursing and support staff may impair teaching and research efforts, and achieving the SVMT objectives.
- Activities are split among three distinct geographical sites.
- The disproportionate yearly supplementary intake of students overwhelms the educational capability of the institution.

#### **Opportunities**

- Increased demand for meat inspectors and public health veterinarians both nationally and internationally.
- Increased demand for practicing veterinarians (farm and companion animals) both nationally and internationally.
- Increased demand for Companion Animal Clinical and Diagnostic Services.
- Primary livestock production constitutes a major component of the Greek economy.
- Increased importance of zoonotic diseases necessitating specialised veterinary input.

#### **Threats**

- Dire financial circumstances. During the last 7 years, the country faced with severe economic crisis with affected higher education as well. Although this situation started improving two years ago, the ongoing covid-19 pandemic is posing a new financial challenge.
- Linked to the first threat, inadequate replacement of faculty retirements affects teaching and clinical services.
- Also linked to the first threat, inadequate maintenance of buildings and premises may compromise the teaching environment.
- All public Universities in Greece are bound by the same legislation which provides limited flexibility, e.g. in annual student intake.

#### Annex 2

#### **Organisation of the AUTH**

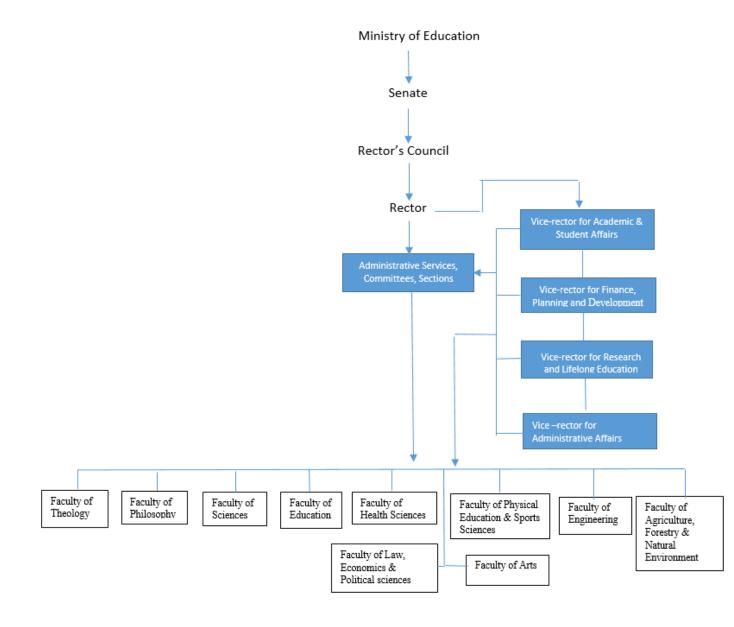
The Aristotle University of Thessaloniki (AUTH) is a State institution that was established in 1925. The number of students currently enrolled at AUTH is 74,000, comprising 65,000 undergraduate and 9,000 postgraduate students. At present, the Teaching and Research (Academic) Staff amounts to 2,024 individuals. The Scientific Teaching Staff amounts to 53. The Special Laboratory Teaching Staff comes up to 287 people, while 6 teachers of the Greek Language and 13 teachers of foreign languages are also employed by the University. Furthermore, support is offered to educational projects by 134 members of the Special Technical Laboratory Staff (Technicians) and to administrative projects by 245 permanent employees, 294 contracted employees, and 790 temporary employees (administrative, cleaning, gardening and security personnel).

AUTH is the biggest University in Greece and offers studies in the majority of the scientific disciplines. The Schools are the academic units issuing the basic University title, called "Degree" ("Ptychio" in Greek), as well as the "Post-graduate Diploma of Specialisation", which is equivalent to the Master's Degree, and the "Doctoral Diploma" equivalent to the PhD degree. Schools with related study disciplines and common orientations form larger academic units, the Faculties. Until 2005 the then School of Veterinary Medicine (SVMT) was part of the Faculty of Geotechnical Sciences. Between 2005 and 2013, it operated as a single-School Faculty, the Faculty of Veterinary Medicine, whereas since 2013 SVMT is a School within the Faculty of Health Sciences (Schools of Medicine, Veterinary Medicine, Dentistry and Pharmacy).

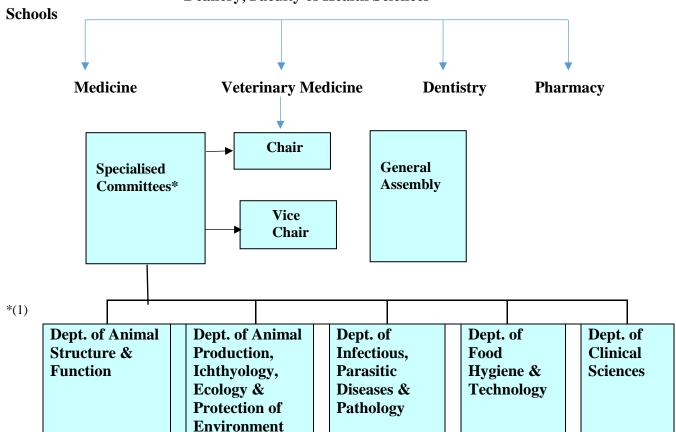
The University is headed by the Rector, who is assisted by four vice-Rectors, one on Academic and Student Affairs, one on Finances Planning and Development, one on Research and Lifelong Education, and one on Administrative affairs. The administrative bodies of the University are the Senate, the Rector's Council and the Rector. The Senate is the ultimate decision-making body and consists of the Rector, the Vice-Rectors, the Faculty Deans, the Chairs of the Schools, the University Secretary (non-voting member), a student representative from each School, two representatives of the postgraduate students, one representative of the assistants-tutors-scientific fellows, one representative of the Special Laboratory Teaching Staff, one representative of the Special Technical Teaching Staff and one representative of the Administrative Staff. Representatives of associate professors and assistant professors are also entitled to participate in the Senate. The Rector's Council consists of the Rector, the Vice-Rectors, a student representative who is elected by all the students who participate in the Senate, and the University Secretary (without a right to vote).

The Rector, the Vice-Rectors and the Deans of the Faculties are elected for a four-year term, while the Chairs and Deputy Chairs of the Schools or single-School Faculties for a term of two years. The electorate for the Rector and the vice-Rectors consists of all the members of the academic staff, under- and post-graduate students, special teaching staff, and technical and administrative staff of the University. The corresponding percentages of votes of the members of the academic staff are by and large equal to those of the members of the other categories of the electorate. The electorate for the Dean of a Faculty has a similar composition, originating, however, only from the Schools which constitute the Faculty. The Schools are subdivided into Departments.

#### Integration of the SVMT in the organisation structure of the AUTH



## Organisational structure of the SVMT Deanery, Faculty of Health Sciences



Kolchiko Farm Committee, (2) Biosecurity, Management of Dangerous Medical Waste and Radioprotection Committee; (3) Bioethics and Deontology Committee; (4) Education Committee; (5) Evaluation of Doctoral Candidate Qualification Committee; (6) EAEVE Committee; (7) Social Policy, Gender and Equality Committee; (8) Quality Assurance Committee; (9) Strategic Planning Committee; (10) Library Supervisor; (11) Counsellors of International Students and Special Needs Students; (12) Coordinators of Erasmus and ECTS; (13) Buildings Supervisors; (14) Textbook Platform ("Evdoxos") Committee; (15) School Website Committee.

Annex 3

List of courses and relevant theoretical and practical training of the current core curriculum structure

1st Semester						
		Hours/Semester				
Code	Course	Theory	Practical Training	ECTS		
1.1	Chemistry-Biochemistry	34	12	6		
1.2	Plant and Animal Biology	10	6	2		
1.3	General Histology-Embryology	26	14	5		
1.4	Anatomy-Histology I	29	64	7		
1.5	Physiology I	25	9	4		
1.6	Molecular Biology-Genetics	22	13	3		
1.7	Biostatistics	18	16	3		
1.8	Seminar on Informatics and Electronic Resources	18		0		
	Total	182	134	30		
	Hours/week	14	10.5			

2 <sup>nd</sup> Semester						
		Hours/Semester				
Code	Course	Theory	Practical Training	ECTS		
2.1	Anatomy-Histology II	25	24	6		
2.2	Physiology II	40	30	7		
2.3.	General Animal Husbandry	18	18	4		
2.4	Fundamentals of Animal Nutrition	24	32	6		
2.5	Deontology, Ethology and Animal Welfare	20		3		
2.6	Animal Production Economics	20	8	4		
	Total	147	112	30		
	Hours/Week	11.3	8.6			

3 <sup>rd</sup> Semester							
		Но	r				
Code	Course	Theory	Practical Training	ECTS			
3.1	Anatomy-Histology III	35	72	7			
3.2	Physiology III	34	12	5			
3.3	General bacteriology, Mycology, Virology and Immunology	34	36	7			
3.4	Animal Husbandry I	32	44	6			
3.5	Animal Feeds-Rations, Agronomy	22	42	5			
	Total	157	206	30			
	Hours/Week	12.1	15.8				

4 <sup>th</sup> Semester						
		Hours/Semester				
Code	Course	Theory	Practical Training	ECTS		
4.1	Pharmacology I	37	34	6		
4.2	Specific Bacteriology, Mycology, Virology and Infectious Diseases	50	36	7		
4.3	Parasitology and Parasitic Diseases I	29	16	5		
4.4	Animal Husbandry II	46	64	8		
4.5	Extramural education (practical training)			2		
	Electives			2		
	Total	162	150	30		
	Hours/Week	12.5	11.5			

