Accreditation Report
for the Undergraduate Study Programme of:

Veterinary Science

Institution: University of Thessaly

Date: 16 January 2021

Report of the Panel appointed by the HAHE to undertake the review of the Undergraduate Study Programme of **Veterinary Science** of the **University of Thessaly** for the purposes of granting accreditation

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PART A: BACKGROUND AND CONTEXT OF THE REVIEW

I.   The External Evaluation & Accreditation Panel

The Panel responsible for the Accreditation Review of the Undergraduate Study Programme of **Veterinary Science** of the **University of Thessaly** comprised the following four (4) members, drawn from the HAHE Register, in accordance with Laws 4009/2011 & 4653/2020:

1. **Professor Michael Polymenis (Chair)**

   Texas A & M University, USA

2. **Professor Andronikos Mauromoustakos**

   University of Arkansas, USA

3. **Assoc. Prof. Nikolaos Dervisis**

   Virginia-Maryland College of Veterinary Medicine, USA

4. **Dr. Dimitrios Galamatis**

   Member of the Geotechnical Chamber of Greece, Greece

II.   Review Procedure and Documentation

Since the evaluation Panel (EEAP) in this case is composed of four members, instead of the expected five members, EEAP sought and received assurance from HAHE that this Report will have the proper legal standing and basis. On behalf of HAHE, Ms. V. Kyriakousi assured EEAP in writing that "although ideally, the External Evaluation and Accreditation Panel (EEAP) consists of five members, according to the standing regulations, it is absolutely acceptable for the EEAP to consist of three or four members. The Report that will be produced will be valid and entirely legitimate."

Due to the current Coronavirus (COVID-19) pandemic, measures were taken to limit its spread. The Hellenic Authority for Higher Education (HAHE) decided to implement the accreditation review process of the Veterinary Science Undergraduate programme (VSUP) of the Department of Veterinary Science (VS) of the University of Thessaly (UT) via teleconferences. All briefings and meetings were conducted efficiently and within the allocated time frame through Zoom. Replacing the on-site visits with virtual meetings was a challenge for all participating parties. The video conferences proceeded without any technical problems. However, the lack of face to face contact and physical presence of the panel members at the DVS premises did not allow for an in-depth evaluation of the departmental infrastructure.

On Monday, 11 January 2021, a two-hour orientation meeting was held with HAHE's Director-General, Dr. Christina Besta, via Zoom. All the members of the External Evaluation & Accreditation Panel (EEAP) joined the meeting. Dr. Besta presented the Quality Assurance standards for Quality Accreditation of Undergraduate programmes and Accreditation Guidelines, and all members received useful information. The EEAP had also received the final timetable for the teleconferences at this point. The Chair of EEAP acted as the host for all debriefing and private meetings among the EEAP members. Before the 'virtual' visit, EEAP received the Proposal for Accreditation of the Department of Veterinary Sciences and other relevant material. The EEAP discussed the strategy and issues to be considered during the visit and the tasks of each panel member were allocated. Upon request of the EEAP, additional supporting documentation and presentations were provided promptly by VS staff after the teleconferences.

The accreditation review was initiated on Tuesday, 12 January, at 4:00 pm Athens time. The inaugural teleconference was held with Vice-Rector Dr. Theodorakis and the President of the Department Dr. Papatsiros. Dr. Theodorakis provided a brief comprehensive presentation of the history and academic profile of the University. Dr. Papatsiros presented the departmental profile, its policies on quality assurance, and other study programme issues. The key issues focused on the curriculum's suitability and structure, the pursuit of learning outcomes and qualifications, following the European and the National Qualifications Framework for Higher Education.

The teleconference meetings continued with eight (8) members of the Internal Evaluation Group (IEG/OMEA) and the Quality Assurance Unit (QAU/ΜΟΔΙΠ). A variety of issues were discussed, focusing mainly on the Undergraduate programme's compliance with quality accreditation standards, curriculum revisions, the students' progression, and assignments. The IEG expressed its support and commitment to implementing a comprehensive quality policy that will promote the academic profile

and more focused programme orientation. The teleconference continued with 7 teaching staff members, including the Vice-Dean of the University, who thoroughly discussed the undergraduate study programme, the interrelations between teaching and research activities, the professional development opportunities, the faculty workload, projects and research activities, and the undergraduate students' questionnaire evaluations. Following this meeting, the EEAP met and discussed with a group of 11 students of different years of study about their studies, the Departmental/Institutional facilities, and their academic staff contacts. At the end of the first day, the EEAP communicated in private to reflect on the teleconferences.

The teleconferences continued the following day with an online tour of the classrooms, lecture halls, libraries, laboratories, and institutional facilities. The next teleconference meetings involved 10 alumni graduates of the Department who expressed their opinions for the study programme, teaching and research, facilities, and the career paths they have followed. Following this, a group of 10 social partners, employers, and stakeholders from the private and public sectors joined the Panel. The EEAP discussed their contacts, links to the Department, and their experiences with graduates and Departmental staff. The second day of the review ended with a joint teleconference meeting of IEG and QAU representatives and the Rector and the Department Head. During this meeting, the discussions focused on issues that needed further clarification. The Chair of the EEAP concluded the meeting presenting the review's key findings, stressing the strong points of the curriculum and the Department's shortcomings, followed with further discussion and expression of views.

