European Association of Establishments for Veterinary Education

European System of Evaluation of Veterinary Training

REPORT ON THE VISIT TO THE FACULTY OF VETERINARY MEDICINE OF THE UNIVERSITY OF THESSALONIKI, GREECE

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by the EXPERT GROUP

Prof. Dana Pusta, Cluj-Napoka, Romania

Visitor on Training in Basic Sciences

Prof. Luca Rossi (chair), Turin, Italy

Visitor on Training in Clinical Sciences (Academic)

Dr. Hervé Hiard, Dol de Bretagne, France

Visitor on Training in Clinical Sciences (Practitioner)

Dr. John Williams, Leeds, UK

Visitor on Training in Animal Production

Prof. Gaspar Ros Berruezo, Murcia, Spain

Visitor on Training in Food Safety

Vittorio, Caramello, 5th year student, Turin, Italy

Student Member

Prof. Gert Niebauer

EAEVE Programme Coordinator

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INTRODUCTION

Greece has two veterinary teaching establishments, the faculties of Thessaloniki and Karditsa. The former, the Veterinary Faculty of the Aristotle University of Thessaloniki (FVMT) is the larger and older establishment, founded in 1950. The School was visited with positive outcome 10 years ago and has since undergone many changes; improvements to the physical plant, especially in the clinical area, addition of a large teaching farm, and the introduction of a new study plan, are among the most important (please refer to the SER "Introduction" for an exhaustive listing). The introduction of a whole new curriculum in 2003/2004, which in general terms is based on the EU directive 36/2005 has been a major change. This curriculum revision has been developed by the Faculty and is entirely tailored to its needs. Greek Universities, individually, have complete autonomy in designing and executing any aspect of academic teaching. No governmental authority is regulating the contents of any curriculum.

Thessaloniki is a large port city with about 1.2 millions inhabitants in the greater area inhabitants. The Faculty is occupying 3 locations, one on the central University campus, a small animal - and equine hospital within the city limits and a teaching farm some 35km to the northeast. Companion animals are numerous like in any large European city, the number of horse stables in the area is rather modest, although there are race tracks in the vicinity; dairy, beef and poultry farming is relatively important, yet commensurate with the dry and hot climate, with pig production being the least important branch of animal production. However, at a distance of 50-100 km there is a number of intensive swine farms.

The Aristotle University is the largest in the country (>80.000 students); FVMT is one of its 9 faculties with overall about 1200 students enrolled. Access to universities in Greece requires passing selective admission tests right after high school; once admitted, studying is free of charge, unlimited in time and entirely government funded. All students have health insurance and other social benefits.

The main problem Greek universities are facing today is of financial nature. The economic crisis has also struck hard the FVMT with significant salary cuts on all employment levels as well as serious shortages of personnel, especially of technical support staff. Retiring academic staff is in general not replaced. Those shortcomings are partially compensated by individual efforts of a motivated and engaged faculty.

1 OBJECTIVES & STRATEGY

1.1 Findings

The general objectives, formulated in the SER but not being published elsewhere or on the Net (at least not in English) follow the standard scheme of veterinary teaching institutions and include the principles of research orientation, omni-competence, "day-one-skill" acquisition and life-long learning. Specific objectives are aimed at enhancing rural development, protection of the environment and adaptation to the needs of the Greek society and local stakeholders with emphasis on the farming community. The important changes during the past years to facilities and curriculum are part of an ongoing long-term strategic plan. Evaluation of these changes is an ongoing process.

1.2 Comments

Indicators of a successful strategy are, among others, the good employment rate of graduates and the decentralisation of food animal teaching by acquisition of the teaching farm. Further developments on this large rural campus are planned, including the transfer of the equine hospital into new facilities, which, however, have still to be built. The farm is quite distant from the city and difficult to reach by public transportation. This relative remoteness may have negative impact on integration and transversality of teaching in general; in specifics, sufficient integration with some basic science subjects (e.g. pharmacology, physiology, pathologic-anatomy) may not be assured.

Although the new curriculum has been introduced 7 years ago, a formal evaluation has not been accomplished yet, Nevertheless, progressive yearly evaluation of individual parts of the curriculum is an ongoing process.

Although the Faculty employs a fair number of European Diplomates in several disciplines, residency programmes are scarce and furthering specialisation does not seem a major strategic goal of the School.

Although the Faculty is well aware of the financial crisis and the shortage of personnel, major strategic plans for funding by non-governmental sources are not in place. On an individual level, many staff members are in a continuous effort to raise funds and, recently, a new Master Agreement has been signed with a major Pharmaceutical Company.

Although the Faculty's objectives include internationality and research collaboration with universities abroad are being continuously developed and conducted, incoming international student mobility on every level is very low (annually only 3 study places available for new enrolment from abroad).

1.3 Suggestions

Develop a funding strategy with the aim of becoming progressively more independent of government funding (for instance, some foreign universities finance a substantial percentage of personnel and investments from third party sources).

Develop a strategic plan to enhance and support specialisation on all levels, in specific, by assuring that EBVS-residency programmes are being instituted in all areas where Diplomates are already employed.

Enhance internationality by progressively introducing mandatory English as second language in teaching and research on all levels.

The faculty has more "off course" (inactive or long-term studying) students enrolled than regular students. Although the law fosters such deplorable situation, the Faculty should develop a strategic plan to progressively and substantially reduce the number of those students.

Try to make the transfer of the equine clinic to the farm a priority.

2 ORGANISATION

2.1 Findings

FVMT is enshroud in the classical frame of the organisational structure of a large university with the privilege of a sufficiently large administrative autonomy. The Veterinary Faculty is, among the 9 faculties, a so called “Single School Faculty” and has acquired the name of “School” with a dean, her own administrative bodies (committees) and a subdivision in 5 departments, comprising teaching and research units, clinics and laboratories.

The administrative bodies are the General Assembly of the School, the Administrative Council, the Education Committee, the Strategic Planning Committee, the Research and Ethics Committee, and the dean and the vice-dean.

The General Assembly of the School is the supreme administrative body of the School. It decides on the curriculum, the policy and the organisation of the School and the teaching and examination schedule. It consists of the dean, the Department heads (5), representatives of the academic staff from all the Departments (30) and representatives of the undergraduate students (18), as well as of the technical staff (2). Under the General Assembly, the special electorates decide on the election or the promotion of members of the academic staff and on any proposal or demand of the Departments or of members of the School.

The Administrative Council consists of the dean and the vice-dean, the heads of the Departments (5) and the representatives of the undergraduate students (2). The Council makes proposals to the Rectors Council and to the General Assembly of the School, and decides mainly on business related to technical staff and students.

The Education Committee consists of 5 representatives of the academic staff, one from each of the five Departments and two representatives of the undergraduate students. The academic staff is appointed by the Dean. This committee evaluates the curriculum and proposes to the General Assembly of the School the necessary changes in the academic programme of the School.

The academic staff and representatives of the undergraduate students and technical staff elect the dean and the vice-dean of the School for a two-year term. The dean chairs the General Assembly of the School and the Administrative Council and is responsible for the administration of the School.

The following five Departments are present:
1. *Department of Animal Structure and Function*. It includes chemistry, anatomy, histology and embryology, biochemistry, physiology, pharmacology and toxicology.
2. *Department of Animal Production, Ichthyology, Ecology and Protection of the Environment*. It includes animal nutrition, animal production, fish rearing technology, ecology and protection of the environment, and economics of animal production.
3. *Department of Infectious and Parasitic Diseases and Pathology*. It includes microbiology and infectious diseases, parasitology and parasitic diseases and pathology.
4. *Department of Food Hygiene and Technology*. It includes food hygiene, food technology and milk hygiene and technology.
5. *Department of Clinical Sciences*. It includes medicine, surgery (including anaesthesiology and diagnostic imaging) and obstetrics (including physiopathology of reproduction, reproductive diseases, artificial insemination and embryo transfer), avian medicine and apiculture and bee diseases.

The head and the General Assembly of the Department comprising all the members of the academic staff, representatives of the undergraduate students of the Department and representatives of the technical staff, administer each Department. The General Assembly of

the Department coordinates teaching and research and allocates the funds among the Laboratories/Clinics of the Department. It also makes proposals to the General Assembly of the School and assigns to the members of the academic staff the responsibilities of the director of the laboratories or the clinics of the department.

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 coordinates the function of the Department. The directors of the laboratories and of the clinics are elected for a three-year term by the teaching staff of the Department.

2.2 Comments

The overall organisational structure is similar to most European faculties; emphasis is on the democratic processes. Assemblies on all levels have more decisional power than any elected person (dean, department head, director): for instance the General Assembly of the School is the supreme authority (and not the dean). Below this structure, the Departments enjoy a substantial degree of autonomy, and again, the authority lies within the Department Assembly (and less with the department head).

In clinics, there is a mix between discipline-oriented and species-oriented organisation, with a strong trend to further development of species-specific teaching.

The overall comment of faculty members on all levels and of students was that “administrative bureaucracy” is too often unduly slowing or hampering administrative processes.

Although academic freedom in teaching is fully assured, the organisational structure with heavy administrative loads is inflexibly governed by nationwide laws.

2.3 Suggestions

Analyse administrative shortcomings and make strategic plans to overcome them; introduce increasingly inter- and intranet based applications to conduct administrative tasks, including electronic documents and certifications, thereby reducing paper, enhancing speed and efficiency of communication and of decision making on all administrative levels.

Assure that the two campus sites of the Department of Clinical Sciences are closely interacting on all levels, despite their distance.

3 FINANCES

3.1 Findings

As mentioned in the Introduction, Greek universities are presently running under strict austerity rules. FVMT is no exception. A 22% overall funding reduction was enacted in 2010 compared to the 2008 budget. Further cuts can be anticipated. This translates into a freeze for new faculty positions, replacement freeze for retiring teaching staff, substantial salary cuts, and difficulties for maintenance, equipment replacement and building plans. The Greek university structure is almost entirely publicly funded. The public investments and running costs are substantial as nearly all salaries and operating expenses are being paid. The precarious financial situation is aggravated by the fact that the Greek higher education

system is not only totally free of charge, all students also benefit of free study material (free textbooks) and for those of families with lower income levels, free meals and low cost accommodation.

Salaries are directly paid by the government to individual employees. The amount of the annual budget given to the School via the University Senate is being determined by fixed coefficients and by a number of other factors, including student numbers, running costs and educational needs. Within the FVMT, funds are distributed between the Departments according to decisions taken in the School's General assembly.

