



# University of Zagreb Faculty of Veterinary Medicine

## Self-Evaluation Report Quality Assurance Visit

(Based on the Uppsala SOP Standards -May 2016)

Zagreb | February 2020

*U službi Jednog zdravlja*  
*At the service of One Health*

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## **Introduction**

### **Brief history of the Establishment and of its previous ESEVT Visitations**

#### ***Brief history of the Faculty***

The Faculty of Veterinary Medicine of the University of Zagreb (FVMUZ) was founded in 1919 as a Veterinary Higher School. On December 7, 1924, it was renamed the Faculty of Veterinary Medicine and it became one of the constituents of the University of Zagreb. For 100 years, the Faculty has performed its educational and scientific function in the field of veterinary medicine. In addition to scientific research, the Faculty conducts activities in many other areas: clinical and field diagnostics, treatment and control of animal diseases and zoonoses, veterinary public health and environmental protection, supervision and expert analysis in the field of veterinary medicine and animal breeding, research and production of drugs intended for the protection of animal health, planning and organization of livestock production, and hygiene and technology in the production of animal foodstuffs.

The active involvement of the Faculty in all of these scientific and professional fields has led to the slogan: “*At the service of One Health*”, which has been used since 2017 as the motto of all employees and students.

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

Departments and clinics are the basic organizational units of FVMUZ. Divisions are higher organizational units, established on the basis of the correlation of the academic, scientific and professional work of the departments and clinics. The Faculty administration is an organizational unit performing professional and administrative activities.

In accordance with the Statute (2017) and Regulations on Internal Organization (2019), the Faculty is organized as described in Appendix 1: Organisational chart of the FVMUZ.

#### **Previous ESEVT Visitations**

The first external evaluation conducted by EAEVE took place in October 2002 and from that year FVMUZ has been included in the list of positively evaluated European veterinary faculties. The second evaluation took place in March 2013 and as one major deficiency was encountered, it was re-visited in May 2015.

#### **Main developments since the last Visitation**

Since the last EAEVE visitations in March 2013 and May 2015, the following activities have taken place:

- Work and activities at the Faculty, especially scientific research and professional work, international cooperation, administrative work, and organizational management, are performed and supervised according to the standard ISO 9001:2015 (2008), which has been applied at the Faculty since 2014, by a decision of the administration and the Faculty Council (FC).
- Digital transformation of the Faculty started three years ago with the implementation of e-office; afterwards a new website was created (both in Croatian and English), and server infrastructure was outsourced to ensure better security and availability
- Much greater importance is given to biosafety and biosecurity at the entire Faculty in order to achieve a higher level of protection for employees and students (new documents have been drafted, laboratories and other premises are appropriately equipped and labelled, necessary training has been carried out).

- Veterinary studies in English, a university course conducted as an integrated undergraduate and graduate course in veterinary medicine, lasting 6 years (12 semesters) began in the 2016/2017 academic year and is completely aligned with the Croatian study program. The number of available places per year is 25, which has now been extended to 35 for the next academic year (2020/2021), approved by the FC.
- Professional work at the FVMUZ Clinics has been placed under the umbrella of the Veterinary Teaching Hospital (VTH) in accordance with the amendments to the Statute approved in 2017.
- In the 2016/2017 academic year a resident program was launched. An Internship program (12 months rotation in Faculty clinics) was introduced for perspective graduates in the 2018/2019 academic year. The first generation was comprised of 3 candidates, what was later extended to 5, with the attention to achieve a final quota of 6 candidates.
- Courses for improvement of English language and teaching skills were introduced for teaching and non-teaching staff in the last two years.
- From the 2018/2019 academic year a new mandatory courses was introduced in the 6<sup>th</sup> semester entitled Communication skills in Veterinary Medicine.
- Reform of the Out-patients' (Ambulatory) Clinic began in 2017/2018, and consequently new vehicles (4 vans) were purchased which made it possible to work with small groups of students and to handle more cases in the field (case-based teaching instead of location-based teaching).

### **Major problems encountered by the Establishment (*whether resolved or not*)**

Major problems encountered at the Faculty are:

- a) The total allocation of governmental funding for higher education in Croatia is significantly lower than the EU average. Additionally, it is essential for the University of Zagreb (UNIZG) to reconsider the system of distribution of funds allocated for the faculties within the group of biomedicine science, of which the FVMUZ is a part. As is well known, the costs of education for doctors of veterinary medicine (DVM) are among the highest at European universities, therefore this should be taken into account when allocating funds in Croatia too.
- b) It is extremely difficult to apply for specific structural projects due to the fact that the FVMUZ campus was given the status of *cultural heritage* and the State regulations state that such an institution are not eligible for them (e.g. for projects that would increase the energy efficiency of the campus). Thus, due to the age of the buildings, they generate high maintenance costs which affects the possibility of allocating funds to other investment projects.
- c) The lack of administrative support for application to EU funds on the state level has substantial consequences for the withdrawal of funds.