The EEAP acknowledges the spirit of cooperation shown by the Departmental staff and their willingness to collaborate and work towards supporting the University's Quality Assurance policy at all levels and contributing to the upgrading of the Department's quality standards. The process of accreditation review via teleconference was deemed sufficient and efficient. All individuals who participated in the e-meetings had the opportunity to voice their views.

From Thursday, 14 January to Saturday, 16 January, the EEAP members worked independently and as a team on their assigned tasks on the Accreditation Report. The teamwork was accomplished via teleconferences daily, as organized by the Chair.

III.   Study Programme Profile

The University of Thessaly (UT) was established by law in 1984 (Presidential Decrees 83/1984, 302/1985, 107/1986) as an Independent Higher Education Institution with University status. In 1988, UT accepted its inaugural class of students. The UT provides education at both undergraduate and postgraduate levels. It consists of the following eight (8) Schools:

- Health Sciences
- Economics and Administrative Sciences
- Technology
- Physical Education and Sports Science
- Sciences
- Agricultural Sciences
- Engineering
- Humanities and Social Sciences

The Department of Veterinary Science (VS) belongs to the School of Health Sciences. VS was established in 1993 (Presidential Decree 177/1993) and began operating in 1994. The first student graduated in 1999, and the first doctoral degree was awarded in 2004. The Department became academically independent in 2006. The Department is located in Karditsa and housed in a 15,215 m^2 building complex, of which the covered area is 7,070 m^2.

The Department generates and transmits knowledge in the field of veterinary sciences. The Department implements and organizes teaching, training, and research in relevant areas. The mission of the Department is the in-depth training of students to become competent and successful veterinarians, able to apply the principles of veterinary sciences, dedicated to protect and improve animal health, improve animal production and the quality of animal products, protect people from zoonotic diseases, protect the environment, advance veterinary research and experimental medicine, and solve emerging problems related with veterinary sciences.

The number of incoming students is determined yearly by the Ministry of Education and Religious Affairs, averaging about 88 students/year in the last several years. There are currently 542 active undergraduate students, nine students pursuing their postgraduate diploma, and 43 postgraduate doctoral students.

The Department offers degrees in Veterinary Medicine (625 degrees awarded), postgraduate specialization Diplomas (165 diplomas awarded), and postgraduate Doctoral degrees (55 degrees awarded). Today, VS is composed of thirty-two (32) faculty members (with four (4) additional faculty members approved and expected to join the Department), three (3) teaching instructors (ΕΔΙΠ), two (2) laboratory instructors (ΕΤΕΠ), and eleven (11) Administrative Staff at various capacities (secretarial staff, 4 in the department + 4 in the clinics; two librarians; one IT support).

The Department has the following five (5) Divisions:

- Structure and Function of Animal Organisms

- Animal Production, Ichthyology, Ichthyopathology, Apiary Sciences, and Applied Ecology
- Food Safety and Technology and Epidemiology
- Laboratory Diagnostics
- Clinical Veterinary Studies

The Department includes the following fourteen (14) Laboratories and Clinics:

- Anatomy, Histology, and Embryology
- Biostatistics, Epidemiology, and Economics of Animal Production
- Biochemistry
- Animal Husbandry and Nutrition
- Ichthyology and Ichthyopathology (EBVS-accredited)
- Microbiology and Parasitology (ISO9001-certified)
- Anatomical Pathology
- Food Hygiene of Animal Origin
- Pharmacology and Toxicology
- Physiology
- Obstetrics and Reproduction (EBVS-accredited)
- Avian Pathology
- Clinical Pathology (EBVS-accredited)
- Surgery Clinic

PART B: COMPLIANCE WITH THE PRINCIPLES

Principle 1: Academic Unit Policy for Quality Assurance

INSTITUTIONS SHOULD APPLY A QUALITY ASSURANCE POLICY AS PART OF THEIR STRATEGIC MANAGEMENT. THIS POLICY SHOULD EXPAND AND BE AIMED (WITH THE COLLABORATION OF EXTERNAL STAKEHOLDERS) AT ALL INSTITUTION'S AREAS OF ACTIVITY, AND PARTICULARLY AT THE FULFILMENT OF QUALITY REQUIREMENTS OF UNDERGRADUATE PROGRAMMES. THIS POLICY SHOULD BE PUBLISHED AND IMPLEMENTED BY ALL STAKEHOLDERS.

The quality assurance policy of the academic unit is in line with the Institutional policy on quality, and is included in a published statement that is implemented by all stakeholders. It focuses on the achievement of special objectives related to the quality assurance of study programmes offered by the academic unit.

The quality policy statement of the academic unit includes its commitment to implement a quality policy that will promote the academic profile and orientation of the programme, its purpose and field of study; it will realise the programme's strategic goals and it will determine the means and ways for attaining them; it will implement the appropriate quality procedures, aiming at the programme's continuous improvement.