5 <sup>th</sup> Semester						
		Hours/Semester				
Code	Course	Theory	Practical Training	ECTS		
5.1	General Pathology	30	32	5		
5.2	Propedeutics of Veterinary Medicine, Surgery and Obstetrics	44	7			
5.3	Obstetrics and Neonatology	35		4		
5.4	Parasitology and Parasitic Diseases II	29	16	4		
5.5	Ecology and Environmental Protection	23	12	3		
5.6	Farming and Pathology of Aquatic Organisms	26	16	3		
5.7	Toxicology	10	4	2		
	Electives			2		
	Total	184	124	30		
	Hours/Week	14.2	9.5			

6 <sup>th</sup> Semester						
		Hours/Semester				
Code	Course	Theory	Practical Training	ECTS		
6.1	Special Pathology I	21		2		
6.2	Companion Animal Medicine I	37		4		
6.3	Companion Animal Surgery I	19		2		
6.4	Diagnostic Imaging I	17	4	2		
6.5	Farm Animal Medicine I	52		5		
6.6	Food Animal Technology	26	21	4		
6.7	Apiculture and Bee Diseases	10	10	2		
6.8	Pharmacology II	26		3		
6.9	Extra-mural training			2		
	Electives			4		
	Total	208	35	30		
	Hours/Week	16	2.7			

7 <sup>th</sup> Semester							
		Hou	ırs/Semeste	r			
Code	Course	Theory	Practical Training	ECTS			
7.1	Special Pathology II	18		2			
7.2	Companion Animal Medicine II	31		3			
7.3	Companion Animal Surgery II	15		2			
7.4	Diagnostic Imaging II 13						
7.5	Farm Animal Medicine 50						
7.6	Avian Medicine 30						
7.7	Hygiene and Technology of Milk and Dairy Products 21						
7.8	Training in Post Mortem examination		36	2			
7.9	Clinical Training in Companion Animals		87	2			
7.10	Clinical Training in Farm Animals		87	2			
7.11	Training in Hygiene and Technology of Milk and Dairy Products		30	2			
	Electives			2			
	Total	178	240	30			
	Hours/Week	13.7	18.5				

8 <sup>th</sup> Semester							
		Hou	r				
Code	Course	Theory	Practical Training	ECTS			
8.1	Hygiene of Mammalian Meat and Products	28		2			
8.2	Food Microbiology	17		2			
8.3	Special Pathology III	31		2			
8.4	Companion Animal Medicine III 32						
8.5	Companion Animal Surgery III 28						
8.6	Equine Medicine and Surgery 23						
8.7	Farm Animal Surgery	17		2			
8.8	Animal Reproduction I	38		3			
8.9	Training in Post Mortem Examination		36	2			
8.10	Clinical Training in Companion Animals		87	2			
8.11	Clinical Training in Farm Animals		87	2			
8.12	Training in Food Hygiene		39	2			
8.13	Extra-mural training			2			
	Electives			2			
	Total	214	249	30			
	Hours/Week	16.5	19.2				

9 <sup>th</sup> Semester							
		Hours/Semester					
Code	Course	Theory	Practical Training	ECTS			
9.1	Hygiene of Poultry and Game Meat and Fish. Hygiene of Eggs and Honey.	20		2			
9.2	Quality Assurance and Food Safety Systems	10		2			
9.3	Anaesthesiology and Intensive Care Medicine	20		2			
9.4	Entrepreneurship and Management of Veterinary and Animal Production Enterprises	14	8	2			
9.5	Reproduction II	48		4			
9.6	Diseases of Exotic Animals	13		2			
9.7	Clinical Pharmacology	20		2			
9.8	Training in Post Mortem Examination		38	2			
9.9	Clinical Training in Companion Animals		108	2			
9.10	Clinical Training in Farm Animals		108	2			
9.11	Training on Food Animal Hygiene and Technology		42	2			
9.12	Epidemiology	24	12	2			
	Electives			4			
	Total	169	316	30			
	Hours/Week	13	24.3				

10 <sup>th</sup> Semester						
		Hours/Semester				
Code	Course	Theory	Practical Training	ECTS		
10.1	Training in Post Mortem Examination. Introduction to Veterinary Forensics		38	5		
10.2	Clinical Training in Companion Animals		108	8		
10.3	Clinical training in Farm Animals		108	8		
10.4	Training on Food Animal Hygiene and Technology		46	5		
	Electives			4		
	Total		300	30		
	Hours/Week		23.1			
	ECTS from regular courses			274		
	ECTS from Elective Courses			20		
	ECTS from Extra-mural training			6		
	Total ECTS			300		

#### ROTATION SCHEDULES IN COMPANION AND FARM ANIMAL GROUPS

Table 1. Rotation schedule of companion animal group of semester 9

Week	Subgroup	A1	A2				A3		
			Anaesthesia		Radiology	Small Animal S	Surgery (SAS)		
Week 1	Tuesday Wednesda y		Anaesthesia Anaesthesia	Opth.+Exotic s Opth.+Exotic s	Radiology Radiology	SAS SAS	Equi	nes etrics	
	Thursday	Small Animal Medicine	,	Radiology	Anaesthesia	Opth.+Exotic s	Equines	SAS	
	Friday			Opth.+Exotic s	Anaesthesia	Opth.+Exotic s	Obstetrics	SAS	
	Monday Tuesday			Radiology Opth.+Exotic	Radiology	Anaesthesia Anaesthesia	Small Animal S		
Week 2	Wednesda y	Small Animal Surgery (	S	Kaulology	Anaesmesia	Anaesthesia	Opth.+Exoti	Radiolog y Radiolog	
	Thursday	Equines	SAS				Anaesthesia	Opth.+Exoti	
	Friday	Obstetrics	SAS				Anaesthesia	Opth.+Exoti	cs
	Monday	Small Animal Surgery (	(SAS)	Small Animal	Medicine		Radiology	Anaesthesi a Anaesthesi	Radiology
	Tuesday	SAS	Equines				Radiology	a A	Opth.+Exotics
Week 3	Wednesda y	Obstetrics	SAS				Radiology	Anaesthesi a	Opth.+Exotics
	Thursday Friday	Equines SAS	Obstetrics Obstetrics				Opth.+Exotic s Opth.+Exotics	Radiology	Anaesthesia Anaesthesia
	Monday	Anaesthesia Radiol	ogy	Small Animal	Surgery (SAS)				
	Tuesday Wednesda	Anaesthesia s	-Exotic Radiology -Exotic	Small Animal	Surgery (SAS)				
Week 4	у	Anaesthesia s	Radiology	Small Animal	Surgery (SAS)				

	Thursday	Radiology	Anaesthesia	Opth.+Exotic s	Equines		Small Animal Medicine
	<b></b>	Opth.+Exotic		Opth.+Exotic			
	Friday	S	Anaesthesia	S	SAS	Obstetrics	
		Opth.+Exotic					
	Monday	S	Radiology	Anaesthesia	SAS	Equines	
		Opth.+Exotic					
Week 5	Tuesday	S	Radiology	Anaesthesia	Obstetrics	SAS	

Table 2. Rotation schedule of farm animal group of the students of semester 7

Monday	Tuesday	Wednesday	Thursday	Friday
KOLCHIKO Teaching Hospital Group 2	POULTRY at Clinic Group 2	RUMENOCENTESIS - OESOPHAGAL TUBING Cattle GROUP 1	SMALL RUMINANTS AT KOLCHIKO Group 1	DISSCUSSION / ANALYSIS OF THE CLINICAL CASES OF THE WEEK (ALL GROUPS)
FETOTOMY Cattle Group 3	Biotechnology of Reproduction Group 1	KOLCHIKO Teaching Hospital Group 2	KOLCHIKO Teaching Hospital Group 2	
CESAREAN-SECTION Sheep Group 1				
Monday	Tuesday	Wednesday	Thursday	Friday
KOLCHIKO Teaching Hospital Group 3	POULTRY at Clinic Group 1	RUMENOCENTESIS - OESOPHAGAL TUBING Cattle Group 2	SMALL RUMINANTS AT KOLCHIKO Group 2	DISSCUSSION / ANALYSIS OF THE CLINICAL CASES OF THE WEEK (ALL GROUPS)
FETOTOMY Cattle Group 1	Biotechnology of Reproduction Group 2	KOLCHIKO Teaching Hospital Group 1	KOLCHIKO Teaching Hospital Group 1	
CESAREAN-SECTION Sheep Group 2				
Monday	Tuesday	Wednesday	Thursday	Friday
KOLCHIKO Teaching Hospital Group 1	POULTRY at Clinic Group 2	LIVER BIOPSY Cattle GROUP 1	SMALL RUMINANTS AT KOLCHIKO Group 1	DISSCUSSION / ANALYSIS OF THE CLINICAL CASES OF THE WEEK (ALL GROUPS)
FETOTOMY Cattle Group 2	Biotechnology of Reproduction Group 1	KOLCHIKO Teaching Hospital Group 2	KOLCHIKO Teaching Hospital Group 2	
CESAREAN-SECTION Sheep Group 3				
Monday	Tuesday	Wednesday	Thursday	Friday
KOLCHIKO Teaching Hospital Group 2	POULTRY at Clinic Group 1	LIVER BIOPSY Cattle Group 2	SMALL RUMINANTS AT KOLCHIKO Group 2	DISSCUSSION / ANALYSIS OF THE CLINICAL CASES OF THE WEEK (ALL GROUPS)
FETOTOMY Cattle Group 3	Biotechnology of Reproduction Group 2	KOLCHIKO Teaching Hospital Group 1	KOLCHIKO Teaching Hospital Group 1	
CESAREAN-SECTION Sheep Group 1				
Monday	Tuesday	Wednesday		
KOLCHIKO Teaching Hospital Group 3	POULTRY at Clinic Group 2	RUMENOCENTESIS - OESOPHAGAL TUBING Cattle Group 1		
FETOTOMY Cattle Group 1	Biotechnology of Reproduction Group 1	KOLCHIKO Teaching Hospital Group 2		
CESAREAN-SECTION Sheep Group 2				