## **1. Outcome Assessment and Quality Assurance**

### **1.1. Factual information**

#### **1.1.1. Description of the global strategy of the Establishment for outcome assessment and Quality Assurance (QA)**

##### **CULTURE OF QA AND CONTINUED ENHANCEMENT OF QUALITY**

For the FVMUZ, ensuring excellence in all forms of activities is one of its fundamental priorities, from the highest quality teaching to the latest research, which together makes comprehensive support possible for students and employees, but also improves relationships with veterinarians and the wider community. The aim of the QA system is to create mechanisms for promoting and achieving the highest level of quality in teaching, research, science, and professional and administrative activities at the Faculty. The QA on all levels, in cooperation with internal and external stakeholders, ensures the encouragement of excellence innovation and openness, and the promotion of a culture of quality, responsibility and cooperation. Acceptance by all employees of the culture of quality is extremely important for future development, as well as the move from a system of QA to a complete and unified system of quality, which will enable continual improvement.

##### **OUTCOME ASSESSMENT, QA AND QUALITY ENHANCEMENT MECHANISMS**

The QA system at the FVMUZ is an integral part of the Faculty's development and an instrument in the strategic approach to realizing the Faculty's mission and vision. The system is continually subject to evaluation and improvement, in order to respond to the needs of stakeholders and the social community. Assurance of the quality of teaching, study programmes and other activities is monitored through periodical internal and external supervision and evaluation, especially by the Croatian Accreditation Agency (CAA), EAEVE, and Bureau Veritas (BV).

Activities at the Faculty, especially scientific research, international cooperation, administrative work, and organizational management, are undertaken and supervised pursuant to standard ISO 9001:2015 (annually certified); accredited laboratories are established according to the ISO 17025 and audited regularly on a yearly basis. The Agency for Science and Higher Education (ASHE) conducts regular evaluations of study programmes according to the ESG in 5 year periods - the process of re-accreditation of higher education institutions and study programmes (last conducted in 2015), and the external independent periodic assessment of the internal quality assurance system (audit) (last conducted in 2018).

The inputs and recommendations of all these evaluations are the basis for continuous improvement and are taken into consideration when creating action plans for further activities. Actions plans are produced by the Quality Management (QM) Committee on a yearly basis for UNIZG and ASHE, and implementation reports are sent to both institutions annually.

##### **COMPLIANCE WITH ESG STANDARDS**

The establishment of a Croatian system for QA in higher education and science, in line with the ESG, began in 2005 by the establishment of the ASHE for the purpose of continuous work in the promotion of a culture of quality, the creation of a national network for quality improvement, linking the Croatian educational and scientific systems with the European network, and building connections with other institutions in order to apply the guidelines of the Bologna Process and the European higher education system. The introduction, development and advancement of QA at the FVMUZ have been aligned with the Act on Quality Assurance

in Science and Higher Education (OG, 45/09). The foundation and framework of QA are also fully compliant with ESG and other legal acts.

### **SHARING INFORMATION ON QA PROCESSES**

The existing legal and institutional frameworks define the principles, criteria and methods of QA, taking into account the ESG. In the 2006/2007 academic year, FVMUZ established a Committee for management of the quality of teaching. In 2007/2008, a vice-dean was appointed for quality control and continuing education, and the Committee extended its jurisdiction and was renamed the Quality Management (QM) Committee. Members of the Committee are elected according to the Regulations on the Quality Assurance System at the FVMUZ (adopted by the FC in May 2019), and include a student representative and external stakeholder.

The Faculty carries out the following basic activities in which QA is implemented and quality management system ensured:

- a) Teaching activities
- B) Scientific activities
- C) Professional activities
- D) Organisational administration and management

Information related to these basic activities is regularly reported to employees, students and other stakeholders on a monthly basis (at FC sessions) or directly on the intranet in the form of the minutes of the FC. All documents related to QA are available on both the intranet and the internet.

In 2018, a Quality Coordinator (QC) was appointed in each department and clinic, as the person facilitating communication between the vice-dean for quality and all Faculty staff.

The QM Committee's role is well described in the Regulations on the Quality Assurance System (<https://www.vef.unizg.hr/wp-content/uploads/2018/08/Pravilnik-kvaliteta-2019-objava.pdf>).

### **QA PLAN-DO-CHECK-ACT (PDCA) CYCLE**

Continuous improvement of overall performance is the ultimate goal of FVMUZ. The methodology is based on the Deming Circle or P-D-C-A where P stands for Planning and establishing the goals and processes necessary to deliver results in accordance with customer requirements and organization policy; D for Do- Application of these processes; C for Check, or monitor and measure processes with respect to set policy, goals and requirements; and A for Action to further improve the overall process. The interaction of the PDCA methodology and process approach is the essence of the quality management system according to ISO 9001. An overview of the quality management system and the interplay of the process is described in the Quality Manual according to the ISO 9001:2015 (issued on September 24, 2017).