In particular, in order to carry out this policy, the academic unit commits itself to put into practice quality procedures that will demonstrate:

a) *the suitability of the structure and organization of the curriculum;*
b) *the pursuit of learning outcomes and qualifications in accordance with the European and the National Qualifications Framework for Higher Education;*
c) *the promotion of the quality and effectiveness of teaching;*
d) *the appropriateness of the qualifications of the teaching staff;*
e) *the enhancement of the quality and quantity of the research output among faculty members of the academic unit;*
f) *ways for linking teaching and research;*
g) *the level of demand for qualifications acquired by graduates, in the labour market;*
h) *the quality of support services such as the administrative services, the Library, and the student welfare office;*

i) *the conduct of an annual review and an internal audit of the quality assurance system of the undergraduate programme(s) offered, as well as the collaboration of the Internal Evaluation Group (IEG) with the Institution's Quality Assurance Unit (QAU).*

Study programme Compliance

- The VS department has established an appropriate Quality Assurance Unit (ΜΟΔΙΠ) clearly defining review processes, the programme's continuous improvement, and Key Performance Indicators. ΜΟΔΙΠ complies, monitors, and enforces the Quality Assurance Policy applied and guaranteed by a committee consisting of six (6) VS members (OMEA). The VS has set specific, measurable, and timely goals for its undergraduate study programme. The OMEA is in line with ΜΟΔΙΠ for the improvement of the study programme. Relevant information is shared with involved parties and posted to the UT/ΜΟΔΙΠ intranet and VS website.

- The EEAP found an established and well-structured quality assurance policy by the academic unit and observed the commitment to implementing the quality policy required to promote the VSUP. The quality policy statement aims to realize the programme's strategic goals and determine the means and ways of attaining them.

Panel Judgement

Principle 1: Institution Policy for Quality Assurance	
Fully compliant	**X**
Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

- The EEAP acknowledges the Department's quality assurance procedures and recommends continuing students' active participation and involvement in OMEA.

- The EEAP recommends that the OMEA ensures that the yearly information sent to HAHE does not create progress reports with missing data.

Principle 2: Design and Approval of programmes

INSTITUTIONS SHOULD DEVELOP THEIR UNDERGRADUATE PROGRAMMES FOLLOWING A DEFINED WRITTEN PROCESS WHICH WILL INVOLVE THE PARTICIPANTS, INFORMATION SOURCES AND THE APPROVAL COMMITTEES FOR THE PROGRAMME. THE OBJECTIVES, THE EXPECTED LEARNING OUTCOMES, THE INTENDED PROFESSIONAL QUALIFICATIONS AND THE WAYS TO ACHIEVE THEM ARE SET OUT IN THE PROGRAMME DESIGN. THE ABOVE DETAILS AS WELL AS INFORMATION ON THE PROGRAMME'S STRUCTURE ARE PUBLISHED IN THE STUDENT GUIDE.

Academic units develop their programmes following a well-defined procedure. The academic profile and orientation of the programme, the objectives, the subject areas, the structure and organisation, the expected learning outcomes and the intended professional qualifications according to the National Qualifications Framework for Higher Education are described at this stage. The approval or revision process for programmes includes a check of compliance with the basic requirements described in the Standards, on behalf of the Institution's Quality Assurance Unit (QAU).

Furthermore, the programme design should take into consideration the following:
- *the Institutional strategy*
- *the active participation of students*
- *the experience of external stakeholders from the labour market*
- *the smooth progression of students throughout the stages of the programme*
- *the anticipated student workload according to the European Credit Transfer and Accumulation System*
- *the option to provide work experience to the students*
- *the linking of teaching and research*
- *the relevant regulatory framework and the official procedure for the approval of the programme by the Institution*

Study programme Compliance

- The programme's mission is to train scientists who will have a career in the veterinary profession. Through research activity and academic teaching, the programme aims to promote science, promote the veterinary profession, and create the next generation of veterinary professionals.
- The study programme appears to be well structured, clearly laid out, detailed, and with a plan for future incremental or substantial changes. It appears that all appropriate stakeholders are consulted for the creation and function of the programme.

Panel judgement

Principle 2: Design and Approval of programmes	
Fully compliant	**X**
Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

The following comments are suggestions that are sought to improve on the current undergraduate programme. It is recognized that many aspects of this section are somewhat novel for Greek Universities, and this lack of prior experience has hampered their application.

- The teaching faculty evaluation by the students needs serious thought and re-organization. The student evaluation procedure should be planned to require the students' absolute minimum effort and be significantly incentivized. It was reported that the students needed to go in person to obtain their "ticket" to use for their evaluation. This was reported as changing since 2020, and rightfully so. The students should get a personalized link with each faculty member's evaluation form on the day of the last class taught by that faculty in the specific course. A significant obstacle to student evaluations is that attendance is not required in classroom teaching. Thus it is impossible to know what percentage of the students present in the class performed the evaluation. This obstacle is absent in lab and clinic rotations. Hence, the student evaluation could be linked to their grade in labs/clinic rotations; i.e., no grade is reported until the evaluation is submitted.