Non-government fund are created by the Faculty through clinical and diagnostic services and by research grants. Such income is consistently less than 10 %, each, of the overall public funding. This situation is aggravated by the fact that 3rd party income from research decreased by nearly 50 percent over the last 3 years. Departments, laboratories and research groups may retain their income (less an overhead of 5,8%) and are autonomous in its use. Nevertheless very few staff is being paid by such incomes. Fund raising initiatives addressing the industry, public and private organisations and donors are apparently not part of the faculty's strategy; at least during the visit we were not being made aware of any.

3.2 Comments

Most faculty members are doing an outstanding job of compensating for lack of funds and personnel. That is, some teachers assume a heavy teaching load while being the only senior lecturer in the field; most faculty members assume an excess load of administrative tasks; none of them is awarded with the exception that during promotion, administrative skills may find recognition. This situation obviously decreases time and efforts otherwise available for research – the significant decrease in performance related research funding is an explicit result of this strenuous situation. Whether teaching is also suffering under these conditions could not be evaluated during our on-site visit: we saw very few students overall, had little or no chance talking to them (not even during the formal meeting with students in which only 5 volunteers were present), and students seem to frequent lectures more regularly only during the first semesters. Therefore, whether teaching funds are being sufficient could not clearly be assessed on site. For availability (or shortage of) animal material for teaching, please see respective chapters 4 and 7.

3.3 Suggestions

Because it cannot be expected that the overall economic situation in Greece (and Europe) will suddenly and drastically improve, the Faculty should develop a substantially different approach to generating income:

To create a Faculty-wide "External Funds Committee" exploring all possible avenues for 3rd party funding in research, clinics and postgraduate programmes (residencies).

In addition to existing annual award for the best publication, it is recommended to increasingly link not only excellence in research but also clinical services and teaching to an award structure.

Requesting that inactive students (except working students and socially under-privileged students) pay tuition fees commensurate and progressively increasing with the undue length of their studies.

To organise periodically the re-use of study material (textbooks) in order to avoid unnecessary public expenses.

In clinics and laboratories (which income is nearly completely retained by the School), income should be increased on the long term by increasing the quality of services (and not only the number of acts): that is, increasing specialisation, creating rotating clinical internships, residency programmes in as many specialties as possible, offering services round the clock (a real 24 hr Emergency Service), and, in the end, increasing substantially the fees. The faculty's companion animal clinical services should, in general, be more expensive than those services rendered by private practitioners.

4. CURRICULUM

4.1 GENERAL ASPECTS

4.1.1 Findings

The Veterinary Studies Programme at the Veterinary Faculty of the University of Thessaloniki extends over 5 years (10 semesters). Current curriculum was adopted in 2003, after the first EAEVE visitation. Integration of teaching among different modules (each one comprising 1-4 sections, and each section comprising 1-5 courses) and the increased amount of practical training are the main differences with the previous curriculum. Remarkably, the 5th year is almost free of classroom lectures. The curriculum has been largely developed at the local level.

The "new" curriculum is composed of 300 25-hours ECTS credits. Core subjects account for 283 credits (94,3%) and electives offered by the Faculty for the remaining 17 credits. In addition, there are 360 hours of obligatory extramural training (120 in farms for care and husbandry of animals, 120 in practices and 120 in slaughterhouses and food processing plants).

In the core part of the curriculum (the obligatory extramural work is included), EU-listed subject areas weight as follows (% of the whole training time calculated from Table 4.2 SER pg 34-35):

Subject area	% training time	% practicals
Basic subjects	1.1	46.1
Basic sciences	25.2	42.9
Clinical sciences	50.9	62.1
Animal production	13.0	63.1
Food hygiene/Public health	9.8	69.2
Professional knowledge	(*)	(*)
TOTAL	**100.0**	**57.9**

(*) mostly taught under Clinical Sciences

The corresponding % time devoted to practical activities is reported in the right column.

No structured tracking system is organized within the curriculum.

The aim of the obligatory extramural work is to integrate future veterinarians into ¨real¨ field practice in a variety of areas of veterinary professional activity.

For all courses, attendance to lectures is optional; however, at least 80% attendance to all supervised practical training is required.

4.1.2 Comments

There were no major discrepancies with information reported in the SER.

There is a good balance between the different subject areas (see comments on basic subjects and on clinical training figures in later paragraphs). Ratios R6 to R8 are as expected.

In general, coverage of EU-subjects is adequate.

Freedom of the Faculty to modify the curriculum is almost unlimited.

Feedback from veterinary practices/institutions about the students undergoing mandatory extramural training is satisfactory. There are no major comments on electives.

By definition, a single ECTS credit is composed of 25 hours, hence a curriculum of 300 ECTS credits – a required minimum standard throughout Europe – is made of 7.500 hours of theoretical training + practical training + individual study. Table 4.1.1 in the SER (pg 28) describes a significant overload of work (660 hours more than the expected). Since the number of declared lecture hours is relatively low (1468) compared with other visited establishments and the number of supervised practical hours is adequate (1630), **the overload is obviously in the hours of individual work (self-directed study = 3977 hrs.),**

Accordingly, teaching methods must be seriously reconsidered (please, see also other parts of this chapter and Chapter 5 of this report).

4.1.3 Suggestions

Based on interviews and the analysis of the SER, the Team judges the volume allotted to individual study as being excessive. This overload on individual study hours, perhaps combined with insufficient control and tutoring for those hours can reasonably be assumed as being one of the main causes of the unsatisfactory flow of students in the Veterinary course; at the same time, control over this aspect of the curriculum seems to be the single main factor that the Faculty can change independently of national laws and regulations It must be the priority of the Faculty to analyse and to correct such "hot spots" of overload; apparently, in the Basic Sciences they abound. Accordingly, the Faculty should shift towards more performing teaching and assessment methods (please, see also other parts of this chapter and Chapter 5 of this report).

In general, traceability of students' attendance to supervised practical training activities needs improvement. For that and especially for documenting and verifying performance in clinical rotations, a student logbook should be introduced, listing all procedures and hands-on learning tasks, which positive fulfilment shall be mandatory before graduation.

4.2 BASIC SUBJECTS & SCIENCES

4.2.1 Findings

The basic subjects teaching (only 39 hours overall at FVMT) are part of the EU Directive-based curriculum delivered at FVMT sine 2003/2004. Some of the basic subjects are taught in high school, and the admission of candidates in the Faculty is through competitive selection, so it is assumed that the 1st year students have a solid background in chemical, physical and biological sciences. Plant Biology is integrated in Animal Nutrition. Most of the teaching (30 of 39 hours) is in Biomathematics.

The curriculum in the basic sciences seems to cover all the necessary aspects for basic veterinary training. In general, the theoretical teaching in the basic sciences seems well related to para-clinical and clinical subjects, and the relevance for veterinary medicine is given throughout. The linkage between the pre-clinical sciences and food science appears somewhat lesser developed. There is a reasonable balance between lectures and practical work.

Anatomy (including histology and embryology), physiology, biochemistry, genetics, pharmacology, pharmacy, toxicology, microbiology and immunology are integrated in modules and are not separate subjects.

A considerable amount of non-animal clinical work is provided by the Anatomy staff. Based on interviews of students participating in practicals, this commitment is much appreciated. In Anatomy, the carcasses, organs and parts (e.g., limbs) are properly handled and preserved, some of them in formaldehyde, however. Sheep carcasses are the prevalent model. The students are trained in groups (of 20), divided into two subgroups. A computer aided teaching programme is also used during lectures and for demonstrations of nerves and vessels.

State-of-the-art working standards and hands-on activity by the students were seen in the Necropsy room in Pathology.

Due to the fact that the Production Animal Clinic and the dairy sheep farm in Kolchiko are relative remote, the relationship of the basic sciences (mainly Physiology and Pharmacology) to the later following clinical courses may be affected.

In a number of courses, practicals (in the form of PowerPoint presentations) seem more an extension of the theoretical part and the desirable “hands-on” activity by the students is not evident. Some laboratories appeared to the Team very little used for teaching purposes and some teachers had true difficulty in providing details on practical activities which they are expected to deliver. Upon our repeated requests, no type of recording of the students’ attendance to practicals was found. This may in part be explained by the fact that some practicals are delivered by more than one teacher and the questioned teachers were not fully aware of what and exactly how others do this, which in itself shows the inadequacy of the system.

During the visit, very few students were seen attending the lectures.

Based on interviews, modules may end in different periods of the semester. Notwithstanding, no evaluation of the students (neither on theoretical nor in the practical part) is done before the official exams which are scheduled at the end of the semester. In some of the modules, evaluation of supervised practical training is not made at all in some topics (e.g., molecular biology, genetics, biostatistics, pharmacology, physiology).

4.2.2 Comments

Although the amount of training in Chemistry is surprisingly low (3 hours), feed-back from the Biochemistry staff let us to believe that many students (at least those coming from a technical and science background, which are the majority at FVMT) have adequate pre-university knowledge of chemistry.

Adequate material for anatomy dissections is available and the students work in group sizes that allow the desirable hands-on experience.

Overall, the number of scheduled class room and practical teaching hours in the basic subjects and sciences is quite low compared to other establishments. This low formal teaching-time invested in the basic subjects and sciences is likely to increase problems related to curriculum overload with self-directed study hours (see par. 4.1.2). Since the study plan apparently relies more on self-directed learning (which is not negative *per se* from a didactic viewpoint), this might also impose a challenge particularly in the first two years as this type of learning is highly dependent upon a strong internal motivation, which seemed not a strong point for the FVMT students in the basic subjects and sciences. Under these circumstances, it is pivotal that all teachers accept the idea that the amount of assigned ECTS credits is the appropriate measure of the working time that the "average" student is bound to devote to that particular course. Requesting disproportionate self-directed work (e.g., in form of just memorising the content of entire books to pass a single course) means limited awareness of current teaching rules according to the Bologna process. The unsatisfactory advancement within the curriculum of students with a reputation of having solid backgrounds in chemical, physical and biological sciences should be also seen and interpreted from this perspective.

A number of practicals appeared poorly organised and the value of training could not at all be assessed in some areas. This does not help encouraging the active participation of students in practicals.