#### **1.1.2. Description of the form by which the strategy, policy and procedures are made formal and are publicly available**

The documents of the QA system at the FVMUZ have been systematically regulated, revised and distributed by the vice-dean for quality control and the QM Committee according to ISO 9001, and approved by the FC. All documents are available in paper form and online (inter- and intranet). The basic acts and documents, in addition to the Statute and regulations, are the Quality Policy (QP) and the QA Manual (both of UNIZG and of FVMUZ, available on the website and in paper form, <https://www.vef.unizg.hr/en/internal-quality-control/>). The QA

Manual serves as a guide and benchmark for all internal and external stakeholders to work on improvement of QA, and as an overview of the legal and common measures and activities that the UNIZG and FVMUZ implements or plans in order to ensure quality. The QA Manual contains a list of standards, objectives, activities and examples of good practice for each of the areas of QA.

Following documents are available on the website and in paper form:

- The QA Manual of the UNIZG – the document on the QA system of the University with which the Manual of the Faculty complies.
- The QA Manual of the FVMUZ - contains basic guidelines and the objectives of the integrated system of management.
- Research Strategy of the UNIZG – the fundamental document of the University with which all the Strategies of the constituents are synchronized.
- Strategic Plan 2018-2022 and Research Strategy of the FVMUZ – the basic documents in which the key tasks for further development are described, with the strategic goals for each activity.
- University and Faculty Regulations – detailed description of operational implementation of law for all constituents and FVMUZ, in line with the national legislation and University.
- University and Faculty forms - controlled documents that ensure systematic collection of data, uniform reporting, evidence of internal compliance with its own established system of quality, as well as evidence of compliance with the requirements of the QA.
- Other documents - procedures, instructions, records, plans and other (Appendix: List of Important Documents and Legal Acts)

#### **1.1.3. Description of the regular publication of up to date, impartial and objective information, both quantitative and qualitative, about the educational programmes and awards the Establishment is offering**

In the fulfilment of its public role, the FVMUZ informs the public about the programmes offered, the intended learning outcomes (LO) of these programs, the qualifications obtained, teaching activities, the assessment procedures applied, as well as the learning resources available to students.

The official web site of the FVMUZ is the basic mode for informing the public of all its activities ([www.vef.unizg.hr](http://www.vef.unizg.hr)). In addition to the website, the FMVUZ uses printed materials to inform the public (a brochure with information about the requirements for admission, etc.). The FVMUZ is also presented at public events organized by the UNIZG (University Fair), it organizes Open Door events, it is active on social media, publishes year books, etc.

#### **1.1.4. Description of the QA processes not yet described in the other 10 Standards (*with information on how (procedures), when (periodicity) and by who (committee structure) they are completed*)**

As the FVMUZ is a single legal entity, having quality systems in place (ISO 9001 and 17025, ESG), existing QA processes and procedure are described in 10 available standards.

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

The FVMUZ adopts its own Strategic Plan based on the Strategy of the UNIZG, taking into account its own specificities. Part of this general Strategic Plan is also QA strategy. The Strategy is drawn up for a five-year period, but action plans and implementation reports are written every year. At the end of each year, the QA Committee prepares a report on the

activities carried out in that year and sends it to the UNIZG and ASHE. The Strategy is publicly available on the web site.

The Committee for development of the Strategy, appointed by the Dean, collects, analyses and uses relevant information for the purpose of effective management of the four main core activities – teaching, scientific research, professional work and management (administration). The Division heads as well as the Dean and all vice-deans participate in Strategy development. During the preparation of the FVMUZ Strategies for 2012-2017, and the 2018-2022 Strategy, the responsible persons (the Strategic Development Committees, the Dean's board) also created a SWOT analysis. The SWOT analysis highlights the most important strengths, weaknesses, opportunities and threats at FVMUZ in the environment of the UNIZG academic community. Since 2019, risk analysis has been conducted in relation to the ISO 9001 and constitutes part of the Management's assessment. The QP is the basic framework for the implemented quality system and is published on the web page so that all employees, stakeholders and the public may be acquainted with it. The FVMUZ management commits itself to providing and developing the necessary resources for implementation of the QP. The Faculty's QP is regularly monitored and revised in accordance with needs and changes to the system.

### **1.2. Comments**

The implementation of QA is supervised by the FC, the Dean and Dean's board, the vice-dean for quality control, the QM Committee, the Office for Quality, the Heads of Divisions, Departments and Clinics, QC, other committees and working groups and all faculty staff. It is important to note that students are actively involved in the QA process, both at the UNIZG and FVMUZ level, as members of respective committees and other bodies, especially the QM Committee.