- Based on the evaluations, corrective actions by the Department Head and the teaching faculty should be taken.

- The evaluation questionnaires need to be simplified and allow for comments. The questionnaires should be no more than one page, and completed quickly.

Principle 3: Student- centred Learning, Teaching and Assessment

INSTITUTIONS SHOULD ENSURE THAT THE UNDERGRADUATE PROGRAMMES ARE DELIVERED IN A WAY THAT ENCOURAGES STUDENTS TO TAKE AN ACTIVE ROLE IN CREATING THE LEARNING PROCESS. THE ASSESSMENT METHODS SHOULD REFLECT THIS APPROACH.

Student-centred learning and teaching plays an important role in stimulating students' motivation, self-reflection and engagement in the learning process. The above entail continuous consideration of the programme's delivery and the assessment of the related outcomes.

The student-centred learning and teaching process

- *respects and attends to the diversity of students and their needs, enabling flexible learning paths;*
- *considers and uses different modes of delivery, where appropriate;*
- *flexibly uses a variety of pedagogical methods;*
- *regularly evaluates and adjusts the modes of delivery and pedagogical methods aiming at improvement;*
- *regularly evaluates the quality and effectiveness of teaching, as documented especially through student surveys;*
- *reinforces the student's sense of autonomy, while ensuring adequate guidance and support from the teaching staff;*
- *promotes mutual respect in the student - teacher relationship;*
- *applies appropriate procedures for dealing with students' complaints.*

In addition :
- *the academic staff are familiar with the existing examination system and methods and are supported in developing their own skills in this field;*
- *the assessment criteria and methods are published in advance;*
- *the assessment allows students to demonstrate the extent to which the intended learning outcomes have been achieved. Students are given feedback, which, if necessary is linked to advice on the learning process;*
- *student assessment is conducted by more than one examiner, where possible;*
- *the regulations for assessment take into account mitigating circumstances;*
- *assessment is consistent, fairly applied to all students and carried out in accordance with the stated procedures;*
- *a formal procedure for student appeals is in place.*

Study programme Compliance

- The current curriculum addresses many of the suggestions from the previous review of 2011, including courses explicitly in veterinary legislation, animal ethology and welfare, and veterinary certification.
- Of the 83 courses required for graduation, 76 are mandatory. The remaining seven courses are electives, based on student interest, from a total of 24 elective course offerings.
- The material's delivery is a mix of traditional lectures, laboratory exercises, written assignments, and clinics. Clinics are the primary form of training in years 4 and 5. Material for 85 undergraduate courses is also available electronically on the e-class

platform. Overall, the ratio of lecture-only: hands-on (laboratories, clinics, etc.) delivery is 1 : 1.5, which is considered a positive aspect of the programme.

- Depending on the delivery mode, the students are assessed in analogous settings. For example, for traditional lectures through a typical written test, student performance in the clinics is evaluated during the clinic rotation.
- The examination schedule and format are announced in advance and with input from the students.
- For students with special needs, there is a procedure in place (through the "ΠΡΟΣΒΑΣΗ" link) for the necessary accommodations.
- A list of prerequisites for some advanced classes exists.
- There is a formal appeals process in place, with a committee of 3 faculty members responsible for guiding the necessary steps, and the process is described on the Department's website.
- An academic advisor is assigned to each student to monitor their progress in the programme.
- Blinded assessment metrics for individual classes and instructors were provided.
- Current student satisfaction with the programme is outstanding.

Panel Judgement

Principle 3: Student- centred Learning, Teaching and Assessment	
Fully compliant	**X**
Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

- An explicit area that is currently deficient in the study programme, based on the opinion of past graduates, is training in taking case notes and communicating with owners of the animals brought to the clinic. It is suggested that this deficiency is addressed, either as part of existing courses, or through a new course.

- Especially for graduate students, introducing data analysis/experimental design courses perhaps taught elsewhere in the University, as elective for those students planning to pursue further graduate degrees, will strengthen the students' research competence.

Principle 4: Student Admission, Progression, Recognition and Certification

INSTITUTIONS SHOULD DEVELOP AND APPLY PUBLISHED REGULATIONS COVERING ALL ASPECTS AND PHASES OF STUDIES (ADMISSION, PROGRESSION, RECOGNITION AND CERTIFICATION).

Institutions and academic units need to put in place both processes and tools to collect, manage and act on information regarding student progression.

Procedures concerning the award and recognition of higher education degrees, the duration of studies, rules ensuring students progression, terms and conditions for student mobility should be based on the institutional study regulations. Appropriate recognition procedures rely on institutional practice for recognition of credits among various European academic departments and Institutions, in line with the principles of the Lisbon Recognition Convention.

Graduation represents the culmination of the students' study period. Students need to receive documentation explaining the qualification gained, including achieved learning outcomes and the context, level, content and status of the studies that were pursued and successfully completed (Diploma Supplement).