Table 3. Rotation schedule of farm animal group of the students of semester 8

Monday	Tuesday	Wednesday	Thursday	Friday
KOLCHIKO Teaching Hospital Group 2	PORCINE at Clinic Group 2	Hormonal treatments in cattle Group 1A	Sutures on reproductive tract of cows – Hands on practice Group 1A	DISSCUSSION / ANALYSIS OF THE CLINICAL CASES OF THE WEEK (ALL GROUPS)
LAPAROTOMY Cattle Group 3	LABORATORY DIAGNOSTICS Group 1	Sutures on udder teats - Hands on practice Group 1B	Ultrasonography in cows - Hands on practice Group 1B	
CLAW TRIMMING Cattle Group 1		KOLCHIKO Teaching Hospital Group 2 KOLCHIKO Teaching Hospital Group 2		
Monday	Tuesday	Wednesday	Thursday	Friday
KOLCHIKO Teaching Hospital Group 3	PORCINE at Clinic Group 1	Hormonal treatments in cattle Group 2A	Sutures on reproductive tract of cows – Hands on practice Group 2A	DISSCUSSION / ANALYSIS OF THE CLINICAL CASES OF THE WEEK (ALL GROUPS)
LAPAROTOMY Cattle Group 1	LABORATORY DIAGNOSTICS Group 2	Sutures on udder teats - Hands on practice Group 2B	Ultrasonography in cows - Hands on practice Group 2B	
CLAW TRIMMING Cattle Group 2		KOLCHIKO Teaching Hospital Group 1	KOLCHIKO Teaching Hospital Group 1	
Monday	Tuesday	Wednesday	Thursday	Friday
KOLCHIKO Teaching Hospital Group 1	PORCINE at Clinic Group 2	Hormonal treatments In cattle Group 1B	Sutures on reproductive tract of cows – Hands on practice Group 1B	DISSCUSSION / ANALYSIS OF THE CLINICAL CASES OF THE WEEK (ALL GROUPS)
LAPAROTOMY Cattle Group 2	LABORATORY DIAGNOSTICS Group 1	Sutures on udder teats - Hands on practice Group 1A	Ultrasonography in cows - Hands on practice Group 1A	
CLAW TRIMMING Cattle Group 3		KOLCHIKO Teaching Hospital Group 2	KOLCHIKO Teaching Hospital Group 2	
Monday	Tuesday	Wednesday	Thursday	Friday
KOLCHIKO Teaching Hospital Group 2	PORCINE at Clinic Group 1	Hormonal treatments in cattle Group 2B	Sutures on reproductive tract of cows – Hands on practice Group 2B	DISSCUSSION / ANALYSIS OF THE CLINICAL CASES OF THE WEEK (ALL GROUPS)
LAPAROTOMY Cattle Group 3	LABORATORY DIAGNOSTICS Group 2	Sutures on udder teats - Hands on practice Group 2A	Ultrasonography in cows - Hands on practice Group 2A	
CLAW TRIMMING Cattle Group 1		KOLCHIKO Teaching Hospital Group 1	KOLCHIKO Teaching Hospital Group 1	
Monday	Tuesday	Wednesday		
KOLCHIKO Teaching Hospital Group 3	PORCINE at Clinic Group 2	Hormonal treatments in cattle Group 1A		
LAPAROTOMY Cattle Group 1	LABORATORY DIAGNOSTICS Group 1	Sutures on udder teats - Hands on practice Group 1B		
CLAW TRIMMING Cattle Group 2		KOLCHIKO Teaching Hospital Group 2		

Table 4. Rotation schedule of farm animal group of the students of semester 9

	A1	A2	А3	Α4
Monday	CESAREAN-SECTION Sheep	RABBITS Farm Visit	FETOTOMY Cattle	KOLCHIKO Teaching Hospital
Tuesday	Laboratory Diagnostics	SMALL RUMINANTS Farm Visit	POULTRY at Clinic	KOLCHIKO Teaching Hospital
Wednesday	POULTRY Farm Visit	PORCINE Farm Visit	POULTRY at Clinic	KOLCHIKO Teaching Hospital
Thursday	CATTLE REPRODUCTION Farm Visit	CATTLE Farm Visit	KOLCHIKO Teaching Hospital	KOLCHIKO Teaching Hospital
Friday		DISSCUSSION / ANALYSIS OF THE	CLINICAL CASES OF THE WEEK	
Monday	KOLCHIKO Teaching Hospital	CESAREAN-SECTION Sheep	RABBITS Farm Visit	FETOTOMY Cattle
Tuesday	KOLCHIKO Teaching Hospital	Laboratory Diagnostics	SMALL RUMINANTS Farm Visit	POULTRY at Clinic
Wednesday	KOLCHIKO Teaching Hospital	POULTRY Farm Visit	PORCINE Farm Visit	POULTRY at Clinic
Thursday	KOLCHIKO Teaching Hospital	CATTLE REPRODUCTION Farm Visit	CATTLE Farm Visit	KOLCHIKO Teaching Hospital
Friday		DISSCUSSION / ANALYSIS OF THE CLINICAL CASES OF THE WEEK		
Monday	FETOTOMY Cattle	KOLCHIKO Teaching Hospital	CESAREAN-SECTION Sheep	RABBITS Farm Visit
Tuesday	POULTRY at Clinic	KOLCHIKO Teaching Hospital	Laboratory Diagnostics	SMALL RUMINANTS Farm Visit
Wednesday	POULTRY at Clinic	KOLCHIKO Teaching Hospital	POULTRY Farm Visit	PORCINE Farm Visit
Thursday	KOLCHIKO Teaching Hospital	KOLCHIKO Teaching Hospital	CATTLE REPRODUCTION Farm Visit	CATTLE Farm Visit
Friday		DISSCUSSION / ANALYSIS OF THE	CLINICAL CASES OF THE WEEK	
Monday	RABBITS Farm Visit	FETOTOMY Cattle	KOLCHIKO Teaching Hospital	CESAREAN-SECTION Sheep
Tuesday	SMALL RUMINANTS Farm Visit	POULTRY at Clinic	KOLCHIKO Teaching Hospital	Laboratory Diagnostics
Wednesday	PORCINE Farm Visit	POULTRY at Clinic	KOLCHIKO Teaching Hospital	POULTRY Farm Visit
Thursday	CATTLE Farm Visit	KOLCHIKO Teaching Hospital	KOLCHIKO Teaching Hospital	CATTLE REPRODUCTION Farm Visit
Friday		DISSCUSSION / ANALYSIS OF THE	CLINICAL CASES OF THE WEEK	
Monday	CESAREAN-SECTION Sheep	RABBITS Farm Visit	FETOTOMY Cattle	KOLCHIKO Teaching Hospital
Tuesday	SMALL RUMINANTS Farm Visit	POULTRY at Clinic	KOLCHIKO Teaching Hospital	Laboratory Diagnostics

Table 5. Rotation schedule of farm animal group of the students of semester 10

	A1	A2	А3	A4
Monday	CLAW TRIMMING Cattle	RABBITS Farm Visit	LAPAROTOMY Cattle	KOLCHIKO Teaching Hospital
Tuesday	ARTIFICIAL INSEMINATION Sheep	SMALL RUMINANTS Farm Visit	POULTRY at Clinic	KOLCHIKO Teaching Hospital
Wednesday	POULTRY Farm Visit	PORCINE Farm Visit	POULTRY at Clinic	KOLCHIKO Teaching Hospital
Thursday	CATTLE REPRODUCTION Farm Visit	CATTLE Farm Visit	KOLCHIKO Teaching Hospital	KOLCHIKO Teaching Hospital
Friday		DISSCUSSION / ANALYSIS OF THI	CLINICAL CASES OF THE WEEK	
Monday	KOLCHIKO Teaching Hospital	CLAW TRIMMING Cattle	RABBITS Farm Visit	LAPAROTOMY Cattle
Tuesday	KOLCHIKO Teaching Hospital	ARTIFICIAL INSEMINATION Sheep	SMALL RUMINANTS Farm Visit	POULTRY at Clinic
Wednesday	KOLCHIKO Teaching Hospital	POULTRY Farm Visit	PORCINE Farm Visit	POULTRY at Clinic
Thursday	KOLCHIKO Teaching Hospital	CATTLE REPRODUCTION Farm Visit	CATTLE Farm Visit	KOLCHIKO Teaching Hospital
Friday		DISSCUSSION / ANALYSIS OF THE CLINICAL CASES OF THE WEEK		
Monday	LAPAROTOMY Cattle	KOLCHIKO Teaching Hospital	CLAW TRIMMING Cattle	RABBITS Farm Visit
Tuesday	POULTRY at Clinic	KOLCHIKO Teaching Hospital	ARTIFICIAL INSEMINATION Sheep	SMALL RUMINANTS Farm Visit
Wednesday	POULTRY at Clinic	KOLCHIKO Teaching Hospital	POULTRY Farm Visit	PORCINE Farm Visit
Thursday	KOLCHIKO Teaching Hospital	KOLCHIKO Teaching Hospital	CATTLE REPRODUCTION Farm Visit	CATTLE Farm Visit
Friday		DISSCUSSION / ANALYSIS OF THI	CLINICAL CASES OF THE WEEK	
Monday	RABBITS Farm Visit	LAPAROTOMY Cattle	KOLCHIKO Teaching Hospital	CLAW TRIMMING Cattle
Tuesday	SMALL RUMINANTS Farm Visit	POULTRY at Clinic	KOLCHIKO Teaching Hospital	ARTIFICIAL INSEMINATION Sheep
Wednesday	PORCINE Farm Visit	POULTRY at Clinic	KOLCHIKO Teaching Hospital	POULTRY Farm Visit
Thursday	CATTLE Farm Visit	KOLCHIKO Teaching Hospital	KOLCHIKO Teaching Hospital	CATTLE REPRODUCTION Farm Visit
Friday		DISSCUSSION / ANALYSIS OF THI	CLINICAL CASES OF THE WEEK	
Monday	CLAW TRIMMING Cattle	RABBITS Farm Visit	LAPAROTOMY Cattle	KOLCHIKO Teaching Hospital
Tuesday	SMALL RUMINANTS Farm Visit	POULTRY at Clinic	KOLCHIKO Teaching Hospital	ARTIFICIAL INSEMINATION Sheep