### **1.3. Suggestions for improvement**

In March 2019, a project entitled: "*Development of standards for occupations and qualifications and improvement of the integrated undergraduate and graduate studies of veterinary medicine at the Faculty of Veterinary Medicine Zagreb*" (abbreviation: the HKO project) started at the FVMUZ, financed by European Social Fund (ESF) through the Ministry of Science and Education (MSE). According to the register of the Croatian Qualification Framework (CQF), there is a lack of prescribed occupation and qualifications standards for the profession of Doctor of Veterinary Medicine (DVM). For this reason, a project was proposed with the main goal of setting the required standard in its place. Through the CQF and the prescribed tools for securing and improving the quality of the study programme, a) an occupation standard for the profession of DVM will be developed; b) a standard of qualifications for DVM will be developed; c) the improvement of QA procedures will be assured.



## 2. Description of the specific QA processes for each ESEVT Standard

### 2.1. Objectives and Organisation

#### 2.1.1. Factual information

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

FVMUZ is a public institution of higher education, which organizes and conducts university study courses, and performs scientific and professional work in the area of biomedicine and health, in the field of veterinary medicine, and other related fields, including interdisciplinary ones, as well as providing educational life-long learning programmes for DVM. It was founded in 1919, as one of the oldest faculties in the Republic of Croatia (RC), and by its long tradition and established criteria of excellence, is inseparable from the development of the veterinary profession in the territory of Croatia. FVMUZ activities are regulated primarily by the provisions of the Act on Scientific Activity and Higher Education, the Act on Veterinary Medicine, the Act on Institutions and the provisions of the Statute of the UNIZG. Moreover, Statute of the FVMUZG is the establishment's foundational document where all processes are described. The activities of the FVMUZ are carried out by the departments and clinics, divisions and management, and administrative and professional services, pursuant to the Statute (Appendix 1 and link <https://www.vef.unizg.hr/en/institutes-clinics/>).

The description on how and by who the Strategic Plan of the FVMUZ is decided, communicated, implemented, assessed and revised is described in Chapter 1.1.5.

The **Faculty Council** is the expert council of the FVMUZ. It may set up permanent and temporary committees to study specific issues, make reports or prepare decisions within its scope. The permanent committees of the FC are:

1. The Statute Committee
2. The Integrated Undergraduate and Graduate Study (IUGS) Programme Committee
3. The Projects Committee
4. The Awards Committee
5. The Student Disciplinary Committee
6. The Staff Disciplinary Committee
7. The Committee for Ethics in Veterinary Medicine
8. The Library and Publishing Committee
9. The Committee for Appointment to Scientific, Scientific-educational, Educational and Associated titles
10. The Quality Management Committee

FVMUZ also has a Doctoral Studies Council and a Specialist Studies Council, as well as temporary committees established by a decision of the Dean: the Biosecurity Committee, the Lifelong Learning Committee and the Media Relations Committee.

### **ORGANISATION AND THE MANAGEMENT OF FVMUZ**

A total of 25 **departments/clinics** (the basic organizational units of the Faculty) are organized in 4 **divisions** according to their scientific, teaching and professional work (Appendix 1). For the purpose of promotion and coordination of professional-clinical work, a **Veterinary Teaching Hospital (VTH)** was established at the Faculty, and there is also **scientific-teaching facility** (game management area). All organizational, administrative, technical and general tasks of common interest for the overall work of the Faculty are performed by the services within the **Faculty Management**.

The election and authority of the **Dean** is prescribed by the Statute (Articles 30 and 38). The composition and manner of work of the FC, as well as the committees, are described in detail in the Statute (Articles 39-44) and in the Rules of Procedure of the FC. The work of the departments/clinic is managed by the **Heads of departments/clinics** who are elected by the employees of the relevant departments/clinic for a term of three years, and this may be repeated once for the next term. Significant decisions at the departments/clinic level are made by the **collegium of the department/clinic**. The division is led by the **Division Head**, who is elected by the **Division Council** for a three-year term, which may be repeated once. The Head coordinates the work of the departments and implements the decisions of the Division Council. At the divisional level, decisions of minor importance, in addition to the Council, may also be made by the **Division's collegium** formed of heads of all departments/clinics within the division. The Division Head is also engaged in the work of the extended **Dean's board**, such as participating in the process of drawing up all the strategic decisions and legal acts of the Faculty. A student representative is also a member of extended Dean's board. The Dean, as the head of the institution, is assisted by up to six **Vice-Deans** who are in charge of a particular field of activity:

**Vice-dean for integrated undergraduate studies and students** - supervises and manages all tasks related to the implementation, monitoring, analysis and improvement of the integrated studies of veterinary medicine in the Croatian language, and assists students working in the Office for Students and Career Counselling.

**Vice-dean for finances and investments** - supervises and manages accounting operations, participates in the preparation of financial plans, the Faculty's budget, investment and maintenance planning, public procurement procedures, preparation of final accounts, and other financial matters, and coordinates maintenance and investment plans.