Study programme Compliance

- The students are admitted to the Department via the National Exams system. The Ministry of Education and Religious Affairs determines the number of students admitted. Every year, an average of 88.3 students are admitted, to which are added admissions of special categories and graduates of other higher education institutions at a rate of 20% and 12%, respectively.
- At the beginning of the 1st academic year, the Department organizes special welcoming and orientation sessions for incoming students, informing them about the facilities, the Curriculum, and the possibility of student mobility (Erasmus), as well as the provisions for student care and the veterinary profession and other topics.
- Students can participate in the Veterinary Schools' study programme of the countries participating in the Erasmus action (EU Member States, Iceland, Liechtenstein, Norway, Turkey) for recognized periods and internships. The outgoing mobility is two students in 2015-16, 12 students in 2016-17, 10 students in 2017-18, 7 students in 2018-19, and 6 students in 2019-20.
- The Department has an Academic Coordinator of the Erasmus Programme, who provides students with detailed information about the action (procedures, partner institutions, etc.). A list of 13 collaborating departments is available to students.
- In addition, the Department supports student mobility through the International Veterinary Students' Association (IVSA). The IVSA student exchange programme is popular among students, with most of them participating in it.
- Students do a mandatory internship that lasts two months and takes place in the summer months, after the 6th or after the 8th semester. Successful completion is a prerequisite for obtaining a degree.
- The internship can occur in private veterinary clinics or the public sector, in enterprises for the processing and production of products of animal origin or animal feed, in livestock production units, or veterinary laboratories.

- At the end of the internship, students submit to the Department a certificate of completion (issued by the institution where the internship took place) and their evaluation sheet during the internship (to be completed by the institution's supervisor) while preparing a relevant evaluation report.
- The Department operates a farm in Larissa, where the students have access to extra training. This facility exposes the students to additional settings, enhancing their education.
- Laboratory exercises are well thought out, but students reported that they would benefit from an additional case load.

Panel Judgement

Principle 4: Student Admission, Progression, Recognition and Certification	
Fully compliant	X
Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

- Connections with outside entities (e.g., clinics, industry, farms) for practical training need to be fostered further and advertised to students, as suggested by past graduates. Students complained they were not fully aware of the possibilities and hosts/partners available. Improving the Department's liaison office, will likely solve this problem.

- In addition to National awards (IKY), Departmental awards of excellence could be instituted for outstanding students at every level (undergraduate and graduate).

- Ensure that students during their practical training have adequate health insurance coverage.

Principle 5: Teaching Staff

INSTITUTIONS SHOULD ASSURE THEMSELVES OF THE QUALIFICATIONS AND COMPETENCE OF THE TEACHING STAFF. THEY SHOULD APPLY FAIR AND TRANSPARENT PROCESSES FOR THE RECRUITMENT AND DEVELOPMENT OF THE TEACHING STAFF.

The Institutions and their academic units have a major responsibility as to the standard of their teaching staff providing them with a supportive environment that promotes the advancement of their scientific work. In particular, the academic unit should:

- *set up and follow clear, transparent and fair processes for the recruitment of properly qualified staff and offer them conditions of employment that recognize the importance of teaching and research;*
- *offer opportunities and promote the professional development of the teaching staff;*
- *encourage scholarly activity to strengthen the link between education and research;*
- *encourage innovation in teaching methods and the use of new technologies;*
- *promote the increase of the volume and quality of the research output within the academic unit;*
- *follow quality assurance processes for all staff members (with respect to attendance requirements, performance, self-assessment, training etc.);*

- *develop policies to attract highly qualified academic staff.*

Study programme Compliance

- Intra-departmental collaborations among basic and clinical research leading to co-authorships is evidence of a cohesive staff.
- The teaching staff is dedicated, committed, and enthusiastic about their mission.
- Departmental documents and procedures are available on the department's website.
- Faculty development leave mechanism is in place and used.

Panel Judgement

Principle 5: Teaching Staff	
Fully compliant	
Substantially compliant	**X**
Partially compliant	
Non-compliant	

Panel Recommendations

- Funding mechanisms to support faculty members' career development, especially junior ones, need to be strengthened by the University's upper administration to promote conference participation, seed grant funding, etc.

- Recommend developing metrics and outcome assessment tools to evaluate teaching staff with regards to their teaching effectiveness. Metrics should include

the student evaluations and peer evaluations, client feedback for service-related faculty, hospital staff evaluations of faculty, etc. Recommend such assessment on an annual basis, even if current laws do not require them. Establish research awards annually, to recognize outstanding research performance among the faculty.

- While recognition of research is relatively easy through grant funding levels and scholarly activity, recognition of teaching excellence needs to be emphasized. This could work only in tandem with the above point on teaching staff evaluation and should include some type of teaching award, on an annual basis, perhaps with support from industrial partners.

- Encouraging scholarly activity, especially of newer staff, is of paramount importance. The panel recognizes the collegial atmosphere among the faculty and the efforts of the Department Head. Nonetheless, a formal mentoring programme for faculty should be established.

- Establish a mock reviewing panel for funding proposals to external agencies. A formal structure where research proposals are first reviewed internally and with enough time before the final submission so that the input can be incorporated, could be very helpful in securing external funding. Well-meaning and well-intentioned critiques from colleagues, even if they seem harsh and brutal at the time, are usually beneficial in the long run. VS is a collegial and tight team, and such an approach could prove valuable.