4.2.3 Suggestions

The curricula in basic sciences should be reorganized and improved, since this might well constitute one of the reasons for the unsatisfactory students' flow. With this in mind, actions should be taken to favour: i) concerning students: attendance to lectures and active participation in practicals; ii) concerning teachers: awareness of the (systemic) consequences of excessive self-directed study imposed on students, and commitment to more efficient teaching and/or assessment techniques.

Similarly as in the other broad subject areas, the practicals in all basic sciences must be based on real "hands-on" participation of the students. Size of the groups coupled with the number of instructors and the characteristics of the laboratory should permit this.

It is recommended that teachers reinforce the link with students giving them the possibility to be evaluated along the course, e.g. in form of interim exams or the continuous assessment of their performance in practicals, and not only at the end of the semester.

It is recommended that students learn from their own lecture notes, the handout notes and other material delivered during the courses (and downloadable from the University platform) rather than largely from textbooks books, which are studied mainly in proximity of the exams. During exams, students should also be encouraged to discuss and answer to some specific features which were presented during the theoretical classes. Text book knowledge alone should generally be inacceptable and insufficient for passing exams. In some subjects, the students could be stimulated to prepare presentations covering specified topics which are presented in "mini workshops" in front of the teacher and the fellow students (problem-oriented teaching)..

4.3 ANIMAL PRODUCTION

4.3.1 Findings

The Department of Animal Production comprises “Laboratories” of Animal Husbandry; Animal Nutrition; Ecology & Protection of the Environment; Economics of Animal Production (which includes Epidemiology and Biostatistics) and Ichthiology. These subjects are taught as separate topics and in considerable depth. Examination of the learning objectives and the details of the lectures and practical sessions included in the Appendices to the SER does not suggest that the teaching is closely focussed on principles important to clinical veterinary medicine. We received this factual comment from the Faculty: *“Following various complaints by the students that the teaching is not closely focussed on principles important to clinical veterinary medicine, and a proposal of the Education Committee, last year the General Assembly asked the Education Committee to address this issue and report back. This report is expected soon to be discussed when all aspects of the curriculum will be discussed thoroughly. Meanwhile, temporarily until a decision on this issue is reached, the subjects of the relevant modules are not prerequisites.”*

The SER indicates that, with the introduction of the new curriculum, the teaching of clinical sciences and pathology, parasitic and infectious diseases and animal production has been integrated and that preclinical teaching now emphasises principles important to clinical veterinary medicine. Nevertheless, individual subjects (e.g. General Animal Husbandry, Ecology and Protection of the Environment) appear to be taught sequentially in the same semester and as part of the same module, but not at the same time as, for example, pathology or infectious diseases.

The facilities which the Department of Animal Production has developed at the Teaching Farm in Kolchiko provide an excellent resource for teaching in the various disciplines of the Department. The facilities and husbandry methods used in the dairy sheep flock are modern and follow best practice; they therefore provide undergraduate students with a good point of reference for the husbandry of small ruminants.

Teaching in animal welfare, while included in the course, does not appear to be treated as a specific and important topic which should form the foundation of teaching in veterinary science. Although it is not regarded as a serious deficiency, the Team noted that the welfare needs of some animals being kept on the main Campus in Thessaloniki were not fully satisfied. This is not acceptable, especially in a teaching facility.

There was little evidence of teaching in State Veterinary Medicine. This could be incorporated into the course by reducing emphasis on the more specialised aspects of epidemiology. Apparently, some teaching in State Veterinary Medicine and Legislation is incorporated into Infectious Diseases and Epidemiology, and Veterinary Legislation and Forensic Medicine (SER, Table 4.2, pp. 34-35), as well as in the relevant subjects of Food Hygiene and Technology.

The Department is staffed by enthusiastic and dedicated teachers, but they appear to some extent frustrated by the lack of motivation by a segment of the student body to engage fully with the course and to take full advantage of the learning opportunities offered.

4.3.2 Comments

According to the Appendices of the SER, the curriculum of the Department of Animal Production appears to be comprehensive, but not directly focussed on providing undergraduates with the essential knowledge they need as a basis for clinical teaching. The Team did not gain the impression that there was close cooperation between the Department

and the teaching staff in clinical sciences to provide genuine, vertically integrated teaching in the para-clinical and clinical disciplines.

4.3.3 Suggestions

A re-assessment of teaching in Animal Production should be undertaken to focus clearly on the learning needs of undergraduates for clinical training and to reserve some of the more specialised topics for postgraduate study. Progress towards more practical, hands-on training should be encouraged, especially if it can be combined with vertically integrated, inter-disciplinary teaching.

4.4 CLINICAL SCIENCES

4.4.1 Findings

All general clinical subjects listed in the SOPs are covered. With reference to electives, see 4.6 of this report.

The core clinical subjects are taught beginning in the 3rd year and continued in the 4th year with a combination of lectures, diagnostic laboratory work and clinical work. As anticipated, the 5th year is lecture-free (no core subjects taught) and devoted to practical training. In the 5th year, each student receives 936 hrs of clinical training. Of these, 300 are out-of-hours duties (200 at the Small Animal Clinic and 100 at the Production Animal Clinic).

Data on necropsy caseload and patients' flow are detailed in the SER (Tables 7.1, 7.3, 7.4b, pg 71, 74, 76).

The total of necropsies is adequate for most species, the domestic fowl included. Equines are poorly represented, however (see Chapter 7 in this report).

The Small Animal Clinic is adequate for the needs of the students and the patient caseload. The atmosphere in the Small Animal Clinic is teaching-friendly. The caseload is borderline for all relevant species. There is attention to and expertise in wildlife.

Neutering operations are performed by the students on cats and dogs supplied by local animal charities.

The Equine visitation area is obsolete and its safety standards for the patients and the students are not adequate (see also par. 6.2 of this report). In turn, there is an adequately structured and equipped surgical suite. Stables are infrequently used. The caseload has progressively increased to approximately 300 visited horses in 2010 (of which only 44 were hospitalized); hence it is consistent with EAEVE requirements, ratio R14. However, each student receives clinical training in equine medicine&surgery during only 5 days (SER pg. 44), during which it is reasonable to assume that the respective group of students will be exposed to not more than 5 patients on average. Previous to the 5th year, additional preliminary training on equines is delivered in the 6th, 7th and 8th semester, adding up to 10 hrs/student in 3 different days (one day per semester). There is a single highly committed teacher dedicated to and alone responsible for the whole equine clinic and its teaching.

The new Production Animal Clinic in Kolchiko is more than adequate for "in house" patient caseload, which is already good for small ruminants but is still very limited for cattle. The deficient in-house bovine caseload is compensated by the ambulatory clinic which is operated for approximately 5 days/week during the academic year. One teacher is involved every day, with the support of 1-2 post-graduate students or residents. Students on duty with

the ambulatory clinic are exposed to public health, herd health and reproduction related activities, as well as medical and surgical procedures on individual patients.

More basic clinical training (on companion or production animals, according to preference) is available to all students in the form of 170 hrs of obligatory extramural work to be taken in the summer between the 3rd and 4th curricular years. Ad hoc arrangements exist with a number of clinics and farms.

The FVMT does not operate a 24/7 emergency service for small animals (24/7) open to the general public. Nevertheless, selected referral cases upon authorisation by senior staff may be admitted out-of-hours (during nights and weekends). A 24/7 emergency on-call service is available for production animals and equines (at least as much as the one staff member can handle). Students are obligated to participate in the out-of-hour services, adding up to 300 curricular hrs.

At the time of the visit, the clinical training in the Companion Animal Clinic is organized in groups of 9-22 students (average 14-15, then split in sub-groups), whereas group size is maximum 10 students in the Production Animal Clinic. In the out-of-hour services, four students are on duty in the Companion Animal Clinic and 4 in the Production Animal Clinic (mainly operating as ambulatory unit).

All students are covered by liability insurance during extramural and intramural (obligatory and voluntary) activities.

Both clinics keep individual records of patients using an electronic system (e-vet) which is also accessible to students under supervision. Without supervision, students have access to all fields of the system (by using a personal password), although they cannot add or alter any data. The system contains no key words for retrospective clinical studies.

According to Faculty regulations, students are not allowed to enrol into the 4th year unless they have successfully passed selected courses (“prerequisites”) of the first three years. Due to a bureaucratic problem or administrative laxity, this rule has been by-passed in recent times and students with poor educational background have been allowed entering rotations in the clinics. This extraordinary situation has negatively influenced the organization of clinical training, since larger groups had to be scheduled and insufficiently qualified students had to be trained on patients. The Team has received conflicting information about the resolution of this problem.

4.4.2. Comments

The case load for small animals has progressively increased in recent years and it seems that sufficient opportunities are offered to students to handle the common small animal surgical and medical procedures. Notwithstanding, there is still no properly functioning emergency service for small animals present. **This is considered a potential Category 1 deficiency.**

The new premises in Kolchiko are excellent and cattle can be stabled on a regular basis and adequately maintained for propaedeutics and clinical teaching purposes. Due to reasons which are common to other establishments in Europe, hospitalization of diseased or injured bovine patients is infrequent; hence the clinic is currently run well below its potential. On the other hand, the flow of small ruminants is still good and the caseload seems interesting and varied. Though not operated on a commercial basis, the mobile clinic is reasonably active

and compensates for the limited “in house” exposure of students to bovine patients. Valuable training in swine and poultry farms is also assured by the teaching staff.

The commitment of the single teacher devoted to the horse clinic is substantial, having generated a patient flow which is considerable, given the conditions. Nevertheless, it was clear to the Team that the Faculty assigns little priority to the equine clinical area. The location within the town campus with poor, outdated premises and the limited practical teaching time allotted per student (with an obvious lack of the desirable continuity) support our perception that the “equine clinic” is felt as a sort of minor appendix to the Small Animal Clinic. **This is a serious deficiency (proposed as category 2) that the Faculty must urgently rectify.**

The electronic system e-vet, whose functionality was shown to the Team in detail, is already a valuable tool to keep and retrieve individual records of patients. It would be desirable that all students and instructors attending the clinics improve their personal skills to exploit its full potential. More efficient use of e-vet to trace attendance of students at clinical work and check their exposure to a varied caseload in the different species, including equines, would also be desirable.

4.4.3 Suggestions

The Faculty must operate a true emergency service for small animals. Once implemented, all 5th year students should rotate through the service, also at night, during Saturday afternoons and on week-ends.