**Vice-dean for human resources, organization and management** - supervises and manages the work of the offices within the Administration, and prepares employment plans. In cooperation with the Secretary, he/she drafts legal acts and sends them for adoption. He/she is responsible for harmonization of legislation with the normative acts of the competent ministries and the UNIZG, as well as rationalization and improvement of the efficiency of the work of the joint services in the Faculty Administration.

**Vice-dean for science, postgraduate education and lifelong learning** - is responsible for all activities related to enrolment, monitoring, analysis and promotion of postgraduate doctoral and specialist studies and lifelong learning. He/she oversees the submission and implementation of scientific projects and the work of the Project Office. Monitors and encourages the scientific work of staff and students.

**Vice-dean for international cooperation and undergraduate studies in English** - coordinates the work of the Office for International Cooperation and organizes international exchanges of students and teachers. Supervises and manages all activities related to enrolment, monitoring, analysis and enhancement of integrated veterinary medicine studies in English, and assists students on this study programme.

**Vice-dean for quality control** - supervises the implementation and manages the quality control system through monitoring, analysis and improvement of all activities at the Faculty. He/she is also the head of the Office for Quality and the QM Committee.

### **2.1.2. Comments**

Following consultation with the union, the FC adopted the Regulations on the organization and systematization of the work of the FVMUZ in 2019, which was confirmed by the UNIZG Senate. It regulates the internal structure of the Faculty, the interrelationship of the organizational units, and competencies and other issues relevant to the internal organization of the Faculty. Furthermore, the titles of employees' posts and the special conditions for concluding employment agreements are regulated.

With regard to processing personal data, FVMUZ is obliged to apply the General Data Protection Regulation (GDPR) (EU) 2016/679, so since 2018, the Regulations on processing and protection of personal data have been in place.

### **2.1.3. Suggestions for improvement**

The Media Relations Committee was established in 2016 and together with the IT Department, takes care of all publicly available information, supports the staff and manages the website. It officially authorizes employees who are responsible for publishing content on the website, as well on social media (Facebook page). The availability of information on the official website and on other media has enhanced the relationship with various stakeholders, and raised the general level of public confidence in the Faculty.

## **2.2. Finances**

### **2.2.1. Factual Information**

**Description of how (*procedures*) and by who (*description of the committee structure*) expenditures, investments and revenues are decided, communicated to staff, students and stakeholders, implemented, assessed and revised**

The FVMUZ is a state budget beneficiary, financed from the State Budget (through the MSE) as part of the UNIZG on the basis of the financial plan for a three-year period. The budget plan includes the Faculty's own revenue, thus it plans with 67% funds from the state budget, 22.5% from its own revenue and 10.5% from other revenue. Budgetary funds are allocated for employees' salaries, covering of overhead expenses (electricity, water, heating, utilities, and maintenance), as well as basic support for scientific activities, and the Faculty's own revenues are allocated according to the Regulations on standards and usage of income earned on the market. Decisions on allocation of Faculty's own income are rendered by the responsible person, i.e. the Dean, following proposals by the heads of departments/clinics, and in accordance with the financial plan. FVMUZ only has autonomy and flexibility in the use of its own financial resources.

Financial activities at the FVMUZ are performed by the Accounting office, which is divided into two sections - the Accounting Department and the Finance Department. Accounting evaluates, processes and publishes information about the Faculty, and forwards it to a wider range of stakeholders. The Office staff perform formal verification of documents, and verification of documents is performed by the Dean and/or vice-dean for finances and investment.

The financing of the FVMUZ is presented cyclically to the FC for approval, and to external bodies in the form of an annual financial plan and final accounts (balance sheet), for the period of one budget year, in accordance with the national legislation.

During the Risk and Opportunity analysis in 2019, in accordance with ISO 9001:2018, possible risks in financing were identified (such as insufficient pre-financing and co-financing of projects, the possible existence of non-eligible costs or non-compliance with legislation, policies and

procedures) and internal audits, corrective measures, additional education of employees, etc. were noted as risk mitigation mechanisms, etc. The persons in charge of these measures are the Dean, the vice-dean for finances and investment, the Accounting Office and the vice-dean for quality control.

### **2.2.2. Comments**

The largest revenue, over 67%, is from (State) budget funds. In this system of financing, an extremely important item is the revenue from the Faculty's own activity, so the FVMUZ tries to generate as much revenue as possible on the market, especially in the field of providing intellectual and professional services, clinical work and the organization of specialized courses and workshops/conferences. As the budget for science and research in Croatia is extremely low, it is of utmost importance to apply for as many EU and national projects as possible. For that reason, the Office for EU projects was established in 2017 and the results are already obvious (receiving around 1.5 mil Euro from European Social Fund and ERASMUS+ in the last three years). (Appendix: Financial Report)

### **2.2.3. Suggestions for improvement**

One of the extremely important goals of the management of the FVMUZ is better articulation of the costs of veterinary medicine studies to government bodies and financial policy makers. Moreover, it is essential for the UNIZG to reconsider the system of distribution of funds allocated for the faculties within the group of biomedical sciences, of which the FVMUZ is a part. Specifically, the costs of education for DVM are among the highest at the University, therefore this should be taken into account when allocating funds.