- Publication per faculty productivity although adequate it can be improved in the future since the ratio of PhD per faculty is less than 1.5.

Principle 6: Learning Resources and Student Support

INSTITUTIONS SHOULD HAVE ADEQUATE FUNDING TO COVER TEACHING AND LEARNING NEEDS. THEY SHOULD –ON THE ONE HAND– PROVIDE SATISFACTORY INFRASTRUCTURE AND SERVICES FOR LEARNING AND STUDENT SUPPORT AND –ON THE OTHER HAND– FACILITATE DIRECT ACCESS TO THEM BY ESTABLISHING INTERNAL RULES TO THIS END (E.G. LECTURE ROOMS, LABORATORIES, LIBRARIES, NETWORKS, BOARDING, CAREER AND SOCIAL POLICY SERVICES ETC.).

> *Institutions and their academic units must have sufficient funding and means to support learning and academic activity in general, so that they can offer to students the best possible level of studies. The above means could include facilities such as libraries, study rooms, educational and scientific equipment, information and communications services, support or counselling services.*
>
> *When allocating the available resources, the needs of all students must be taken into consideration (e.g. whether they are full-time or part-time students, employed or international students, students with disabilities) and the shift towards student-centred learning and the adoption of flexible modes of learning and teaching. Support activities and facilities may be organised in various ways, depending on the institutional context. However, the internal quality assurance ensures that all resources are appropriate, adequate, and accessible, and that students are informed about the services available to them.*
>
> *In delivering support services the role of support and administrative staff is crucial and therefore they need to be qualified and have opportunities to develop their competences.*

Study programme Compliance

- Funding is tight, but despite the budgetary restrictions in Greece during the past decade, this programme has managed to leverage innovation, community, and industry support. It has grown remarkably since the previous evaluation. The faculty, trainees, and staff have gone well above and beyond to provide excellent resources and training opportunities for the veterinary students.
- Increased funding is needed in some areas:
  i. Funds for technical/support staff for labs and clinics. Reliance on soft monies by senior faculty, while admirable, is not sustainable in the long term for the whole programme.
  ii. Funds as start-up packages for new hires. The current level of start-up support is admirable, but more is needed.
  iii. Funds to maintain and replace big-ticket equipment (e.g., in the clinics and laboratories) at regular intervals.

Panel Judgement

Principle 6: Learning Resources and Student Support	
Fully compliant	**X**
Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

- Teaching on clinical rotations or equivalent (labs, etc.) represents the most crucial part of the students' career. It is the epitome of experiential learning, where theoretical knowledge is put to the test and becomes an experience. As such, more focus should be given to supporting these areas of the curriculum. For example, there is a single "technician/nurse" available for the small animal clinic work (medicine, surgery, OB). Given the clinical load, there should be multiple such persons to support the care of the patients and the students' learning. The same goes for many laboratories (pathology, micro, etc.), where the support staff appears to lack in numbers compared to doctors. More support staff will free time from faculty and post-grad trainees to focus on their teaching and scholarly activities, thus increasing overall productivity, training, and morale.

Principle 7: Information Management

INSTITUTIONS BEAR FULL RESPONSIBILITY FOR COLLECTING, ANALYSING AND USING INFORMATION, AIMED AT THE EFFICIENT MANAGEMENT OF UNDERGRADUATE PROGRAMMES OF STUDY AND RELATED ACTIVITIES, IN AN INTEGRATED, EFFECTIVE AND EASILY ACCESSIBLE WAY.

Institutions are expected to establish and operate an information system for the management and monitoring of data concerning students, teaching staff, course structure and organisation, teaching and provision of services to students as well as to the academic community.
Reliable data is essential for accurate information and for decision making, as well as for identifying areas of smooth operation and areas for improvement. Effective procedures for collecting and analysing information on study programmes and other activities feed data into the internal system of quality assurance.

The information gathered depends, to some extent, on the type and mission of the Institution. The following are of interest:

- *key performance indicators*
- *student population profile*
- *student progression, success and drop-out rates*
- *student satisfaction with their programme(s)*
- *availability of learning resources and student support*
- *career paths of graduates*

A number of methods may be used for collecting information. It is important that students and staff are involved in providing and analyzing information and planning follow-up activities.

Study programme Compliance

- Based on the last year for which data were provided (2019/20), on average, students graduate with a grade of 6.82 after six years of study. Only one student graduated on time, in no more than five years, but it was noted that a September graduation date is counted in the next academic year (n+1), inflating the time to degree.
- The Department has done follow-up surveys of graduates. A comparative analysis of 2015 vs. 2020 surveys was provided to the Panel. A positive trend on most metrics was noted.
- The graduates are satisfied with their training, and >90% find relevant employment within a year after graduation.
- Current students commented on the helpful attitude and support of the faculty. Overall, the Department has a very enthusiastic and supportive environment that fosters student development.
- It is difficult to determine the number of inactive students and, therefore, graduation rates. However, the Panel recognizes that this is an endemic problem of the Greek Higher Education System and its transfer mechanisms, which are beyond the Department's control.