The Faculty is urged to develop a strategic plan to improve the equine clinical section. It is recommended that the plan considers, *in primis*: i) the relocation of the clinical activities in suitable premises outside Thessaloniki. Kolchiko is the obvious candidate location; ii) the enrolment of dedicated additional staff. In the transition phase to the desirable situation, more time should be assigned to outside training of students under the guidance of contracted equine practitioners.

4.5 FOOD HYGIENE AND TECHNOLOGY AND VETERINARY PUBLIC HEALTH

4.5.1 Findings

The core curriculum in Food Hygiene and Technology subjects adds up to 209 hours of theoretical (100 hours) and practical (109) training.

The curriculum covers the hygiene and technology aspects of the production, manufacture and distribution of animal foodstuffs or foodstuffs of animal origin intended for human consumption, and the laws, regulations and administrative provisions relating to these subjects.

In addition, there are 7 elective courses that students may select to increase knowledge in Food Hygiene and Public Health.

There are 4 laboratories in the Campus for practical training in Food Hygiene and Technology (Food Microbiology, Food Hygiene, Food Technology and Milk Hygiene and Technology). They are adequately equipped for routine microbiological and chemical analyses of milk, meat, fish, eggs and their products. Most of the laboratory work is oriented to milk and dairy products, covering the main aspects of these topics. The number of students per laboratory work session is about 25, with 2-3 instructors. On average, each session lasts 3 hours.

Additional practical work is carried out in three slaughterhouses, two general ones (bovine,

sheep, goat and swine) and a poultry slaughterhouse. The first, which was visited by the expert, provides the basic infrastructure for the educational purpose. It was favourably noticed the friendly environment that allows students to move freely around the slaughterhouse, under the supervision of the instructors. The plant is about 30 km far from the Faculty and students are taken there in a bus rented by the University (30 minutes ride). The students' group size is 25-30, with 3 instructors. At the slaughterhouse, students are further divided into 3-4 sub-groups and rotate in different areas to practice "hands on" on meat inspection of head, carcasses and offal, hygienic conditions according to EU regulation and carcasses grading. The expert observed no evidence of training on some official procedures like microbiological and residue sampling, *Trichinella* or BSE. On the other hand, the expert witnessed students: i) taking pathological and microbiological samples for later processing at the Faculty; ii) being instructed on official documents and certificates during the ante mortem visit.

Practical work in the poultry slaughterhouse is similarly organized, but no on-site visit was performed.

All students are involved in several visits to the slaughterhouses to cover a minimum number of 36 hours (18 per semester). During summer, students join additional 120 elective hours (about 1 month) of slaughterhouse training.

Training is completed with visits to dairy and milk-processing plants, with the same organization as in slaughterhouse visits as regards the number of students and instructors. The infrastructures, laboratories and Quality Assurance are outstanding and the students get a close view of the real dairy inspection and quality control.

The Food Hygiene and Technology Department runs some services for food companies. Only internship students and professors are involved in this activity.

4.5.2 Comments

Based on information in the SER, the visit to laboratories and facilities and the interviews of (senior and junior) teaching staff and students, it is reliable that - on graduation - the new veterinarians can be trained by the Competent Authority (CA) to carry out the tasks described in the Food Hygiene Regulations (178/200, 852/2004, 853/2004, 854/2004), the Regulation on Official Food and Feed Safety Controls (OFFSC, 882/ 2004) and the associated EC and domestic enabling legislation.

Students at FVMT receive enough and adequate information and training in Food Hygiene and Technology, especially in meat and dairy. The streaming of the theory runs what is desirable to know and what it is functional to understand the practical training. In general, there is a good balance of the practical training in Food Hygiene and Technology with the Faculty facilities. Also the outside facilities are important teaching resources of valuable quality.

Students are adequately exposed to valuable slaughterhouse training. Visits are stimulating and it is remarkable how everybody in the plant is wishing to cooperate for the benefit of students' training, from the owner, veterinarians, technical personnel, etc.

Visits to slaughterhouses are well organized and splitting students in small groups of 8-10 allows true "hands on" training in meat inspection.

There is room, during the visits to slaughterhouses, for additional emphasis on stunning of the animals, pig inspection, selected EU inspection protocols (for BSE and *Trichinella*), aspects related to residues and environmental hygienic conditions.

In consideration of the Country's priorities, practical training in fish inspection needs improvement.

Some closer relationship with the units operating at the University Farm in Kolchiko would be also desirable.

4.5.3 Suggestions

To be even more effective, slaughterhouse training should be postponed to the final semesters (9^{th} or 10^{th}).

During slaughterhouse training, more emphasis should be put on EU regulations dealing with microbiological sampling, *Trichinella* and BSE. The link between slaughterhouse and laboratory training should also be reinforced.

It could also be considered to include some elective courses, e.g. Food Microbiology, amongst the core subjects to support some basic knowledge. This would increase the total number of delivered hours and the ratio lecture/practical training. Other subjects to include are those related with HACCP.

Fish inspection activities should be enhanced.

To improve efficacy of the “hands on in small groups” teaching approach in the laboratory, it would be desirable to increase the number of working sets (mainly basic material) available to students.

4.6 ELECTIVES, OPTIONAL DISCIPLINES & OTHER SUBJECTS

4.6.1 Findings

Students are required to take 17 ECTS credits in choosing among elective subjects, between the 4^{th} and the 10^{th} semester. A list of electives at FVMT is available in the SER (Table 4.3, pg. 36-38).

There are 47 elective courses offered. Of these, 28 are deal with Clinical Sciences, 7 with Animal Production and 7 with Food Hygiene/Public Health.

4.6.2 Comments

The number of electives and their variety is sufficient for students to develop personal interests. The range of electives in clinical sciences is particularly appreciated as well the fact that attention is given to bee diseases and honey production.

.4.6.3 Suggestions

No suggestions.

5.1 TEACHING METHODOLOGY

5.1.1 Findings

Teaching methodology is outlined in the SER (pg 51-52). In the majority of the modules, modern audio-visual systems are used. Problem-based and case-based approaches are used by some teachers but this is not widespread. The last two semesters are substantially lecture free.

The learning objectives are set and published for each “module”, but apparently not for each “section” or course.

The textbooks are given to the students, each year, free of charge according to national legislation. The students in their first curricular years mostly study on textbooks, and use course notes less frequently. Just a small number of students are using the main Faculty library, the subsidiary libraries and the PC rooms for individual study. Based on feed-back, electronic resources such as the web-based course management system “Blackboard”, offered by the Central University Library, is very appreciated by some students but not much used at the moment.

In general, teachers met during the visit seemed open and approachable for students.

Teachers’ evaluation by the students is done by filling anonymous questionnaires at the end of each semester (a standard form was shown during the visit). Questionnaires are distributed by each teacher, without obligation to file. Once collected, the questionnaires are sent to the evaluated teacher and the respective section’s coordinator. Though precise figures are not available, there seems to be inconsistent distribution and a low return rate of questionnaires. Also, a negative evaluation has no verifiable consequences, as evaluation results are not part of the individual teacher’s files.. This, in turn, will reinforce scepticism of students on the evaluation tool.

The Team found no evidence of any mechanism to reward teaching excellence, not even of educational events to improve individual teaching skills. Didactic skills are however taken into consideration in the process of promotion.

Attendance of classroom lectures is not a requirement. Based on interviews of several teachers and on-site observations, we found that attendance to lectures is highest (well above 50%) in the first curricular year and very low in the second and third year, again on the increase afterwards in clinics. Attendance to practicals and clinical rotations is compulsory and reportedly checked, at least in the recent years. The team noticed indeed, that only few students were attending the lectures during the entire week of the visit and, in general, that few students were present in the Faculty’s premises at the University Campus. However, it should be mentioned that one day of the visiting week was student election day, a political event of seemingly great importance during which the entire day was lecture free.

In several “modules” in the first curricular years, mainly in the basic sciences, the amount of theory is excessive (“.... entire books to be learned by heart”) and the too few practicals are often designed as demonstrations and not as “hands-on” training sessions.

In the University of Thessaloniki, services and offers related to student welfare are certainly adequate. They are outlined in the SER pg. 55-56. In the Faculty, at the beginning of each academic year, ten members of the teaching staff are nominated as tutors for students. This opportunity is publicized amongst students and the relevant information is uploaded on the Faculty website.

5.1.2 Comments

It is a matter of fact that, at present, excellence in teaching is not promoted, evaluated or rewarded as it should. Coupled with poor students' attendance to formal teaching, this may explain what seemed to the team a lack of enthusiasm on the part of some teaching staff to embrace innovative teaching and learning methods and, in turn, to develop and deliver state of the art teaching, learning and mechanisms and methods of evaluation.

For reasons which largely remain unclear, students are not encouraged to attend the lectures and the appeal of practicals in some "modules" or "sections" is questionable.

The tutorial service that the Faculty offers to students is commendable but it is still not sufficiently effective to improve the unsatisfactory students' flow and reduce the large number of "non-active" students.

In the Emergency Service for Companion Animals, the student's duties, the case responsibility and the interactions with clients are insufficient; this is first due to the fact that the ES is not functioning 24 hours per day and that walk-in clients during the night are generally not accepted. Considering these facts, animal owners prefer local veterinarians with emergency services rather than utilising the improper services of the School.

5.1.3 Suggestions

The participation of the students to lectures must be encouraged. A strong indication by the Faculty management should come to the teachers to synthesize the theory of the courses, make larger use of problem-based teaching, harmonize the workload to available ECTS and avoid books as the only learning support to be used by the students.

The practicals must be intended by all teaching staff as "hands-on" training rather than simple demonstration or as an extension of theory. The principle of "learning by doing" should strongly be implemented. Performance in practicals should be evaluated, in each "module", by continuous assessment or at least not later than at the end of the "module".

A well structured and transparent evaluation system of the teachers by their students needs urgent implementation. A University policy in the is direction has been announced.

The tutorial service should operate, with the necessary personnel, budget and technical tools, as the executive arm of a maximum priority strategic plan that the Faculty is urged to develop.

The emergency service must be fully functional 24 hours per day, 7 days a week and must be open throughout for all patients (walk-in clients) and not just for the second opinion or referred cases. Students must be actively involved all the time.