## **2.3. Curriculum**

**Description of how (*procedures*) and by who (*description of the committee structure*) the core curriculum is decided, communicated to staff, students and stakeholders, implemented, assessed and revised**

### **2.3.1. Factual information**

#### **INTEGRATED UNDERGRADUATE AND GRADUATE UNIVERSITY STUDIES (IUGS) OF VETERINARY MEDICINE**

In 1996, following the UNIZG criteria and taking into account the recommendations of the World Veterinary Association (WVA) and EAEVE, a new curriculum for the study of veterinary medicine was created, according to which, after graduation, students attain the academic title of DVM (dr. med. vet.). For better and more complete professional training of future DVM, additional professional-clinical work was introduced into the program. This curriculum was evaluated in 2002 as part of an EAEVE visitation. Taking into account the recommendations received for improvement of teaching, and the necessity to include new biomedical knowledge and didactic procedures in modern veterinary education, at the beginning of the 2005/06 academic year the implementation of the new curriculum began. In accordance with the curriculum of the six-year course, in the first three years students take all the basic, pre-clinical and some clinical courses, and during the 4th and 5th years they participate in theoretical and practical classes in mandatory and elective clinical courses. In the 10th semester of study, students choose a study track: Farm Animals and Horses, Small Companion Animals, or Foodstuff Hygiene and Veterinary Public Health and take mandatory

clinical courses, courses related to veterinary public health and mandatory courses according to their chosen study track (Appendix Course catalogue available at the FVMUZ). The sixth year of study is intended primarily for practical training and extramural teaching. The workload of students is determined by the, and the six-year study covers a total of at least 360 ECTS credits.

Since 2016/2017, a study course of veterinary medicine in English has been implemented, which is fully complementary to the Croatian study program.

### **APPROVAL, MONITORING AND EVALUATION OF THE STUDY PROGRAM**

The curriculum of IUGS and other study programs at the FVMUZ have to be approved by the FC and UNIZG, accredited by the ASHE and finally approved by the MSE. The existing study programmes at the Faculty are regularly monitored to ensure they are up to date. The Faculty has defined mechanisms for the approval, monitoring and periodic evaluation of the curriculum of the IUGS. Minor amendments (changes in syllabus which do not alter the expected LOs and competencies specified in the accredited syllabus, up to 20% of the curriculum per year) to the curriculum are regularly proposed on the establishment level (all amendments are initiated by course leaders and head of departments/clinics) and accepted by the FC.

Changes in the content of the programme which would significantly alter the curriculum, the final competencies of students or their qualifications (professional profile) must be approved by the FC and submitted to the UNIZG Working Group for Study Programmes (WGSP). The curriculum, organized in accordance with the "Bologna Declaration" based on the Los, combines different methods of interactive teaching and learning, including case-study analysis, solving specific problems directly from practice, guest lecturers, and the use of modern teaching technology, independent research and cooperative learning.

Monitoring and QA of the curriculum are regulated by the Statute, the Regulations on IUGS, Regulations on Postgraduate Studies and Regulations on Doctoral Studies, in which the specific characteristics of the educational objectives at various levels are clearly indicated. Since 2008/2009, an Information Package (IP) (catalogue of all courses) has been available to all students and staff at the beginning of the academic year. Other available documents are: the *Catalogue of Knowledge and Skills for all Core Subjects/Courses and Electives*, with a detailed list of knowledge and skills with proficiency levels prerequisite for defining LOs. LOs are described in detail for each course included in the current study programme at the FVMUZ (documents: *Application of LO at FVMUZ*).

The current IUGS programme is based on the provisions of the Act on Regulated Professions and Recognition of Foreign Professional Qualifications (OG, 82/15; 70/19) and EU Directive 2005/36/EC on the recognition of professional qualifications. Specifically, the recommendations set out are applied, so that the training of DVMs guarantees that a person has acquired the specific and necessary knowledge and skills. The Diploma Supplement which students receive upon completion of the IUGS programme, clearly demonstrates the competences, that is, the level of knowledge, skills and abilities the student has acquired.

### **RECORDING OF ALL FORMS OF CLASSES**

In 2005, the Faculty introduced a standardised method of recording all forms of classes (Record of teaching activities delivered), and individual continuous assessment of each student and exams, through the ISVU information system. Part of the ISVU, containing all the information about the student workload of each specific course, is publicly available (link <https://www.isvu.hr/javno/hr/vu53/index.shtml>). Teachers are required to record the attendance and activity of students in all types of classes. Records of teaching activities delivered must be

in accordance with the syllabus, and include the number of students attending and the names of the teachers who delivered the classes. The record itself is verified by the course leader, and signed by each teacher in paper form. This record is subjected to annual analysis by the vice-dean for human resources and the vice-dean for undergraduate studies.