Panel Judgement

Principle 7: Information Management	
Fully compliant	
Substantially compliant	**X**
Partially compliant	
Non-compliant	

Panel Recommendations

- Among recent graduates, student satisfaction was the lowest for the laboratory (avg. 5.8, on a 1-10 scale) and clinical (avg. 4.8) training during their studies. This is substantially lower than the overall satisfaction (avg. 7.4) for the theoretical/lecture-based training. The reasons for the discrepancy are unclear. The Panel noted that current students during the interviews seemed satisfied with their clinical training. However, from interviews with past students, it was suggested that the students need more clinical cases during their clinical rotations. Efforts to increase the clinical case load available to students need to strengthen.

- The Department needs to track and present better the metrics related to student attendance in the classroom courses and completion of course evaluation questionnaires. Likewise, graduation rates were difficult to evaluate, and need to be tracked better.

- Efforts to maintain graduation rates (n+2) above 70% needs to be pursued to increase the overall standing and ranking of VS among its peers.

Principle 8: Public Information

INSTITUTIONS SHOULD PUBLISH INFORMATION ABOUT THEIR TEACHING AND ACADEMIC ACTIVITIES WHICH IS CLEAR, ACCURATE, OBJECTIVE, UP-TO-DATE AND READILY ACCESSIBLE.

> *Information on Institution's activities is useful for prospective and current students, graduates, other stakeholders and the public.*
>
> *Therefore, institutions and their academic units provide information about their activities, including the programmes they offer, the intended learning outcomes, the qualifications awarded, the teaching, learning and assessment procedures used, the pass rates and the learning opportunities available to their students, as well as graduate employment information.*

Study programme Compliance

- The Departmental website was constructed in 2019. The provided information (about the structure, human resources, laboratories, and infrastructure) is adequate and updated regularly. Announcements and press releases are available on the home page.
- There is data for the Department and information on actions, events, job vacancies, etc., both in Greek and in English.
- Undergraduate Programme Guide and the individual courses are available online in a downloadable format in Greek but not English.
- The Department communicates its activities mainly through its website.
- The competent Maintenance Committee updates the website.
- Department uses an e-Class platform, which supports distance learning. The e-Class platform's update is done through the direct posting of new material by the faculty members.

Panel Judgement

Principle 8: Public Information	
Fully compliant	**X**
Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

- Through the Departmental website, market and explicitly promote the Laboratories and Clinics of the Department's services to maximize the Department's income stream. Outside stakeholders and past students raised the above deficiency during the interviews. For one clinic, such efforts are already underway. The other clinics and laboratories need to follow that lead and integrate their websites and services with the Departmental website, raising their profile and the Department's.

- Include and highlight alumni news and accomplishments. Introduce alumni activities and awards to recognize distinguished alumni.

Principle 9: Ongoing Monitoring and Periodic Internal Review of programmes

INSTITUTIONS SHOULD HAVE IN PLACE AN INTERNAL QUALITY ASSURANCE SYSTEM FOR THE AUDIT AND ANNUAL INTERNAL REVIEW OF THEIR PROGRAMMES, SO AS TO ACHIEVE THE OBJECTIVES SET FOR THEM, THROUGH MONITORING AND AMENDMENTS, WITH A VIEW TO CONTINUOUS IMPROVEMENT. ANY ACTIONS TAKEN IN THE ABOVE CONTEXT SHOULD BE COMMUNICATED TO ALL PARTIES CONCERNED.

Regular monitoring, review and revision of study programmes aim to maintain the level of educational provision and to create a supportive and effective learning environment for students.

The above comprise the evaluation of:
- *the content of the programme in the light of the latest research in the given discipline, thus ensuring that the programme is up to date;*
- *the changing needs of society;*
- *the students' workload, progression and completion;*
- *the effectiveness of the procedures for the assessment of students;*
- *the students' expectations, needs and satisfaction in relation to the programme;*
- *the learning environment, support services and their fitness for purpose for the programme*

Programmes are reviewed and revised regularly involving students and other stakeholders. The information collected is analysed and the programme is adapted to ensure that it is up-to-date. Revised programme specifications are published.

Study programme Compliance

- In collaboration with ΟΜΕΑ/ΜΟΔΙΠ, VS has established the study programme's annual self-assessment procedure following the Quality Assurance Requirements. The findings are shared within the academic unit leading to the implementation of agreed actions.

Panel judgement

Principle 9: On-going Monitoring and Periodic Internal Review of programmes	
Fully compliant	**X**
Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

- Past and upper-level students' participation and external stakeholders' involvement in the undergraduate study programme revisions should be welcomed and enhanced.