5.2 EXAMINATIONS

5.2.1 Findings

A total of 9 weeks (split in three periods of three weeks) in each academic year are set aside for examination purposes and it is understood that no teaching takes place during these periods. Teaching staff have freedom to use any form of examination they feel appropriate; continuous assessment is not much used while written examinations are the preferred form, particularly in pre-clinical subjects (mainly essay question and short answer questions). Dates of the exams are timely announced.

A “section” is passed when the mean of all marks in the courses of that “section” is ≥ 5 on a scale of 10 (that corresponds to a pass rate of just over 50%, which seems excessively low).

The Faculty (as any other Greek Faculty) does not make use of external examiners at any point in the undergraduate course.

According to national legislation, students may re-sit examinations as many times as they like, although this benefit is being reconsidered nationally by the Ministry of Education. According to a new University law, which was passed by the Greek parliament after the visitation in August 2011 this shall stop as of the academic year 2011-12). In theory, undergraduates may not enrol in the 4th year until they have passed examinations in all the subjects deemed essential for their clinical studies, but in practice, exceptions have been allowed to this rule. This means that students not having passed the requested pre-clinical examinations (“prerequisites”) may enter clinical rotations; that such scenarios do happen was verified during the visitation.

The Faculty does not have an Examination Committee to coordinate policy for examinations and to investigate, for example, inconsistencies in pass rates within and between subjects. Anecdotal information suggests that average pass marks are low and that few students achieve high grades.

The average time to graduation was 8 years between 2001 and 2007. In the years 2008-2010, approximately 55% of students graduated within 7 years from enrolment. In the same three years, only 15% of the students graduated in five years. However, this percentage is higher than in years 2005-2007 (approximately 4%).

5.2.2 Comments

One of the causes contributing to the long average time to graduation seems to be student complacency engendered by the legal possibility to repeat examinations indefinitely.

Since the final mark for each “section” is the average of the marks obtained in each course of the “section”, it is possible for students to pass a sectional examination, although they have failed an individual course. Based on interviews, some teachers do not feel comfortable with this scheme and argue that, because of it, some students may deliberately (and strategically) avoid studying individual courses.

The fact that some students enter clinics without having passed all basic sciences exams is inacceptable and potentially dangerous for both students and animals examined and treated. As example, lack of proven knowledge in anatomy, physiology, pharmacology, pathology, for instance, may endanger patients and/or render hands-on learning inefficient.

5.2.3 Suggestions

The Team fully supports the suggestion of the Faculty (SER pg. 57-58) that “examination results of the different modules and sections of the present curriculum should be properly evaluated and compared to those of the old curriculum.” Accordingly, establishment of an Examination Committee to agree on coherent and consistent rules for the conduct and marking of examinations seems an essential step.

It must be carefully investigated if, and to which extent, the possibility to retake exams indefinitely is a risk factor of unsatisfactory advancement of FVMT students in their career. If yes, the Faculty should support any restrictive policy by the Ministry of Education.

To avoid that inadequately prepared students are admitted to clinical training, the Faculty should strictly apply its internal rule that undergraduates may not enrol in the 4th year until they have passed examinations in all the "prerequisite" subjects of the first curricular years.

A gradual introduction of external examiners in profession-oriented subjects should be considered. This would provide a basis for comparison with other schools and the expectations of stakeholders. Such policy would also reinforce the links with representative of the veterinary profession.

6 PHYSICAL FACILITIES & EQUIPMENT

6.1 GENERAL ASPECTS

6.1.1 Findings

The Faculty was founded in 1950 and successively expanded and renovated several times. Significant parts such as the Kolchiko premises (the Farm animal clinic and the Dairy sheep farm) became operational in 2009 only, well after a first EAEVE visit in 2001.

The Faculty is split into three main sites: i) the buildings at the central University Campus; ii) the buildings of Clinics in Thessaloniki, 4 km apart from the University Campus; iii) the premises at Kolchiko, 35 km from Thessaloniki. The first two are downtown and easily accessible by public transportation. Reaching Kolchiko by public transportation is time-consuming and even difficult during non-working hours. Some transport is provided by the Faculty. For details of the 3 sites, see SER pg. 59-61.

In the central University Campus, there is easy access to the Departments and teaching facilities. Several lecture halls and the main Faculty Library are located there, as well as the administration. The teaching laboratories are situated close to the different Departments and sometimes within or close to research laboratory areas.

In general, the infrastructure offered for the pre-clinical training of veterinary students is adequate. However, the team noticed that several teaching laboratories in the Basic Sciences are marginally well equipped and that their use by the students is limited. In contrast, the equipment, operational standard and appeal of the teaching laboratories of Pathology, Parasitology and Microbiology were of high quality.

The dissection theatres for anatomy are somewhat old fashion, but a student friendly atmosphere was noticed.

The recently renovated necropsy room is more than adequate.

The dissection room for poultry and other avian species, though old fashion, is satisfactory.

Contact of students with healthy production animals occurs in the dairy sheep farm in Kolchiko and – in the frame of special agreements – at the premises of the American Farm School and at two units of the National Agriculture Research Foundation. These outside facilities are 7 to 40 km far from Thessaloniki. The dairy sheep farm in Kolchiko was felt by the team as excellent for early exposure of the students to handling and management of farm animals.

Practical training in Food Technology is provided in the Department Laboratories and within outside dairy, meat and seafood processing units. A catering facility, the University Restaurant and the Food Market of Thessaloniki are also visited. The Food Technology and

Food Hygiene laboratories are well equipped for teaching, research and for offering a commercial service to industry.

All students receive training in meat inspection at three slaughterhouses (a poultry abattoir included) located 20 to 30 km from Thessaloniki. Their structural standard is satisfactory.

In the Faculty, all visited buildings have air conditioning.

The faculty owns 2 mini-buses (18 seats each) to transport students to external establishments for clinical training. In addition, private buses are rented to transport students to farms and other plants for non-clinical training.

The students have reasonable access to computers. Wireless internet access is not yet available.

Though major safety equipment and protocols are reportedly monitored by the University of Thessaloniki, not all visited laboratories and departments were up to standard with biohazard warnings, eye washers, hand washers and efficient signalling of escape routes. On some corridors of the basic sciences departments there was storage of some old and non-functional equipment and furniture which incommoded the traffic and some (emergency) exits were blocked.

Waste management is correct.

6.1.2 Comments

The fact that teaching in the Faculty is split between 3 sites presents a challenge to ensure that undergraduates are able to be in the right place at the right time. Although the University provides some transportation, feedback from students suggests that better support is required in this area – particularly to enable them to take advantage of the Kolchiko site.

In general, the physical facilities available to the Faculty are more than adequate in size and are in a sufficient to good state of repair. The team saw no evidence of lack of sufficient provision by the University but began to suspect that, in some respects, the Faculty has too limited a vision of how to make the most effective use of the facilities available to achieve excellence in teaching.

The basic facilities, means and materials for teaching exist in the faculty but, again, it should find better use to take advantage of its entire potential.

The provision of lecture rooms, laboratories and dissection/necropsy rooms is adequate although, in some areas, the arrangements for staff/student/bio-safety left much to be desired. But there was evidence that laboratory equipment (some of it new and expensive) had been purchased but was not being used – indeed, in a number of cases, was not even connected to an electrical supply.

The excellent facilities at Kolchiko are under-utilised at present and it is unfortunate that the proposed use of the large building (as an abattoir) was not followed through. The site gives the impression of a work in progress at present and it is to be hoped that the Faculty will seek ways to fully exploit its potential.

6.1.3 Suggestions

There is an urgent need to ensure that students are better enabled to travel to their classes where necessary, either by providing suitable transportation or perhaps by paying individuals with cars to operate car-sharing schemes.

The Faculty should consider to increase the time that students in their first curricular years must spend time in Kolchiko (and maybe the surrounding farms), for the benefit of their motivation and awareness as future veterinarians.

The Faculty should strongly promote the culture of excellence in teaching, leading, amongst other effects, to better use (mainly by some teachers in the first curricular years) of the available equipment and premises.

6.2 CLINICAL FACILITIES & ORGANISATION

6.2.1 Findings

Clinical training activities are carried out in the Companion Animal Clinic in Thessaloniki and in the Production Animal Clinic in Kolchiko as well as on contracted farms.

Besides staff offices, three lecture rooms and 7 rooms for group work (one equipped with 9 PCs), the Companion Animal Clinic comprises a reception, 13 consulting rooms and 8 surgical suites (of these, one for endoscopies) for Small Animals, one examination area and one surgical suite and a recovery room for equines, a room for animal preparation, an intensive care area, an area dedicated to exotic and wild animals, a Central Diagnostic Laboratory, the laboratory of Diagnostic Imaging, two small in-clinic diagnostic laboratories (dermatology and internal medicine), three old stables.

Equipment in the Small Animal Clinic is definitely up to standard, and a new CT scanner has been ordered with the premises ready to house it.

Safety standards of the examination area for equines are not adequate. The area is obsolete, narrow and has a low ceiling. Under these circumstances, possible accidents and injuries to patients and inexperienced people (like students) may easily happen. The surgical suite for equines is adequate in structure and equipment. Stables are of acceptable standard but they are little used due to the urban location of the Clinics and the frequent protest of neighbours complaining of large animals (horses) being housed at the School.

Standard of premises and equipment in the new Production Animal Clinic in Kolchiko is simply excellent.

Normal opening hours in the Clinics are from 9.00 to 13.00, but consultations go on until each case is worked up until mid-afternoon for 5 days a week and 48 weeks per year. A 24 hrs intensive care service for hospitalized animals (actually mainly small animals) is operative. In the small animal section, there is no real 24 hrs emergency service permanently open to the general public, but only second-opinion cases are admitted by appointment and prior authorisation by a senior clinician. In the equine and production animal sections, there is one veterinarian (usually an intern) on call in the case of emergencies. The service if free of charge for farmers collaborating in practical training for students.

In addition, the Faculty operates a Mobile Clinic in the form of two ambulance-like modified vehicles (5 seats each) and a 7-seat mini-bus, mainly providing consultations to farms collaborating in practical training. The Mobile Clinic activity is for five days a week.

Marginally acceptable isolation facilities for small animals were visited. Isolation of equines in Thessaloniki is only possible (and it occurred, e.g. with West Nile neurological patients) due

to the fact that regular stables are most of the time empty so that infectious disease may not easily spread to other horse patients. Although inexistent in town, proper isolation facilities for large animals are present and functional at the Kolchiko faculty farm.

The use of the working and protective clothes is obligatory and respected in all rooms and laboratories that the team visited.