### **EVALUATION OF TEACHING AND LEARNING**

Pursuant to Article 92 of the Statute of the UNIZG, which prescribes the regular monitoring of the teaching work of permanent members of staff, each semester the QA Committee organizes a student survey for the evaluation of teachers. The survey is carried out prior to the end of the teaching period, before exams. The survey covers the individual teacher's performance or student perception of teachers' expertise in the area they teach, evaluation of the quality of teaching, their attitude towards students and work motivation. The survey also includes a question in which students provide a general assessment of the teacher's performance. The survey is conducted and organized with the technical support of UNIZG, which conducts comprehensive statistical and psychometric data processing. The QA Committee, in consultation with the teachers, heads of departments/clinics, and according to the UNIZG Plan for student surveys, decides how and when to conduct a survey, carries out preparatory activities and provides for the processing of the survey results. The Dean, the vice-dean for quality control and the QA Committee are responsible for the analysis of the survey results at the FVMUZ level, and for undertaking measures to improve the quality of teaching. The survey is available in Croatian and English, and it is done in paper-pen form.

During the semester, according to needs observed, some internal surveys are also conducted (in pen-paper or online form) by the QA Committee related to specific issues (Mobile clinic survey, English studies survey, Extramural survey, Employers' survey, etc.).

#### **2.3.2. Comments**

In order to carry out a study programme in the RC, a faculty must obtain a certificate of approval from the MSE, based on the national accreditation carried out by ASHE. The current FVMUZ certificate of approval dates from 2015 and re-accreditation is expected in 2021. Study programmes are announced on the FVMUZ website and are publicly available. Syllabi are published on the website before the beginning of the academic year.

All other information regarding the curriculum is available on the SER 2013.

#### **2.3.3. Suggestions of improvement**

Through the above mentioned HKO project, an occupation and qualification standard for the profession of DVM will be developed and the improvement of QA procedures will be assured. Some specific activities also include new software solutions for improving the examination system and student self-analysis; an e-project for the vertical and horizontal integration of courses; development of an online system for conducting student and teaching surveys, and new software for producing written exams. The main outcomes of the project, a modern and relevant study programme and constant improvement of quality, will have an impact on all stakeholders, including students and employees. The ERASMUS financed project "Pan-European soft skills curriculum for undergraduate veterinary education – SOFTVETS", coordinated by the FVMUZ, has the goal of creating a framework, and producing an ideal version of the new soft skills curriculum that would be applicable in veterinary higher education throughout Europe. It should cover a wide range of life skills, organized in three sections: interpersonal communication, entrepreneurship and digital skills (<https://ec.europa.eu/programmes/erasmus-plus/projects/eplu-project-details/#project/2018-1-HR01-KA203-047494>)

## **2.4. Facilities and equipment**

### **2.4.1. Factual information**

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

#### **FVMUZ CAMPUS**

The whole FVMUZ campus is located in Heinzelova street (Appendix: Plan of the FVMUZ). As an integrated campus, the Faculty owns 58,783 m<sup>2</sup> of its own land, while the total area of its facilities is 26,915 m<sup>2</sup> (including all floors: ground floor, first floor, second floor). The campus comprises 12 constituent buildings. As most buildings are between 60-80 years old, it is extremely important to keep them well maintained. For that reason, the FVMUZ maintenance service, with an easily accessible caretaker, constantly supervises the buildings. As mentioned earlier, the Faculty buildings are protected cultural heritage, therefore any construction works are subject to special permits. For the majority of the costs of maintaining and upgrading the campus, FVMUZ depends on own revenue or some special calls for investments through the MSE. The Faculty's infrastructure maintenance activities are carried out pursuant to the Annual Financial Plan prepared by the Accounting office, based on proposals by the Heads of Departments/Clinics approved by the FC. More information on the Facilities and equipment may be found in SER 2013 (page 139-149).

#### **EQUIPMENT AND LABORATORIES**

In the last decade, a significant amount of the funds have been invested in clinical, laboratory and other equipment. The majority of this amount has been provided through EU and national projects, while smaller amounts have been provided through the Faculty's revenues. The premises of clinics, lecture halls, and laboratories for students or diagnostic/research laboratories have been modernized, so the equipment currently available meets the requirements of high-quality teaching activities, professional work and research. Procurement of equipment is also monitored through the Accounting office, based on the Annual Financial Plan. Should there be a need for new equipment to be procured during the year, a Plan modification process is initiated at an FC session.