Cattle farms and their location (in alphabetical order of farm owner)

A/A	Name of the farm	Location
1	American Farm School	Pylaia
2	Darginakis farm	Analipsi
3	Dimopoulos farm	Gerakarou
4	Geronikolakis farm	Drymos
5	Gogos farm	Elassona
6	Kalaitzis farm	Ossa
7	Karvounidis farm	Kolchiko
8	Kefalas farm	Kolchiko
9	Kontouridis farm	Nymfopetra
10	Ligdas farm	Lagkadikia
11	Moshopoulos farm	Sindos
12	Mourati farm	Nymfopetra
13	Mpoudouridis farm	Agios Athanasios
14	Mpeis farm	Kavalari
15	Rokos farm	Lagadas
16	Panagiotidis farm	Kolchiko
17	Sotidis farm	Kolchiko
18	Spirakis farm	NeaMesimvria
19	Stathis farm	Analipsi
20	Tsetouras farm	Adendro
21	Tsompanos farm	Sindos
22	Xanthopoulos farm	Alexandreia
23	Zaralis farm	Agios Loukas

Annex 4

## Small Ruminant farms and their location (in alphabetical order of farm owner)

A/A	Name of the farm	Location
1	Axiotis farm	Kalochori
2	Demertzis farm	Ag. Vasilios
3	Endi farm	Lagadas
4	Galanousis farm	Profitis
5	Georgiadis farm	Monolofos
6	Giorgos farm	Euaggelistria
7	Iakovou farm	Kampanis
8	I.M. Ag. Rafail farm	Filyro
9	Kachagias farm	Lagadikia
10	Karagiannidis farm	Kalochori
11	Karagoulis farm	Profitis
12	Kostas farm	Nea Kavala
13	Krystallas farm	Peristera
14	Lykoudis farm	Pentalofos
15	Maragoudakis farm	Eleochoria
16	Miltsakakis farm	Vafiochori
17	Polychronoudis farm	Lagyna

18	Safetis farm	NeaAchialos
19	Samoladas farm	Gynaikokastro
20	Stampoulis farm	Kolchiko
21	Zachariadis farm	Stivos

### **Pig farms and their location** (in alphabetical order of farm owner)

A/A	Name of the farm	Location
1	Fotiadis farm	Exochi
2	Gasnakis farm	Kampochori
3	Karagiorgos farm	Milia
4	Kipouros farm	Kolchiko
5	Kofidis	AnoApostoloi
6	Kontos farm	Vrya
7	Mpatalas farm	Kontariotissa
8	Stravogiannis farm	Vrya
9	Vamvakas farm	Triglia

### **Rabbit farms and their location** (in alphabetical order of farm owner)

A/A	Name of the farm	Location	_
1	Giannarelis farm	Gonimo Serron	
2	Domproglou farm	Sindos	
3	Polianidis farm	Prochoma	
4	Samaras farm	Stivos	

**Poultry farms and their location** (in alphabetical order of farm owner)
Magna Virtus farm Neochorouda (10 flocks of 25,000 birds each)

Annex 5
Research programmes

## Research Programs at the School of Veterinary Medicine (through AUTH Research Committee)

Project code	Starting date	Ending date	Title	Grant source	Framework	Budget
93813	01/01/17	31/12/18	A transparent and traceable food supply chain for the benefit of workers, enterprises and consumers: the role of a multi-sectoral approach of industrial relations and corporate social responsibility.	EUROPEAN COMMISSION- DIRECTORATE GENERAL MIGRATION AND HOME AFFAIRS	EUROPEAN 2014-2020, SUPPORT FOR SOCIAL DIALOGUE	26,836.50
94682	09/06/17	10/11/17	Expert assistance on drafting the main European Union Summary Report (EUSR) on Zoonoses 2016 - Listeria	EUROPEAN FOOD SAFETY AUTHORITY	REST EUROPEAN, TENDERS	9,341.69
95036	01/08/17	31/01/18	Expression of proinflammatory cytokines IL-2, TNF-a, IL-23, IL-1β and CCL28 in colonic mucosa and mucus in canine idiopathic inflammatory bowel disease	GENERAL SECRETARIAT FOR RESEARCH AND INNOVATION	NATIONAL 2014-2020, FELLOWSHIPS HFRI FOR CANDIDATE PHD STUDENTS	5,400.00
95061	01/08/17	31/07/18	QUALITATIVE PARAMETERS OF COLOSTRUM IN DAIRY COWS	GENERAL SECRETARIAT FOR RESEARCH AND INNOVATION	NATIONAL 2014-2020, FELLOWSHIPS HFRI FOR CANDIDATE PHD STUDENTS	10,800.00
95064	01/08/17	31/07/18	Phylogenesis, identification and investigation on the potential to develop anthelmintic resistance of subpopulations of the nematode parasite Haemonchus spp. of ruminants in Greece	GENERAL SECRETARIAT FOR RESEARCH AND INNOVATION	NATIONAL 2014-2020, FELLOWSHIPS HFRI FOR CANDIDATE PHD STUDENTS	10,800.00
95431	25/10/17	31/12/17	Financing for the school of Veterinary Medicine from the Greek Ministry of Education, Research and Religious Affairs	GREEK MINISTRY OF EDUCATION, RESEARCH AND RELIGIOUS AFFAIRS	NATIONAL 2014-2020, PROGRAM OF GOVERMENTAL INVESTMENTS GRMERRA 2017	20,000.00
95490	25/10/17	31/12/17	Financing for the Postgraduate Course Small Animal Medicine from the Greek Ministry of Education, Research and Religious Affairs	GREEK MINISTRY OF EDUCATION, RESEARCH AND RELIGIOUS AFFAIRS	NATIONAL 2014-2020, PROGRAM OF GOVERMENTAL INVESTMENTS GRMERRA 2017	13,000.00

95619	23/11/17	22/03/21	Innovative poultry production using phytobiotics and pharmaceutical substances of plant origin, mainly from the region of Epirus, free of anticoccidial drugs, in order to produce broiler meat of premium quality.	REGION OF EPIRUS	NATIONAL STRATEGIC REFERENCE FRAMEWORK 2014- 2020, Regional Operational Program of Epirus, code call:2267/1.0	33,148.00
40228	01/01/17	28/08/19	Detectable food supply chain for the benefit of employees, businesses and consumers: the role of a multi-sectoral approach to labor relations and corporate social responsibility.	GENERAL SECRETARIAT FOR RESEARCH AND INNOVATION	REST NATIONAL	395.99

Project code	Starting date	Ending date	Title	Grant Source	Framework	Budget
93507	30/07/2018	29/07/2020	Protection of Autochthonous populations of Pelagonia Sheep breed in the cross- border area	EUROPEAN REGIONAL DEVELOPMENT FUND (ERDF) & REGION OF CENTRAL MACEDONIA	NSRF 2014-2020, EUROPEAN TERRITORIAL COOPERATION PROGRAMMES, INTERREG IPA CBC - GREECE- REPUBLIC OF NORTH MACEDONIA	134,878.60
95342	25/05/2018	25/03/2020	Investigation on nanotechnological applications on farm animals' semen processing	GREEK MINISTRY OF EDUCATION, RESEARCH AND RELIGIOUS AFFAIRS	NSRF 2014-2020, Operational Program FOR HUMAN RESOURCES DEVELOPMENT, EDUCATION AND LIFE LEARNING, SUPPORT TO RESEARCHERS WITH EMPHASIS TO THE NEW RESEARCHERS	72,100.00
95391	30/05/2018	30/12/2019	Recording and evaluation of factors affecting the success of artificial insemination using fresh ram sperm in Greek farming systems	GREEK MINISTRY OF EDUCATION, RESEARCH AND RELIGIOUS AFFAIRS	NSRF 2014-2020, Operational Program FOR HUMAN RESOURCES DEVELOPMENT, EDUCATION AND LIFE LEARNING, SUPPORT TO RESEARCHERS WITH EMPHASIS TO THE NEW	56,350.00