6.2.2 Comments

In general, there is enough and appropriate space and equipment to carry out all clinical teaching activities.

Diagnostic services are more than adequate for the needs of the Clinics and also provide services for external customers.

The attention to exotics and wildlife is noted positively (a de facto 24/7 service is provided for them), as well as the increased provision of cats for hands on neutering by the students due to agreements with charities.

Some defects were found:

- There are obvious discrepancies from the acceptable safety standards in the examination area for equines.

- As stated in the SER (pg 75), there is not an emergency service for small animals opened for 24 hrs/7 days to the general public. **This is a potential Category 1 deficiency.** Nevertheless, students on duty are occasionally exposed to second-opinion emergency cases. The availability of this (pseudo-) emergency service is not made sufficiently public. Also no signs are posted outside to guide the public, no opening hours are placated.

- Emergency services for equines and farm animals, though formally adequate (open to the general public), are run at a minimum and currently provide less than 10% of the caseload (SER pg. 75). However, the single and motivated teacher responsible for the equine section cannot dedicate more time than he actually does.

- There is no adequate isolation facility for horses at the downtown clinical campus, the location where horses are presently stabled and treated. This would per se constitute a category 1 deficiency; however, at the Kolchiko campus there is a well equipped and fully functioning isolation facility present for large animals, which can also be used for horses. **Therefore, and as long as the horse clinic is not transferred to Kolchiko, the inadequacy of the isolation facilities for horses at the present location constitutes in our opinion a category 2 deficiency**.

6.2.3 Suggestions

The Faculty must urgently relocate the clinical activities on horses into suitable premises outside downtown Thessaloniki. Kolchiko is the obvious candidate location. This would also solve the problem of the inadequate horse isolation facility in town.

The Faculty must organize a true emergency service for companion animals open and functioning 24/7 to the general public (without appointment or prior authorisation).

Additional staff is needed to increase the activity of the emergency service for equines and production animals, to offer the students more varied caseload. Once reinforced, the service must be better publicized.

The isolation facilities for companion animals should be refurbished.

7. ANIMALS & TEACHING MATERIALS OF ANIMAL ORIGIN

7.1 Findings

For anatomy, the SER (pg. 69-71) is very informative about the variety of animals and teaching material of animal origin used.

In pathology, cadavers come from the Faculty Clinics, private clinics, individual practitioners and farms in the surroundings of Thessaloniki. On average, 298 large animals are necropsies per year. The number of small animals is approximately 200 per year. The average number poultry is remarkably high (SER pg 71). Necropsies of equines are rare, those of cattle and rabbits sufficient.

At the dairy sheep farm in Kolchiko, there are approximately 200 ewes. Handling and use of these sheep and their lambs by the students is well organised and seen very positively. The teaching objectives of activities at the farm are clearly stated in the SER (pg 71-72). The Faculty has also agreements with farms and companies to guarantee contact with other production animal species (SER pg 197-198).

The Clinics have an average patient flow of over 3,200 small animals and approximately 165 horses per year. The number of horses has increased in the last three years. Cattle and pigs are infrequently presented at the Production Animal Clinic. The flow of small ruminants is approximately 200 per year.

Cattle patients, in number of approximately 250 per year, are mainly seen in outside teaching with the mobile clinic. Additional equine patients (approximately one third of the case load) are also seen in outside teaching.

Hands-on clinical training in pig farms is more than adequate.

The Clinics also receive patients from local charities, where neutering is performed.

For food hygiene, students carry out practical work in the relevant Departmental laboratories, in slaughterhouses and other outside plants (see this report par. 6.1).

7.2 Comments

In anatomy, the variety of preserved teaching material currently being used is positively noted. Nevertheless, the amount of fresh animal material - especially whole cadavers – is very limited. It is important that students have the opportunity to dissect entire cadavers, as this “hands-on” approach contributes to topographical knowledge, motivation and serves as useful exercise for the acquisition of surgical skills. The preparation by instructors of organs and body parts may be a useful adjunct to the dissection of fresh carcasses, but the bleaching effect of long term preservation in formalin reduces the usefulness of such material and frequent exposure - both of instructors and students - to formaldehyde constitutes a health risk and is not desirable. Similarly, the availability and use of bones and anatomical models, though helpful in certain circumstances, cannot be a substitute for the exposure of students to fresh material, where organs can be studied topographically.

In pathology, adequate teaching material is available.

In animal production, dairy sheep kept at the Faculty farm are of high teaching value. Nearly all types of farming processes in the countryside are visited by tutored students through agreements with outside farms.

The number of small animals seen in the Clinics in the 3 years prior to the visit is slightly lower than the expected threshold. On paper, *this would constitute a potential Category 1 deficiency*, but it was found that pets admitted for re-examination (even after months) were not computed; if added to the overall case load, numbers would be fitting the minimums expected.

The number of horses fits the range; however, achieving a better equilibrium between reproductive, medical and surgical cases in equines should be an objective for the future.

The number of bovine patients seen at the Production Animal Clinic is clearly very limited, possibly due to sanitary regulations and the short time since opening of the premises. The mobile clinic compensates for that shortage and the involved teachers must be complimented for this. Notwithstanding, the teaching value of in-house hospitalized patients is particularly high (especially for beginners) and the Faculty should try to promote optimal use of the outstanding facilities in Kolchiko.

7.3 Suggestions

The number and variety of whole cadavers, especially canine, for dissection training in anatomy should be increased. On purpose formal arrangements with charities and public pounds for the provision of canine and feline carcasses should be arranged. The acquisition of farm animal and equine carcasses is always more challenging, but full use needs to be made of the opportunities presented by the already existing Faculty's arrangements with the various farms and equine establishments. Cooperation with Food Hygiene and clinical Departments might help to provide additional fresh material for anatomy.

The number of visited/hospitalized small animals must be increased to the desirable threshold. Operating a true 24/7 Emergency Service would be the most reasonable way to compensate for the relatively limited caseload and for the specific Category 1 Deficiency.

A strategic plan aimed at optimal use of the Production Animal Clinic in Kolchiko should be developed and implemented. The main goals should be: i) a substantial increase of hospitalizations of bovine patients, to a suggested minimum of one hospitalized patient/week; ii) in parallel, to assure that all students are exposed to the desirable amount of training through improved organization and check of their activity in the clinic.

Construction of paddocks for keeping more large animals outdoors for prolonged periods of time should be budgeted and built; this especially in the light of transferring the equine clinic to Kolchiko..

8. LIBRARY & LEARNING RESOURCES

8.1 Findings

The library system is comprised of: i) the large, well equipped University Central Library in the main Campus (SER pg 83-84); ii) the relatively small Faculty Library, with two full-time employees; iii) 18 Subsidiary Libraries located in the various Departments and laboratories. The latter are specialized in veterinary textbooks and journals and have the reputation to offer adequate services for the students. The system of accessing papers in e-journals and accessing and borrowing books seems efficient.

All books acquired for the Subsidiary libraries are properly catalogued by the Main Library of the Veterinary Faculty and the Central University Library.

The Information Technology Service is comprised of: i) the Audio-Visual Service, which offers slides, films, videos, CDs and DVDs; ii) the Computer Service, with three computer laboratories (33 PCs in total, mostly quite old). There are also 15 PCs available to students in the companion animal clinic; iii) the Virtual Campus of the University, which uses – amongst other services, e.g., RefWork – the web-based course management system "Blackboard". According to interviews, "Blackboard" is very appreciated by some students but not extensively used at the moment. "Blackboard" and the subscribed e-journal are readily accessible to all students, even from home.

There are training programmes for computer use.

A WIFI System is not available at the moment throughout the campus.

Repeatedly during the visits, the Team noticed a complete absence of students in the larger computer rooms. The Faculty Library does not seem to be much attended either, in spite of the student-friendly opening hours during term-time. Opening hours are quite reduced off-term.

8.2 Comments

The library facilities as a whole are adequate and access to hard copies, books, e-journals etc. is simple and complete, with subscriptions to the currently important databases and other university libraries. Opening hours are sufficiently student friendly. Notwithstanding, many students do not attend the Faculty library and do not benefit from the full range of available resources (SER pg. 89).

It is understood that students most frequently study from notes or from their own text books which are free of charge available for all students in Greece, hence the Library is not central to their academic lives.

8.3 Suggestions

Students should be encouraged to make more extensive use of the Faculty library services and subsidiary library facilities, e.g. though the assignment of problems or exercises that require bibliographic searches and self-learning activities (SER pg. 89).

Improving the appeal of the computer rooms for the students is recommended.

9. ADMISSION & ENROLMENT

9.1 Findings

Admission requirements for entering the Veterinary Faculty are established by the Ministry of Education. To enrol, a High School Diploma and passing a nation-wide examination are required. The exam is offered once a year.

Admission is regulated by a *numerus clausus* system. In the last five academic years, the admissible number for the first year has ranged between 75 and 90 students (average 82). However, there is a supplementary number of students joining the Faculty that may enter the first year and even onwards. This number ranges between 20 and 33 (average 25) per year. The Faculty receives 4-5 Socrates/Erasmus students per year, and a similar number of Thessaloniki students attends courses in foreign Countries.

The admission numbers within the *numerus clauses system* is determined every year by the Ministry of Education. The number takes into account the available facilities and staff, but also policies at the national level. Based on feedback from the interviewed practitioners, the number is slightly higher than the labour market demands.

Veterinary Studies are the first choice for a majority of admitted students (well above 80% according to SER p. 92). Students do not have to pay any fees, not for admission, no tuition and all textbooks are free of charge available throughout the curricular years. In addition, there are financial aids for students from large and/or poor income families or for students that are orphan children.

Based on SER (pg. 39), the average duration of studies is approximately 8 years on the average, with a trend to decrease somewhat in the very recent years. The drop-out rate is not explicitly indicated in the SER, however the average number of graduates is 103 (SER Table 9.4 Pg. 94) and the average number of students enrolled is 107 (SER Table 9.2 Pg. 92). The overall drop-out rate is according to the Faculty, around 12 %.

The total student number at FVMT is 1226 (in 2011). Of these, 698 (57%) are “non-active” students, that have completed the mandatory hours of attendance in practicals and clinics (lecture attendance is not compulsory) and sat through the five-year study programme; they may be just short of graduation in the best case or having passed a limited number of exams in the worst case. In general, these “off course” students frequent the Faculty only for taking examinations but do not attend classes or other forms of instruction (SER, pg 93). The team was not made aware of any Faculty plan to counteract this unorthodox phenomenon.