- Regarding the course objectives as described on each syllabus: They should be focused on a higher level of Bloom's taxonomy, rather than the lower levels (https://teaching.uncc.edu/services-programmes/teaching-guides/course-design/blooms-educational-objectives). For example, instead of "περιγράφουν

πλήρως και με σαφήνεια τα βασικά στοιχεία της …" it should be something such as «εξηγήσουν πλήρως και με σαφήνεια τα βασικά στοιχεία της … σε συναδέλφους, και άλλους φοιτητές.» The course objectives must be measurable. For example: "κατανοούν τα βασικά στοιχεία που σχετίζονται με διάφορους επιμέρους τομείς της…". In this example, there is no stated method of measuring if the students reached the objective. An excellent site that could be consulted in writing course objectives and separating them from course assessments is the following https://www.celt.iastate.edu/teaching/preparing-to-teach/tips-on-writing-course-goalslearning-outcomes-and-measureable-learning-objectives/

- Department head needs to contact exit interviews face to face with each graduate, to gather an additional source of actionable data gathering and monitoring of the VSUP.

Principle 10: Regular External Evaluation of Undergraduate programmes

PROGRAMMES SHOULD REGULARLY UNDERGO EVALUATION BY COMMITTEES OF EXTERNAL EXPERTS SET BY HAHE. THE TERM OF VALIDITY OF THE ACCREDITATION IS DETERMINED BY HAHE.

HAHE is responsible for administrating the programme accreditation process which is realised as an external evaluation procedure, and implemented by a committee of independent experts. HAHE grants accreditation of programmes, with a specific term of validity, following to which revision is required. The accreditation of the quality of the programmes acts as a means of verification of the compliance of the programme with the template's requirements, and as a catalyst for improvement, while opening new perspectives towards the international standing of the awarded degrees.

Both academic units and institutions participate in the regular external quality assurance process, while respecting the requirements of the legislative framework in which they operate.

The quality assurance, in this case the accreditation, is an on-going process that does not end with the external feedback, or report or its follow-up process within the Institution. Therefore, Institutions and their academic units ensure that the progress made since the last external quality assurance activity is taken into consideration when preparing for the next one.

Study programme Compliance

- After the external evaluation of May 2011, the VS Department followed the vast majority (90%) of the EEAP recommendations. The Department provided an extensive and detailed, point-by-point response of each action taken. They will assess the progress of the new revised undergraduate programme when the first students (since the restructuring) graduate in the next two years.

Panel judgement

Principle 10: Regular External Evaluation of Undergraduate programmes	
Fully compliant	**X**
Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

- A detailed action plan and implementation grade to any recommendations should be provided for future accreditation/evaluation.

PART C: CONCLUSIONS

I.   Features of Good Practice

- VS is a department on an upward trajectory. The faculty is energetic and actively seeks to identify and solve problems to become more successful.
- VS put a lot of effort into addressing the points raised in the previous external review.
- It is a tightly-knit department, with strong faculty-faculty, faculty-student, and student-student interactions.

II.   Areas of Weakness

- To maintain its momentum, the Department needs to be more aggressive in showcasing its accomplishments to leverage additional support from the upper administration and external stakeholders.
- A clear strategy of how to increase research funding was not obvious.
- Despite the strong efforts in changing the curriculum, still more emphasis should be placed on practical, problem solving.
- Graduation rates could be improved.

III.   Recommendations for Follow-up Actions

- Market and advertise better the Department's services (clinical, laboratory analyses) to be easily accessible to outside entities and customers. These efforts will increase Departmental revenue and strengthen the Department's connections with diverse stakeholders and its overall profile.
- Formalize mentoring of junior faculty members. Institute a departmental committee (on a rotating basis), where funding proposals to agencies are first reviewed internally, involving senior, experienced colleagues, and input is provided in advance, before the external submission.
- No policies are outlined for the recruitment and retaining of qualified academic staff. While hiring for academic positions in Greece is highly regulated and hampered by bureaucracy, coordinated steps should be taken by the department to seek University and Industry help to attract and retain "superstars" in their respective fields.
- Explore ways to increase the case load during the clinical training of students. Revamp student training in the proper recording of clinical cases and communicating with the animals' owners brought to the clinic.
- Design student examinations, especially with the purely theoretical courses, away from the recitation of terminology and specific facts and towards the application and synthesis of information, emphasizing real-world applications of the course material.
- Increase the engagement of students with the Department's liaison office.
- Collect better metrics that track student graduation rates, course attendance, and instructor/course evaluations. Set higher goals for graduation rates.

IV. Summary & Overall Assessment

The Principles where full compliance has been achieved are: **1, 2, 3, 4, 6, 8, 9, 10**

The Principles where substantial compliance has been achieved are: **5, 7**

The Principles where partial compliance has been achieved are: **None**

The Principles where failure of compliance was identified are: **None**

Overall Judgement	
Fully compliant	**X**
Substantially compliant	
Partially compliant	
Non-compliant	

The members of the External Evaluation & Accreditation Panel

Name and Surname   **Signature**

1. **Professor Michael Polymenis (Chair)**

   Texas A & M University, USA

2. **Professor Andronikos Mauromoustakos**

   University of Arkansas, USA

3. **Assoc. Prof. Nikolaos Dervisis**

   Virginia-Maryland College of Veterinary Medicine, USA

4. **Dr. Dimitrios Galamatis**

   Member of the Geotechnical Chamber of Greece, Greece