					RESEARCHERS	
95625	25/09/2018	24/09/2021	Contribution to the conservation of health and welfare in poultry and public health	REGION OF EPIRUS	NSRF 2014-2020, Regional Operational Program of Epirus, code call :2267/1.0	151,200.00
95767	01/11/2018	31/10/2022	Small Ruminants breeding for Efficiency and Resilience	EUROPEAN COMMISSION- DIRECTORATE GENERAL FOR RESEARCH & INNOVATION	EU Programmes 2014- 2020, Horizon 2020, Societal Challenges, Food security, sustainable agriculture and forestry, marine and maritime and inland water research	305,267.00
95772	18/07/2018	17/07/2021	Production of high-quality cheese from raw cow milk	GSRI DIRECTORATE OF RESEARCH & INNOVATION ACTIVITIES-DEPARTMENT OF RESEARCH & PRODUCTION CONNECTION	NSRF 2014-2020, OPERATIONAL PROGRAMME COMPETITIVENESS, ENTREPRENEURSHIP AND INNOVATION 2014- 2020 (EPANEK)	204,960.00
95834	17/10/2018	16/10/2021	Nanobiotechnological Injectable Extracellular Matrix (ECM) for cartilage regeneration, personalized therapy and identification of individual microbe metabolites involved in joint degeneration	GSRI DIRECTORATE OF RESEARCH & INNOVATION ACTIVITIES-DEPARTMENT OF RESEARCH & PRODUCTION CONNECTION	NSRF 2014-2020, OPERATIONAL PROGRAMME COMPETITIVENESS, ENTREPRENEURSHIP AND INNOVATION 2014- 2020 (EPANEK)	62,952.27
95842	18/07/2018	17/07/2021	Innovative technologies to increase the competitiveness of Greek meat: Greek Quality Meat	GSRI DIRECTORATE OF RESEARCH & INNOVATION ACTIVITIES-DEPARTMENT OF RESEARCH & PRODUCTION CONNECTION	NSRF 2014-2020, OPERATIONAL PROGRAMME COMPETITIVENESS, ENTREPRENEURSHIP AND INNOVATION 2014- 2020 (EPANEK)	105,049.92
95843	18/07/2018	17/07/2021	Innovative technologies to increase the competitiveness of Greek meat: Greek Quality Meat	GSRI DIRECTORATE OF RESEARCH & INNOVATION ACTIVITIES-DEPARTMENT OF RESEARCH & PRODUCTION CONNECTION	NSRF 2014-2020, OPERATIONAL PROGRAMME COMPETITIVENESS, ENTREPRENEURSHIP AND INNOVATION 2014- 2020 (EPANEK)	239,350.12
95849	18/07/2018	17/07/2021	Longevity and welfare of sows: Genetic factors, nutritional management of growing gilts and control of urinary tract infections	GSRI DIRECTORATE OF RESEARCH & INNOVATION ACTIVITIES-DEPARTMENT OF RESEARCH & PRODUCTION CONNECTION	NSRF 2014-2020, OPERATIONAL PROGRAMME COMPETITIVENESS, ENTREPRENEURSHIP	84,353.00

95859	18/07/2018	17/07/2021	Longevity and welfare pf sows: Genetic factors, nutritional management of growing gilts and control of urinary tract infections	GSRI DIRECTORATE OF RESEARCH & INNOVATION ACTIVITIES-DEPARTMENT OF RESEARCH & PRODUCTION CONNECTION	AND INNOVATION 2014- 2020 (EPANEK) NSRF 2014-2020, OPERATIONAL PROGRAMME COMPETITIVENESS, ENTREPRENEURSHIP AND INNOVATION 2014- 2020 (EPANEK)	199,825.81
95918	17/10/2018	16/10/2021	Research studies on the use of alternative proteinaceous feeds in livestock production aiming to reduce production cost and to apply innovative processes for the production of traditional dairy products with superior quality characteristics	GSRI DIRECTORATE OF RESEARCH & INNOVATION ACTIVITIES-DEPARTMENT OF RESEARCH & PRODUCTION CONNECTION	NSRF 2014-2020, OPERATIONAL PROGRAMME COMPETITIVENESS, ENTREPRENEURSHIP AND INNOVATION 2014- 2020 (EPANEK)	179,600.00
95924	09/07/2018	08/07/2021	Development of a broiler meat production system with reduced environmental impact and antibiotic free	GSRI DIRECTORATE OF RESEARCH & INNOVATION ACTIVITIES-DEPARTMENT OF RESEARCH & PRODUCTION CONNECTION	NSRF 2014-2020, OPERATIONAL PROGRAMME COMPETITIVENESS, ENTREPRENEURSHIP AND INNOVATION 2014- 2020 (EPANEK)	131,425.00
96903	06/09/2018	05/03/2021	Greek sheep for Greek conditions	GENERAL SECRETARIAT FOR RESEARCH AND INNOVATION	NATIONAL 2014-2020, RESEARCH PROGRAMS ELIDEK FOR FINANCIAL SUPPORT OF POSTDOCTORAL RESEARCHERS	199,578.00
97142	20/10/2018	19/10/2019	Neutering and medical care of stray animals in Thessaloniki Municipality 2018	MUNICIPALITY OF THESSALONIKI	REST NATIONAL, COMPETITIONS	36,198.93
97293	07/09/2018	02/10/2018	COST ACTION FA 1401 (PiguNet) Final Event	UNIVERSITY OF BOLOGNA - FONDAZIONE ALMA MATER	EUROPEAN 2014-2020, COST	4,500.00

Project code	Starting date	Ending date	Title	Funding source	Framework	Budget
93580	05/07/2019	04/07/2021	Fauna Assessment and management to safeguard Biodiversity in cross – border mountainous areas of Bulgaria and Greece: Innovative approaches to estimate monitor and protect biodiversity in local ecosystems	EUROPEAN REGIONAL DEVELOPMENT FUND (ERDF)	NSRF 2014-2020, EUROPEAN TERRITORIAL COOPERATION PROGRAMMES, INTERREG V-A GREECE-BULGARIA	231,653.80
93580	05/07/2019	04/07/2021	Fauna Assessment and management to safeguard Biodiversity in cross – border mountainous areas of Bulgaria and Greece: Innovative approaches to estimate monitor and protect biodiversity in local ecosystems	The Managing Authority of European Territorial Cooperation Programmes EUROPEAN TERRITORIAL COOPERATION	NSRF 2014-2020, EUROPEAN TERRITORIAL COOPERATION PROGRAMMES, INTERREG V-A GREECE-BULGARIA	231,653.80
96729	14/11/2019	13/11/2022	Exploration of innovative herb-based nutritional strategies in order to reduce antimicrobial use for green pig and poultry production	GENERAL SECRETARIAT OF RESEARCH AND INNOVATION	NSRF 2014-2020, OPERATIONAL PROGRAMME COMPETITIVENESS, ENTREPRENEURSHIP AND INNOVATION, BILATERAL R&T COOPERATION, GREECE-CHINA, 2017- 2019	164,750.00
97432	22/03/2019	30/09/2021	Assistance and Support Services to Research and Academic Institutions	GREEK RESEARCH AND TECHNOLOGY NETWORK	REST NATIONAL, COMPETITIONS	306,262.27
97978	18/06/2019	17/06/2022	Smart automatic management system for mussel farms	Operational Programme «Competitiveness and Entrepreneurship»	NSRF 2014-2020, OPERATIONAL PROGRAMME COMPETITIVENESS, ENTREPRENEURSHIP AND INNOVATION, SPECIAL ACTION IN THE AQUACULTURE SECTOR, 2014-2020	92,300.00
98376	01/09/2019	30/06/2022	Online Learning Agreement 3.0	EUROPEAN COMMISION - EDUCATION, AUDIOVISUAL & CULTURE EXECUTIVE AGENCY	EUROPEAN 2014-2020, ERASMUS+, Key Action 2 (KA2) - Cooperation for innovation and the exchange of good	59,485.00

99507	23/10/2019	30/09/2020	Plastic surgery on cats	ANASTASIOS MAVROGENIS MEDICAL SUPPLIES PUBLIC COMPANY	REST NATIONAL	10,000.00
99354	08/10/2019	22/09/2022	Comparison of the effect of autologous PRp in second intention healing of skin deficits and vascular supply and survival of random skin flaps in cats. An experiment study	NATIONAL FOUNDATION FO RESEARCH AND INNOVATION	NATIONAL 2014-2020, FELLOWSHIPS ELIDEK FOR CANDIDATE PHD STUDENTS	31,500.00
40268	28/08/2019	31/10/2022	Small Ruminants breeding for Efficiency and Resilience	GENERAL SECRETARIAT OF RESEARCH AND INNOVATION	REST NATIONAL	495.63
99200	30/08/2019	31/12/2019	COST Action ca15114 workshop and Working groups meetings in Thessaloniki	COST ASSOCIATION - COST OFFICE - EUROPEAN COOPERATION IN SCIENCE AND TECHNOLOGY	EEUROPEAN 2014-2020, COST	-
99058	26/11/2019	25/09/2021	-	SPECIAL ADMINISTRATION SERVICES O.P. DEVELOPMENT OF HUMAN RESOURCES, EDUCATION AND LIFE LONG LEARNING	NSRF 2014-2020, Operational Program FOR HUMAN RESOURCES DEVELOPMENT, EDUCATION AND LIFE LEARNING, SUPPORT TO RESEARCHERS WITH EMPHASIS TO THE NEW RESEARCHERS	46,046.00
99043	23/12/2019	22/04/2021	Food-born parasite zoonoses: epizootiological investigation of wild boars as reservoirs of Trichinella spp. and Alaria spp. and development of modern diagnostic	SPECIAL ADMINISTRATION SERVICES O.P. DEVELOPMENT OF HUMAN RESOURCES, EDUCATION AND LIFE LONG LEARNING	NSRF 2014-2020, Operational Program FOR HUMAN RESOURCES DEVELOPMENT, EDUCATION AND LIFE LEARNING, SUPPORT TO RESEARCHERS WITH EMPHASIS TO THE NEW RESEARCHERS	37,037.00
98892	19/07/2019	31/03/2020	DIAVLOS- Service provision for the further development and the maintenance of the portal	GREEK RESEARCH AND TECHNOLOGY NETWORK	REST NATIONAL, COMPETITIONS	12,000.00
98769	01/10/2019	30/09/2020	Neutering and medical care of stray animals in Thessaloniki Municipality 2019	MUNICIPALITY OF THESSALONIKI	REST NATIONAL, COMPETITIONS	42,550.00
					partnerships in the field of education, training and youth	

practices, Strategic

Project code	Starting date	Ending date	Title	Funding source	Framework	Budget
96385	21/01/2020	20/01/2022	Investigation of boar semen fertilizing capacity changes applying biomedical techniques	HELLENIC FOUNDATION OF RESEARCH AND INNOVATION	NATIONAL 2014-2020, H.F.R.I. Research Projects to Support Faculty Members & Researchers and Procure High-Value Research Equipment	150,000.00
99633	01/03/2020	28/02/2022	FIND A BAILIFF III — FABIII	EUROPEAN COMMISSION - DIRECTORATE GENERAL JUSTICE AND CONSUMERS	EU Programmes 2014- 2020, JUSTICE PROGRAMME	142,061.76