9.2 Comments

Current selection procedure is very competitive and a high rank in the national exam is necessary to be admitted to the Veterinary Schools (Thessaloniki and Karditsa).. Nevertheless, the long average time to graduation and the large number of non-active students suggest that the admission procedure is only partially efficient in selecting the best applicants; the admission exam apparently does not sufficiently select for long-term motivation, learning attitude and aptitude for studying veterinary science.

Admitted students are deemed by their teachers to have an adequate basic knowledge in biology, physics, chemistry and the use of PCs.

The number of enrolled students is slightly higher than desired by the Faculty and the Veterinary authorities that the team happened to meet. The Faculty is considering that enrolling a total of 90 new students/year or less would fit better the available facilities and staff (SER pg. 95).

There is an unusually high proportion of “non-active” students, by far the highest ever found by any member of the Team during a visit. Interviewed students and teaching staff offered the opinions on the apparent causes of the long duration of studies. Amongst them are: the overload of theoretical training (see also Chap 4 and 5 of this report), which is more pronounced in basic sciences; the low attendance of lectures (see also Chap. 5 of this report); the absence of any mentoring for students in their first years; working in parallel with studying, a need and sometimes a choice by several students; personal problems; a rather diffuse immaturity; all that possibly encouraged by the general lax atmosphere which was clearly perceived within the student community of the veterinary University Campus. As example, students could only be interviewed by the team when fetched in the aisles, during clinical rotations and in the cafeteria. The announced and planned Thursday morning

meeting of the team with students was only attended by 5 students of which 3 were foreign students. The administration assured, however, that all students received information about the visit and were invited to attend scheduled meetings. It remained unclear, whether the absence of students was based on disinterest or, as we heard, was the result of active lobbying of influential student groups against external evaluations and audits. The apparent lack of motivation and the unwillingness to be exposed to and to discuss European learning standards by a substantial number of students was more than surprising.

The unusually long duration of studies by several students and the chronic "non-active" status weaken (*per se*) the assurance to stakeholders that, by the time they graduate, all students have acquired the knowledge and the first day skills listed in the SOPs' guidelines. In this context shall also be re-emphasised the laxity with which regulations preventing ill-prepared students to advance into higher semesters are treated.

The high proportion of "non-active" students (independently of possible socio-economic causes), the poor learning performance associated with long times to graduation and the scarce overall participation on any non-compulsory teaching and learning activities represent a serious problem (see also Chap. 4 and 5 of this report). Though obviously not only attributable to the sole responsibility of the Faculty, these parameters combined with an insufficient awareness and lack of reaction and action by the Faculty mirrors complacency and organizational weakness and might constitute a potential "Category 1 deficiency".

There are few students wishing to spend training periods in Faculties abroad.

9.3 Suggestions

In the current phase in which a new demanding curriculum is run, student intake should be adapted as far as possible to the available facilities and staff. Accordingly, the team strongly supports the Faculty's request to the Ministry of Education to limit to 90, or less, the number of students admitted per year.

It is a must that a clear strategy to reduce the numbers of students, who have a high average duration of studies, is adopted with a maximum degree of priority. As a first step, better investigation and understanding of the underlying causes is necessary. The overall lack of motivation for change and adaptation to current training standards (by senior students and perhaps only by an influential minority) shall be analysed and strategies found to improve the general attitude vis à vis international academic standards, learning and teaching methods.

The Faculty should commit itself to support any lobbying, at the national level, to improve current admission procedures (e.g., by integrating them with an interview of the nation-wide exam winners for motivation to become a vet).

10. ACADEMIC & SUPPORT STAFF

10.1 Findings

In general, there appears to be a sufficient number of teaching staff and, as the SER notes, over 90% of the academic staff of the Faculty are veterinarians.

The selection procedure for academic staff is detailed in the SER (pg. 100-101). Staff appointments and staffing levels are independently decided by the Faculty, based on the number of new positions allocated yearly by the Ministry of Education (via the University administration).

Based on interviews, there appears to be limited emphasis on excellence in teaching in the recruitment, selection and promotion procedures followed by the Faculty; training in didactic techniques does not seem to be readily available to veterinary teaching staff, nor is it encouraged by the Faculty.

The number of technical staff is in the lower part of the established range. A shortage of technical staff is perceived by the academic teaching staff in all Departments.

The arrangements for part time staff and for sabbaticals are generous.

10.2 Comments

Comparison of the salaries of veterinary teaching staff with salaries in other sections of the profession within a country is always difficult and comparisons between countries are hazardous. The Team did not gain the impression that recruitment to the Faculty is inhibited by the remuneration available, though it is possible that, once appointed, staff may be tempted to take on private work, thus reducing the time they commit to the Faculty.

The SER mentions at several points a perceived shortage of support staff. This is a problem common to many Veterinary Faculties; some approach the problem in the same way as FVMT is doing, by recruiting support staff independently and paying their salaries out of Faculty funds.

10.3 Suggestions

The various committees of the Faculty need to consider what scope they have to widen the selection procedures to attract academic and teaching staff with experience either from Greece or from abroad, thus enhancing the opportunities for cross-fertilization and innovation in teaching.

Greater emphasis on teaching ability and on the acquisition of teaching skills would also be of value.

The use of funds generated by the Faculty – particularly from clinical areas – to finance the appointment of support staff is helpful, but FVMT should continue to lobby its funding bodies for the provision of sufficient staff for the particular needs of the veterinary undergraduate course, as they are essential for the provision of effective hands-on teaching.

11. CONTINUING EDUCATION

11.1 Findings

The Faculty organises by itself a limited number of continuing education events (3-4 per year). Other events are organized in association with various veterinary institutions, association and companies. The facilities are also used by external organizations such as veterinary associations and pharmaceutical companies to run independent CPE courses.

To date, no specialisation courses are offered.

Several members of the teaching staff are invited speakers at events organized nationwide and, less often, abroad.

11.2 Comments

Based on feed-back, the Faculty admit that the potential market for organizing CPE courses has not been fully developed. The visitors suspect that because of the lack of an organizational structure, the courses depend on the enthusiasm of individual staff members, which would seem to be the main contributing factors.

It is important for universities to instil into their undergraduates the need for lifelong learning after they have graduated. The process but should start with the current undergraduates.

11.3 Suggestions

A Committee for Continuing Education should be created as soon as practicable.

Expanding the virtual campus to topics for Continuing Education would be beneficial for every practitioner.

The faculty should ensure that the concept of lifelong learning is fully embedded within the curriculum.

12. POSTGRADUATE EDUCATION

12.1 Findings

The postgraduate research training is represented by two types of degree: MSc (12 students/year enrolled for 2 years), and PhD degree (61 students enrolled for a period of 3-6 years). As a rule, holding a MSc is a prerequisite for pursuing a PhD.

There also exist 10 clinical disciplines for clinical speciality training (interns and residents), totally being 26 interns and 6 residents. The residents are trained in Veterinary Anaesthesia & Analgesia (3) and in Veterinary Dermatology (3). The interns are in Small Animal Internal Medicine (8), Veterinary Clinical Pathology (5), Large Animal Medicine, Surgery & Reproduction (5), two in Small Animal Surgery & Obstetrics and in Equine Medicine & Surgery, respectively one in Veterinary Radiology, Ophthalmology, Exotic Animal Medicine and in Veterinary Anaesthesia & Analgesia. The so called “interns” follow a clinical training in one chosen discipline in form of a junior assistant ship. A rotating clinical Internship programme is not installed.

The training programme for PhD and MSc is submitted to the General Assembly on a yearly basis. It is changeable according to the proposal of the academic staff.

The postgraduate students are also involved on a volunteer basis in teaching activities. In turn, their research/training expenses are covered by the Faculty.

There are no minimum publication requirements for awarding a postgraduate degree at FVMT. However, the publication of the findings in international journals is viewed very favourably during the evaluation of the thesis.

12.2 Comments

The postgraduate education comprises all the required types and structures (PhD, MS) and clinical specialities training (interns and residents). However, not all Diplomates employed at the Faculty have residency training programmes running.

Few postgraduate students are supported financially by public or other research grants.

Many faculties make use of postgraduate students for the teaching of undergraduates and it can benefit both. But it needs to be carefully monitored, both to ensure that the quality of teaching is adequate and to allow the postgraduate students to have enough time to pursue their own studies.

There is a fair number of European College Diplomates on faculty, representing 10 specialty Colleges, however residency programmes are not established except in anaesthesia and dermatology. Diplomates in other specialties either lack financial means or the necessary support by the respective Departments to install formal residency training programs. Also the concept of rotating clinical internships is either unknown to or not followed by the Faculty.

12.3 Suggestions

A minimum requirement of at least one peer-reviewed publication before the final thesis evaluation would be desirable for all PhD students.

The team fully supports the suggestion by the Faculty (SER, pg. 107) that there is a need for increasing residency programmes and specialisation in general. Lack of financial support might however not be the sole reason for the low number of residents trained. The faculty should analyse reasons and actively encourage specialisation and internationalisation.

Rotating clinical internship programmes should be instituted and may even be opened to a wider range of graduates. During clinical rotations, Interns may also be involved in staffing the Emergency and Intensive Care Services.

13. RESEARCH

13.1 Findings

Interviews and publication lists indicate that research of local to international breadth is carried out at FVMT. The level of recent publications is good to excellent in many Departments, including the profession-oriented ones; this suggests that research-based training is carried out and that the teaching staff is committed to research. The team's impression is that the research effort is more fragmented than cohesive but, during the visit, only limited time could be devoted to analyzing this aspect; the existence of a clear research strategy in the Faculty was not apparent

Only a limited number of students/year is exposed to some research activities, mainly by assisting in the experimental work of ongoing research projects. Some financial support is provided in the frame of a University-wide programme. No credits are recognized for this activity. However, if research activity is done within the framework of a course, the student may have his/her mark in that course increased by up to 20%.

13.2 Comments

Apparently, the limited involvement of undergraduate students in research activities does not impact negatively on the appeal of postgraduate education offered at the FVMT (SER, pg. 106).

13.3 Suggestions

More undergraduate students should be motivated to participate in research tasks if these activities were recognized by the Faculty as elective credits.