#### Annex 6

#### **Quality Assurance in SVMT**

The main **mission** of the SVMT is to constitute a centre of excellence for veterinary training, education, scientific development, and ensure that high-quality veterinary medical services are provided to the society.

Towards achieving these goals, SVMT offers student training of the highest standard to ensure graduates possess all the necessary skills to meet the professional requirements. In this regard, the School has established the following Quality Assurance constituents:

- 1. A policy and associated formal mechanisms are set up for the approval, periodic review and monitoring for the assurance of the standards and quality of the programmes and awards offered;
- 2. A system of collection, analysis and use of up-to-date, objective-relevant information is established to ensure that the programmes respond to the needs of students and the society;
- 3. Conflict of interest avoidance mechanisms are in place at multiple levels including but not being limited to student assessment and appeal procedures, student examination failures or academic staff promotion at School and Faculty of Health Sciences level.
- 4. Academic staff/personnel experience and skill requirements for hiring or promotion are clearly defined (Greek law of Higher Education), relevant to the objectives of the School, and amenable to evaluation and review; Teaching experience of applicants is evaluated by the students:
- 5. Student assessment is a transparent process based on published criteria, regulations and procedures, which are applied consistently and reviewed periodically; it has a method of checking the numbers of graduating students on a yearly basis;
- 6. Students receive timely feedback on their assessment, including the quality of their logbooks in order to ensure that all clinical procedures, and practical and hands-on training have been fully completed by each individual student;
- 7. All students are trained in scientific methods and research techniques relevant to evidence-based veterinary medicine;
- 8. The strategy, quality assurance and all major documents of the School are publicly available;
- 9. The SVMT strategic plan is reviewed and revised every 10 years;
- 10. The School undergoes external quality assurance in line with the ESG on a regular basis:
- 11. There are mechanisms for interaction with the key stakeholders and the wider society;
- 12. The School has strategies in place for maintaining, upgrading and restoring all facilities and equipment related to learning and training;
- 13. The School follows a well-organised approach for delivering a clear operational procedure on biosafety and biosecurity
- 14. Moreover, working under the umbrella of the Aristotle University of Thessaloniki, the SVMT:
- i) Commits to the development of a culture that recognises the importance of quality and quality assurance in all activities;
- ii) Develops and implements a strategy for the continuous enhancement of quality;
- (iii) Safeguards the interests of the society and the veterinary profession by securing the quality and standards of veterinary education and training;
- (iv) Ensures the resources required to support student learning and training are available, accessible, adequate and suitable;
- (v) Supports the physical, emotional and welfare needs of students.

#### **Accountability procedures**

SVMT has established the following procedures:

- a. A published policy for the assurance of the quality of the School, on its website
- b. Documentation demonstrating that:
  - the processes and results reflect the School's mission and goals of quality assurance;
  - an effective no-conflict-of-interest assurance mechanism is in place addressing all relevant activities of staff and students;
  - the School has reliable mechanisms that ensure the quality of all activities, procedures and outcomes (including research and services);

In accordance with its objectives to (i) function as an Organisation developing and enhancing standards and guidelines on quality assurance in the area of Veterinary Medicine education, and (ii) maintain and develop a support network of national and international partners, SVMT is committed to continuing cooperation with other Veterinary Medicine Establishments in Europe and beyond.

# CERTIFICATE Q-CERT

Q-CERT, an accredited provider of third-party system certification attests that:



## DEPARTMENT OF CLINICAL STUDIES - SCHOOL OF VETERINARY MEDICINE AUTh - COMPANION AND FARM ANIMAL CLINIC

11, STAVROU VOUTYRA STR., GR- 54627, THESSALONIKI, GREECE

with a scope of:

Provision of Integrated Health Services for Companion & Farm Animals.

Clinical & Laboratory Examination & Disease Treatment - Genetic Analyses and Laboratory Investigation of Infections in Animals (Farm Animal Clinic) - Animal Fertility Testing Services (Unit of Biotechnology of Animal Reproduction - Farm Animal Clinic)

has established a

QUALITY MANAGEMENT SYSTEM

that is in conformance with the requirements of the International Standard

EN ISO 9001:2015

July 20, 2023		July 21, 2020
Certification Period Ending		Initial Certification Date
July 21, 2020		
Certification Date	IAF/EA Subsector: 38.3	For Q-CERT's Board

# CERTIFICATE Q-CERT

Q-CERT, an accredited provider of third-party system certification attests that:



## DEPARTMENT OF CLINICAL STUDIES - SCHOOL OF VETERINARY MEDICINE AUTh - LABORATORY OF DIAGNOSTIC IMAGING

11, STAVROU VOUTYRA STR., GR- 54627, THESSALONIKI, GREECE

with a scope of:

# Provision of Diagnostic Imaging Service for Companion and Farm Animals

has established a

QUALITY MANAGEMENT SYSTEM

that is in conformance with the requirements of the International Standard

#### EN ISO 9001:2015

July 20, 2023		July 21, 2020
Certification Period Ending		Initial Certification Date
July 21, 2020		
Certification Date	IAF/EA Subsector: 38.3	For Q-CERT's Board



## CERTIFICATE

Management system as per

ISO 9001: 2015

Hellas

Quality Management Systems-Requirements

In accordance with TÜV HELLAS (TÜV NORD) S.A., procedures, it is hereby certified that

ARISTOTLE UNIVERSITY OF THESSALONIKI
FACULTY OF HEALTH SCIENCE
SCHOOL OF VETERINARY MEDICINE: DIAGNOSTIC LABORATOTY
11, Stavrou Voutira Str.
546 27 Thessaloniki

applies a management system in line with the above standard for the following scope

#### Clinical Pathology Diagnostic Services for Companion and Farm Animals.

Certificate Registration No. 041 20 0124 Audit Report No. E-3439/2020 Valid from 2020-10-23 Valid until 2023-10-22 Initial certification 2020

TÜV HELLAS (TÜV NORD) S.A. Certification Body

Athens, 2020-10-23

This certification was conducted in accordance with the TÜV HELLAS (TÜV NORD) S.A. auditing and certification procedures and is subject to regular surveillance audits.







Owner of Certificate:

## **CERTIFICATE**

ISO 9001:2015

Swiss Approval Technische Bewertung SA certifies in accordance with its procedures that:

Laboratory of Microbiology and Infectious Diseases, School of Veterinary Medicine, AUTH

Aristotle University of Thessaloniki Campus 54124-Thessaloniki Greece

Has established and applies a Quality Management System for:

Bacteriological, immunological and viral testing in clinical and environmental samples. Experiments planning and execution. Support of research projects.

TB-030-02-100-01189

10/12/2023

11/12/2020

The Certification Cycle initiates from 11/12/2020 and lasts for three years by the condition of successful completion of mandatory Surveillance Audits until due date. Initial Certification Date: 11/12/2020



Processes General Manager

SWISS APPROVAL INTERNATIONAL







Scope: Certificate

Registration Nr:

Valid until:

Date of Issue:

#### Annex 10

A List of publications of the academic staff SVMT. A list of publications can be found in the AUTH website: <a href="https://qa.auth.gr/el/report/publications/catalog/school/vet">https://qa.auth.gr/el/report/publications/catalog/school/vet</a>.