EXECUTIVE SUMMARY

Several positive aspects emerged during the visit, which consistently fit the SER content. The most relevant ones are:

- the good relationship between the attending students and the teaching and support staff;
- the commitment of the whole staff and young collaborators at the Clinics, permitting to overcome the difficulties related to the shortage of support staff and teaching budget, to the benefit of the motivated students;
- the high qualification of the academic staff, with numerous European College specialists;
- the excellent facilities and equipment at the Large Animal Clinic at the farm;
- the early exposure of students to valuable hands-on training at the Dairy Sheep Farm;
- the well organized extramural training in Food Hygiene;
- the modern equipment of a range of research laboratories, mirroring successful access to prestigious and highly competitive European funds.

Some deviations from the EU standards were however present:

Hands-on training is still insufficient in the so called small animal emergency service and borderline in all small animal clinics. The EAEVE standard provides for “clinical hospital facilities that should operate day and night for most of the year, like a normal practice”. For several reasons, current organization of the emergency service does not fit this standard..

The student flow of non-active students (57%), scarce participation in lectures and long average times to graduation are so critical that the Faculty cannot provide reasonable assurance that all students, by the time they graduate, have acquired the knowledge and the first day skills listed in the EAEVE guidelines.

A number of contributing factors may perhaps be inherent to the Greek university laws *, but other factors can be corrected by the Faculty and these are:

- the overload of theoretical teaching with an excessive number of hours allocated to individual study, a phenomenon which is more pronounced in the basic sciences; some or many of these self-directed study hours seem not or only insufficiently faculty-directed and supervised.

- the low attendance to lectures;

- the low appeal of practicals provided in some disciplines;

- the poor efficiency of mentoring for students in their first curricular years;

- the failure to consistently apply existing rules set to prevent the advancement of non-qualified students into the clinical training.

So far, reaction and actions of the Faculty to analyse and counteract such critical student flow have been weak or absent. Developing and implementing a strategy to reduce the proportion of “non-active” students and to restore a regular student flow should be the “number one” priority of the Faculty.

Other weaknesses in short are:

- the poorly structured and organized, hence totally inefficient evaluation system of teachers; - the limited hands-on clinical training on equines, mainly related to the shortage of staff and the obsolete premises in Thessaloniki. It was noted that, although the caseload is sufficient on paper (ratio R14 in the desirable range), the average student spends insufficient time on duty in the “equine clinic” and is little exposed to outside patient care.

Both weaknesses are of less severity than the previous two.

Other organizational and structural weaknesses were found, which are commented and discussed in the report. Those dealing with teaching methodology and finances deserve special attention as well as the concept of European College specialisation and internationalisation, in general, need to receive substantial administrative support.

* *A revision of the University law was passed by the Greek parliament in August 2011*

Finally, the team voices profound concern that the existing shortage of support staff may even in the short run adversely affect the quality of practical teaching and the delivery of services to students, veterinarians and the general public.

Annex 1 Indicators

Ratio	Numerator/Denominator raw	1/Denominator	Established range of denominators	Notes
R1	110.6/528	4.77	8.85-10.42	
R2	178.6/528	2.95	8.75/12.54	
R3	101.2/528	5.22	10.62-12.62	
R4	101.2/103	1.02	4.91-7.21	
R5	110.6/68	0.61	0.53-2.20	
R6	5445/1630	0.30	0.51-0.36	
R7	790.5/839.5	1.06	1.88-2.21	
R8	3977/8160	2.05	0.51-7.87	
R9	211/3059	14.50	Still open	
R10	211/120	0.57	Still open	
R11	102/214	2.08	2.47-1.73	
R12	103/1159	11.25	0.51-7.87	
R13	103/116	1.13	0.20-0.09	
R14	103/254	2.47	1.78-0.92	
R15	103/214	2.05	0.58-0.37	
R16	103/3224	31.30	48.74-37.94	
R17	103/37	0.36		
R18	103/298	2.89	0.75-0.46	
R19	103/1516	13.72	0.26-0.12	
R20	103/209	2.03	1.26-0.89	

Annex 2: Listing of Major Deficiencies as decided by ECOVE

1. Insufficient level of hands-on training in small animal medicine and surgery linked to a not fully functioning emergency service.

2. Insufficient level of hands-on training in equine medicine and surgery linked to shortage of staff, inappropriate facilities and isolation facilities for horses.

3. Lack of reaction and action by the Faculty to poor learning performance associated with long times to graduation and the scarce overall participation of students in any non-compulsory teaching and learning activities. Under these circumstances, the Faculty cannot assure, by the time students graduate that all students have acquired the knowledge and the first day skills listed in the EAEVE guidelines.

STATUS OF THE FACULTY: NOT APPROVED

Annex 3 Student`s Report

ORGANISATION

Question: Is the structure organized in a student friendly manner?

From the student friendly aspect, the structural organization of the Faculty with the position of the farm 35 km outside of Thessaloniki is far from being ideal; the farm area is not well served by public transportation, hence not easy for the students to reach. The Faculty has minibuses to transport students to Kolchiko (farm and production animal clinic), when it is possible, to alleviate this problem. Buses rented by the Faculty are also available but, reportedly, private cars are most often the only way to get to the farm. On the other hand, some interviewed students said that there are no problems to reach the Faculty locations in Thessaloniki, since they are well served by the public transportation.

ADMISSION AND ENROLMENT

Question: Are the requirements and the application thereof fair?

Every year, 90-110 new students are admitted. The entrance examination is a very important decision point for the student. During the high school, students may select different study plans according to their future projects. Depending on which course they choose, their study will be more focused on particular subjects, like chemistry, biology, physics and math for veterinary applicants. The admission to the Faculty (a nation-wide exam is provided once a year by the government) is very hard and very competitive. To be admitted, students must have a high rank in the nation-wide exam. All interviewed students tell that it is a very difficult

exam with no relevance to the future veterinary studies. One aspect emerged during the interviews is that part of enrolled new students are not interested in Veterinary Medicine (they are just waiting one year to try again the examination to enter into another faculty with a better score). This is one of the possible explanations of the low attendance to lectures.

STUDENTS ACCOMODATION, SAFETY, UNION FACILITIES, SOCIAL PROGRAMMES AND SPORT

Question: are these all catered for?

Thessaloniki is a big city; students come here from all over Greece. For incoming students it's easy to find accommodation (several buildings are occupied solely by students). The University provides a support service for students who have financial problems.

The University has a sport center located near the Faculty and easily accessible by public transport. Students have special discounts for sport activities. All interviewed students reported that is often used.

About safety, maybe one problem could be in the companion animal clinic. During the night there is no kind of control of the main gate and the hospital entrance. It is a potential risk for students on duty.

TEACHING METHODOLOGY AND EXAMINATIONS

Question: are the means of teaching up to date and do the examination methods truly measure a student's knowledge?

The pedagogical approach for the majority of the modules includes the application of the traditional type of lecturing using modern audio-visual systems, PPT presentations and videos. Case-based teaching is not largely used. In 2003, the "integrated teaching" approach has been introduced. There are areas where this particular way of teaching is very used, such as molecular biology, histology, anatomy, physiology, biochemistry and part of the general pharmacology, pathology, infectious and parasitic diseases. Interviewed students seemed to appreciate this kind of teaching methodology, which is somewhat different from the old one and gives the opportunity for transversal learning.

A major problem found was the overload of theoretical teaching that is an excess of individual study hours, which is more pronounced in the basic sciences. This could be a partial explanation for low attendance to lectures.

During practical activities students rotate in groups whose size may change according to the subject. Groups are usually much larger in the laboratories than in the clinics.

Assessment of students' performance is not progressive but is based solely on the final examination (written and/or oral) at the end of each semester. The dates of the exams are

announced at the beginning of each semester. Often, the examinations are written, especially in preclinical subjects. Essay questions and short answer questions are more used than multiple-choice questions. Oral/practical exams are also carried out, especially in clinical subjects and meat inspection. There are three examination periods during the academic year (January-February, June, and September). The student can chose the period and if he/she fails any exam may retake the exams as many times as needed to either pass finally or give up; and this as per national legislation.

TEACHING QUALITY AND THE ASSESSMENT THEREOF

Question: is the quality of the teaching generally acceptable or is it very variable between the staff. Is an internal quality assurance program in place which is actually applied? Are the majority of students involved?

A paper questionnaire is filled in by the students, anonymously, at the end of each semester to evaluate teachers' performance. However, questionnaires are not screened and evaluated centrally and no or little follow up is given to criticism. Moreover, the limited attendance to lectures implies a limited restitution of questionnaires.

Possibly, the low attendance of the students to lectures could derive – amongst other causes - from the use of suboptimal teaching methods by some lecturers and by the fact that text book knowledge in exams may be sufficient for obtaining a passing score.

Students may participate in monitoring the quality of teaching through their representatives in the Faculty's General Assembly.

One of the biggest problems is the bad student flow through the five curricular years. This could mirror, at least in part, weakness in organization, deliverance and quality control of the curriculum.

CLINICAL LEARNING AND HANDS ON APPLICATIONS

Question: Are there in general enough clinical cases for each student to have hands-on experience?

A 24h emergency service for small animals does not seem to be operative during the night and only second opinion cases are occasionally admitted, as confirmed by all students that I happened to interview.

Another problem is the high number of PhD and post graduate students that work in the hospital. During the visit, all clinical cases that I've seen were leaded by a PhD or post graduate student. This kind of organization reduces the hands-on training opportunities for undergraduates, and this fact was largely confirmed by the interviewed students.

Concerning equines, there are only few days of training per student in the whole curriculum and this does not seem to be enough to learn the basics. Hands-on training on equines should be increased according to interviews.

LIBRARY

Question: is the library adequate and easy to use for the students? Is there a "virtual Campus"? Is there "e-learning"? Is there Wi-Fi campus wide?

The FVMT library is located in the main building and is easily accessible to students. It is a small library, with 18 sit places. However, Greek students usually study from books that are distributed to them free of charge, so there is no need for the students to have many book copies available in the library.

Adjacent to the library there's a reading room with 85 places.

In the Faculty, there are two computer rooms with 24 PC's (in the main building) and one additional room in the companion animal clinic (9 PC's). All PC's have internet access and each student has access to online books and journals with a personalized keyword.

A novel information technology tool already at hand for use by the students (though not widely used) is the "online course pack (blackboard)". Some interviewed students said they like this program very much because they may have access to useful learning material from home.