#### Annex 11

#### List of Academic Staff of SVMT

#### A. Angelidis, DVM, M.P.V.M., PhD

Professor (Hygiene and Technology of Milk and Dairy Products)

Tel: 231 099 9862

email: asangel@vet.auth.gr

#### P. Angelidis, DVM, PhD

Professor (Farming and Pathology of Aquatic Organisms)

Tel: 231 099 9822

email: panangel@vet.auth.gr

#### A. Angelopoulou, BSc (Chemistry), PhD

Associate Professor (Biochemistry)

Tel: 231 099 9825

email: <a href="mailto:kangelop@vet.auth.gr">kangelop@vet.auth.gr</a>/kangelop

#### A. Adamama Moraitou, DVM, PhD

Professor (Companion Animal Medicine)

Tel: 231 099 4518

email: kadamama@vet.auth.gr

#### T. Anagnostou, DVM, PhD

Associate Professor (Anaesthesia - Intensive Care)

Tel: 231 099 4420

email: tanagnos@vet.auth.gr

#### I. Antonopoulos, DVM, PhD

Professor (Embryology, Microscopic and Macroscopic Anatomy)

Tel: 231 099 9874 email: jant@vet.auth.gr http://blogs.auth.gr/jant/

#### G. Arsenos, DVM, PhD, DECSRHM

Professor (Animal Production)

Tel: 231 099 9988

email: <a href="mailto:arsenosg@vet.auth.gr">arsenosg@vet.auth.gr</a> http://users.auth.gr/~arsenosg/

#### G. Banos, BSc (Agriculture), PhD

Professor (Animal Production)

Tel: 231 099 9955 email: <u>banos@vet.auth.gr</u> http://users.auth.gr/~banos/

#### G. Batzias, DVM, PhD, DECVPT

Professor (Veterinary Clinical Pharmacology)

Tel: 231 099 9855

email: batzias@vet.auth.gr

#### C. Batzios, BSc (Economics), PhD

Professor (Animal Production Economics and Applied Statistics)

Tel: 231 099 9957

email: <u>batzios@vet.auth.gr</u> http://users.auth.gr/~batzios/

#### G. Brellou, DVM, PhD

Assistant Professor (Pathology)

Tel: 231 099 4530

email: mprellou@vet.auth.gr

#### C. Brozos, DVM, PhD, DECSRHM

Professor (Obstetrics and Reproductive Medicine of Ruminants)

Tel: 231 099 4452

email: brozos@vet.auth.gr

#### E. Christaki, DVM, PhD

Professor (Applied Mammalian and Avian Nutrition)

Tel: 231 099 9973

email: efchris@vet.auth.gr

#### G. Delis, DVM, PhD

Assistant Professor (Veterinary Pharmacology)

Tel: 231 099 9933 email: delis@vet.auth.gr

#### N. Diakakis, DVM, MS, PhD

Associate Professor (Equine Surgery)

Tel: 231 099 4419

email: diakakis@vet.auth.gr

#### A. Diakou, DVM, PhD

Associate Professor (Parasitology and Parasitic Diseases)

Tel: 231 099 9927

email: <a href="mailto:diakou@vet.auth.gr">diakou@vet.auth.gr</a> http://users.auth.gr/~diakou/

#### C. Dovas, BSc (Agriculture), PhD

Associate Professor (Molecular Microbiology)

Tel: 231 099 9870

email: dovas@vet.auth.gr

#### I. Dori, BSc (Biology), PhD

Associate Professor (Embryology, Microscopic and Macroscopic Anatomy)

Tel: 231 099 9884 email: <u>idori@vet.auth.gr</u> http://users.auth.gr/~idori/

#### E. Economou, DVM, PhD

Assistant Professor (Hygiene of Mammalian Meat and Products)

Tel: 231 099 9875

email: boikonom@vet.auth.gr

#### D. Fletouris, DVM, PhD

Professor (Hygiene and Technology of Milk and Dairy Products)

Tel: 231 099 9817

email: djflet@vet.auth.gr http://blogs.auth.gr/djflet/

#### P. Fortomaris, DVM, PhD, DECPHM

Professor (Animal Production)

Tel: 231 099 9808

email: <a href="mailto:fortomap@vet.auth.gr">fortomap@vet.auth.gr</a>/fortomap/

#### I. Georgopoulou, DVM, PhD, DECPVS

Professor (Avian Medicine)

Tel: 231 099 4554

email: ioannag@vet.auth.gr

#### N. Giadinis, DVM, PhD, DECSRHM

Professor (Small Ruminant Medicine)

Tel: 231 099 4509

email: ngiadini@vet.auth.gr

#### I. Giannenas, DVM, PhD, DECPVS

Assistant Professor (Animal Nutrition)

Tel: 231 099 9937

email: igiannenas@vet.auth.gr

#### I. Grivas, DVM, PhD

Assistant Professor (Veterinary Embryology, Microscopic and Macroscopic Anatomy)

Tel: 231 099 9908

e-mail: janos@vet.auth.gr

#### E. Iosifidou, DVM, MSc, PhD, DECVPH

Professor (Hygiene of Mammalian Meat and Products)

Tel: 231 099 9815

email: <a href="mailto:ehygfood@vet.auth.gr">ehygfood@vet.auth.gr</a> <a href="http://blogs.auth.gr/ehygfood/">http://blogs.auth.gr/ehygfood/</a>

#### G. Kazakos, DVM, PhD

Associate Professor (Veterinary Surgery-Intensive Care)

Tel: 231 099 4425

email: gkdvm@vet.auth.gr

#### E. Kalaitzakis, DVM, PhD

Assistant Professor (Ruminant Medicine)

Tel: 231 099 4454

email: ekalaitzakis@vet.auth.gr

#### M. Karayannopoylou, DVM, PhD

Associate Professor (Surgery)

Tel: 231 099 4407

email: marikara@vet.auth.gr

#### X. Karamanlis, DVM, PhD

Professor (Ecology and Environmental Protection)

Tel: 231 099 9966

email: <u>karamanl@vet.auth.gr</u> <u>http://blogs.auth.gr/karamanl/</u>

#### P.D. Katsoulos, DVM, PhD

Assistant Professor (Ruminant Medicine)

Tel: 231 099 4455

email: katsoulo@vet.auth.gr

#### E. Kiosis, DVM, PhD, DECSRHM

Professor (Ruminant Reproductive Medicine)

Tel: 231 099 4464

email: ekiossis@vet.auth.gr

#### A. Komninou, DVM, PhD

Professor (Veterinary Surgery- Comparative Ophthalmology - Exotic and Wild Animal Medicine)

Tel: 231 099 4443

email: natakomn@vet.auth.gr

#### C. Koutinas, DVM, PhD

Assistant Professor (Companion Animal Medicine)

Tel: 231 099 4500 email: quark@vet.auth.gr

#### M. Koutsoviti- Papadopoulou, DVM, PhD

Professor (Veterinary Pharmacology)

Tel: 231 099 9885

email: <a href="mailto:mariakp@vet.auth.gr">mariakp@vet.auth.gr</a> http://blogs.auth.gr/mariakp/

#### S. Kritas, DVM, PhD, MSc Healthcare Management, DECPHM

Professor (Animal Microbiology and Infectious Diseases)

Tel: 231 099 9940

email: <a href="mailto:skritas@vet.auth.gr">skritas@vet.auth.gr</a>/skritas/

#### S. Lavrentiadou, BSc (Biology), PhD

Assistant Professor (Animal Physiology, Molecular Physiology)

Tel: 231 099 9872

email: <a href="mailto:slavrent@vet.auth.gr">slavrent@vet.auth.gr</a> <a href="mailto:slavrent/">http://users.auth.gr/~slavrent/</a>

#### M. Mylonakis, DVM, PhD

Professor (Companion Animal Medicine)

Tel: 231 099 4495

email: mmylonak@vet.auth.gr

#### E. Nikolaidis, DVM, PhD

Associate Professor (Veterinary Pharmacology -Toxicology)

Tel: 231 099 9899

email: enikolai@vet.auth.gr

#### N. Panousis, DVM, PhD, DECBHM

Καθηγητής (Ruminant Medicine)

Tel: 231 099 4501

email: panousis@vet.auth.gr

#### M. Papagianni, DVM, MSc, PhD

Professor (Technology of Mammalian Meat and Products)

Tel: 231 099 9804

email: <a href="mp2000@vet.auth.gr">mp2000@vet.auth.gr</a> http://blogs.auth.gr/mp2000/

#### S. Papadimitriou, DVM, PhD, DDS

Professor (Veterinary Surgery- Dentistry and Maxillofacial Surgery)

Tel: 231 099 4575

email: serpap@vet.auth.gr

#### G.C. Papadopoulos DVM, PhD

Professor (Microscopic, Macroscopic Anatomy and Embryology)

Tel: 231 099 9883

email: <a href="mailto:gpapadop@vet.auth.gr">gpapadop@vet.auth.gr</a> http://users.auth.gr/~gpapadop/

#### G.A. Papadopoulos, DVM, PhD

Assistant Professor (Animal Production)

Tel.: 231 099 9907

email: geopaps@vet.auth.gr

#### E. Papadopoulos, DVM, MSc, PhD, DVPC, DECSRHM

Καθηγητής (Parasitology and Parasitic Diseases)

Tel: 231 099 9926

email: eliaspap@vet.auth.gr

#### P. Papadopoulou, DVM, PhD

Assistant Professor (Veterinary Diagnostic Imaging)

Tel: 231 099 4447

email: vivipap@vet.auth.gr

#### N. Papaioannou, DVM, PhD

Professor (Veterinary Pathology)

Tel: 231 099 9976

email: nikpap@vet.auth.gr

#### E. Papapanagiotou, DVM, MSc, PhD, DECVPH

Associate Professor (Hygiene of Mammalian Meat and Products)

Tel: 231 099 9827

email: ipapapan@vet.auth.gr

#### L. Papazoglou, DVM, PhD

Professor (Surgery)

Tel: 231 099 4426

email: <a href="makdvm@vet.auth.gr">makdvm@vet.auth.gr</a> http://users.auth.gr/~makdvm/

#### D. Pardali, DVM, PhD

Assistant Professor (Veterinary Clinical Pathology)

Tel: 231 099 4490

email: dpardali@vet.auth.gr

#### M. Patsikas, DVM, MD, PhD, DECVDI

Professor (Veterinary Radiology)

Tel: 231 099 4442

email: <a href="mailto:patsikm@vet.auth.gr">patsikm@vet.auth.gr</a> <a href="http://users.auth.gr/patsikm/">http://users.auth.gr/patsikm/</a>

#### E. Petridou, DVM, MSc Healthcare Management, PhD, DECVM

Associate Professor (Animal Microbiology and Infectious Diseases)

Tel: 231 099 9854

email: epetri@vet.auth.gr

#### Z. Polizopoulou, DVM, PhD, DECVCP

Professor (Clinical Pathology)

Tel: 231 099 4493

email: poliz@vet.auth.gr

#### T. Poutahidis, DVM, PhD

Professor (Animal Pathology)

Tel: 231 099 9810

email: <a href="mailto:teoput@vet.auth.gr">teoput@vet.auth.gr</a> http://users.auth.gr/~teoput/

#### N. Prassinos, DVM, PhD

Professor (Animal Surgery)

Tel.: 231 099 4525

email: ngreen@vet.auth.gr

#### D. Psalla, DVM, PhD

Associate Professor (Animal Pathology)

Tel: 231 099 9931

email: dpsalla@vet.auth.gr

#### T. Psarra, DVM, PhD

Lecturer (Veterinary Pharmacology)

Tel: 231 099 9545

email: psarratheo@vet.auth.gr

#### M. Sachana, DVM, MSc, PhD

Assistant Professor (Biochemistry and Toxicology)

Tel: 231 099 9948

email: <a href="mailto:msachana@vet.auth.gr">msachana@vet.auth.gr</a> http://users.auth.gr/~msachana/

#### I. Savas, DVM, PhD

Professor (Veterinary Anesthesiology, Analgesia and Intensive Care)

Tel: 231 099 4411 email: <u>isavas@vet.auth.gr</u> http://isavas.webpages.auth.gr/

#### D. Sergelidis, DVM, PhD

Associate Professor (Hygiene of Mammalian Meat and Products)

Tel: 231 099 9970

email: dsergkel@vet.auth.gr

#### V. Siarkou, DVM, MD, PhD

Associate Professor (Microbiology and Infectiology)

Tel: 231 099 9914

email: vickysi@vet.auth.gr

#### N. Soubasis, DVM, PhD

Assistant Professor (Companion Animal Medicine)

Tel: 231 099 4517

email: nsouba@vet.auth.gr

#### N. Soultos, DVM, MSc, PhD, DECVPH

Professor (Hygiene of Mammalian Meat and Products)

Tel: 231 099 9807

email: soultos@vet.auth.gr

#### I. Symeonidou, DVM, PhD

Assistant Professor (Parasitology and Parasitic Diseases)

Tel: 231 099 9993 email: isaia@vet.auth.gr

#### I. Taitzoglou, DVM PhD

Professor (Animal Physiology)

Tel: 231 099 9858 email: jotai@vet.auth.gr http://users.auth.gr/~jotai/

#### P. Tassis, DVM, PhD

Associate Professor (Porcine Medicine and Reproduction)

Tel: 231 099 4549

email: <a href="mailto:ptassis@vet.auth.gr">ptassis@vet.auth.gr</a>/ptassis

#### A. Theodoridis, BSc (Agriculture), PhD

Assistant Professor (Animal Production Economics & Applied Statistics)

Tel.: 231 099 9953

email: <u>alextheod@vet.auth.gr</u> http://blogs.auth.gr/alextheod/

#### I. Tsakmakidis, DVM, PhD

Associate Professor (Physiopathology and Biotechnology of Reproduction of Farm Animals)

Tel: 231 099 4467 email: <u>iat@vet.auth.gr</u>

http://users.auth.gr/iat, http://blogs.auth.gr/iat

#### M. Tsantarliotou, DVM, PhD

Professor (Animal Physiology)

Tel: 231 099 9863

email: <a href="mailto:mtsant@vet.auth.gr">mtsant@vet.auth.gr</a><a href="mailto:mtsant/">mtsant/</a><a href="mailto:mtsant@vet.auth.gr">mtsant@vet.auth.gr</a><a href="mailto:mtsant@vet.auth.gr">mtsant@vet.auth.gr</a><a href="mailto:mtsant@vet.auth.gr">mtsant/</a><a href="mailto:mtsant/">mtsant/</a><a href="mailto:mt

#### A. Tsingotjidou, DVM, PhD

Assistant Professor (Macroscopic, Microscopic Anatomy and Embryology of Domestic Animals)

Tel: 231 099 9941

email: <a href="mailto:astsing@vet.auth.gr">astsing@vet.auth.gr</a> <a href="mailto:http://users.auth.gr/~astsing/">http://users.auth.gr/~astsing/</a>

#### V. Tsiouris, DVM, PhD, DECPVS

Assistant Professor (Avian Medicine)

Tel: 231 099 4555

email: <u>biltsiou@vet.auth.gr</u> <u>http://users.auth.gr/biltsiou</u>

#### G. Tsousis, DVM, PhD

Assistant Professor (Physiopathology Reproductive Management of Ruminants)

Tel: 231 099 4466

email: tsousis@vet.auth.gr

#### E. Tzika, DVM, PhD, DECPHM

Associate Professor (Porcine Medicine)

Tel: 231 099 4508

email: eltzika@vet.auth.gr

#### G. Valergakis, DVM, PhD

Associate Professor (Animal Production)

Tel: 231 099 9850

email: geval@vet.auth.gr

#### C. Ververidis, DVM, PhD

Assistant Professor (Obstetrics and Physiopathology of Reproduction of Companion Animals)

Tel: 231 099 4527

email: harisver@vet.auth.gr

#### I. Zervos, DVM, PhD

Assistant Professor (Veterinary Physiology)

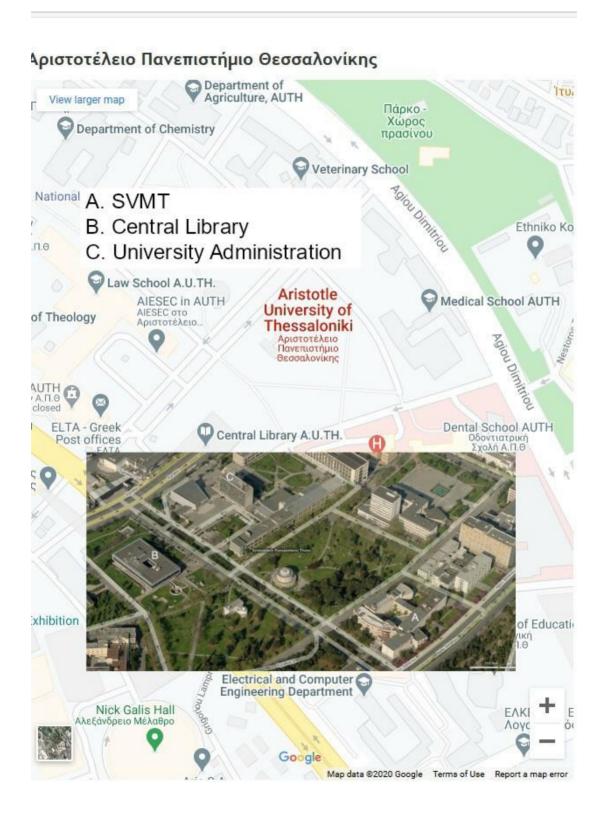
Tel: 231 099 9860

email: <u>izervos@vet.auth.gr</u> http://users.auth.gr/~izervos/

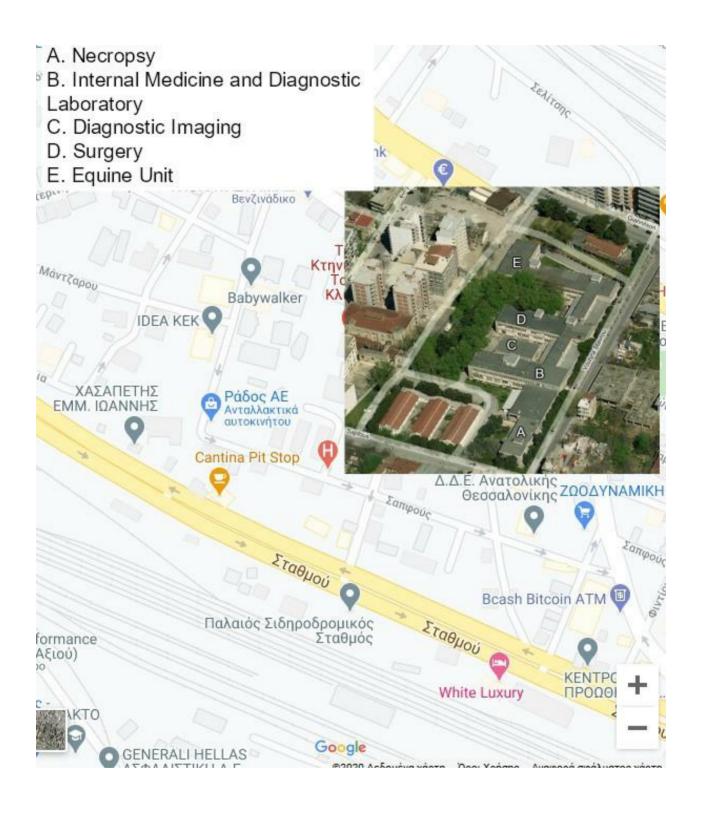
#### Annex 12

Maps of the Establishment and the intra-mural and extra-mural facilities used in the core veterinary program

#### SVMT IN THE UNIVERSITY CAMPUS



# The Companion Animal Clinic, Diagnostic Laboratory and Laboratory of Diagnostic Imaging



#### The Farm Animal Clinic and Dairy sheep Farm at Kolchiko