Among the diagnostic/research laboratories at the FVMUZ (as listed in the Regulations on the organization and systematization of work), there are currently five laboratories accredited in accordance with ISO 17025:2007, which act as official and reference laboratories for the RC. These laboratories base their accredited methods primarily on the diagnosis of infectious and parasitic diseases of animals, and on cooperation with the Veterinary and Food Safety Directorate of the Ministry of Agriculture. The first accreditation was carried out in 2011, and in February 2016 the laboratories underwent re-accreditation, bringing them into a new five-year accreditation cycle. Currently, the accredited laboratories at the Faculty are:

- The Laboratory for Honey Bee Diseases, Department of Fish and Bee Biology and Pathology (APISlab)
- The Laboratory for Equine Viral Arteritis, Department of Microbiology and Infectious Diseases with Clinic (ARTERlab)
- The Laboratory for Chlamydia, Department of Poultry Diseases with Clinic (CHLAMlab)
- The Laboratory for Equine Infectious Anaemia, Department of Microbiology and Infectious Diseases with Clinic (IAKlab)

- The Laboratory for Leptospirosis, Department of Microbiology and Infectious Diseases with Clinic (LEPTOlab)

## **BIOSECURITY AND BIOSAFETY**

In order to be informed and educated about issues related to occupational safety, employees and students are provided (by the vice-dean for undergraduate studies, Heads of Departments/Clinics and outsourced agencies) with all information about the possible risks (chemical and biological) in an introductory class immediately after admission to the Faculty (students), and during their first year of the employment (employees).

Guidelines on the protection of workers and students exposed to biological and chemical agents at work and a Manual of implementation of biosecurity measures at the FVMUZ (<https://www.vef.unizg.hr/wp-content/uploads/2018/10/Postupnik-provo%C4%91enja-mjera-biosigurnosti-na-Veterinarskom-fakultetu.pdf>) are available in Croatian and English on the official web site, and serve as basic literature before undertaking any activities in the laboratories, clinics, etc. Also, students need to sign a specific statement related to their particular course after carefully reading these Guidelines. The Faculty's employees and students are obliged to act in accordance with the general principles of prevention, perform work in a safe manner, and be aware of their obligations and responsibilities. Additionally, they must report any changes to working conditions and warn their superiors of specific biosecurity and biosafety deficiencies. The Heads of Departments/Clinics are obliged to provide all the requirements for implementation of occupational safety, health surveillance and the training of employees. Personal protective equipment is provided and used where necessary. The Faculty provides goggles for work in the laboratories and dissection hall for each student. All around FVMUZ there are specific signs and, where necessary, posters containing information on risks and instructions on measures to be taken in case of an emergency. SOPs are also available on disinfection of premises and vehicles, and quarantine protocols for patients with infectious diseases, as well as a protocol for notification of any outbreak of a notifiable disease, zoonoses or emerging disease. Special metal lockers for storage of hazardous chemicals, as well as first aid cabinets and eye showers are available in laboratories. Escape plans and escape signs are visible in all buildings. All these activities have been implemented by the Committee for Biosecurity, established in 2013. As a direct consequence, routine awareness of biosecurity and biosafety has improved substantially at the FVMUZ. Together with the nominated biosafety commissioner the QM Committee is also responsible for annual internal audits of biosecurity and biosafety.

## **WASTE MANAGEMENT**

Biological (carcasses, organs, laboratory waste, etc.) and chemical waste (chemical residues, used plastic and glassware) is generated during clinical and practical work. Depending on the type, the waste is collected in respective containers and stored in a special facility, accompanied by specific form containing all the information about its origin, weight and date.

Currently, specific containers and bags are used, as described:

- plastic bins with red lids for infectious waste
- plastic bins with green lids for chemical and pharmaceutical waste
- yellow plastic bins for sharp waste
- plastic bags for carcasses, various organs and food of animal origin

The Faculty has signed a waste disposal agreement with a certified company which collects different waste material. Also, one staff member is especially assigned for waste management at the FVMUZ, serving as a contact person for all issues arising.



#### **2.4.2. Comments**

There is a constant need for development of even more appropriate measures and standards of biosafety and biosecurity. As the biosafety and biosecurity procedures have been in place since 2013, and as there is no urgent need for an additional Biosafety Committee, the current intention is that the work on biosecurity and biosafety should be under the QM committee, especially as the biosafety commissioner is one of the members of the QM committee.

A core facility for proteomic, genomic and metabolomics analysis was established at the FMVUZ in order to improve research and teaching activities. The funding was provided through EU funds (ERA-CHAIR project).

#### **2.4.3 Suggestions for improvement**

In spring 2020 the so-called "*Green Island*" will be opened and used as a single collecting point for all waste produced at the FVMUZ. It will be easily accessible to all staff members, but also to all vehicles when emptying the containers.

Building the capacities of the skills lab will be possible in next the two years through EU funding of two projects: HKO and *Establishment of postgraduate specialist courses in veterinary medicine in the English language*. Already some models are available, and currently there is work in progress to rebuild one of the buildings (part of the Clinic for Internal Diseases) into new skills lab. One of the departments that urgently needs to be renewed is the Department of Radiology, Ultrasound Diagnostics and Physical Therapy, and therefore a new radiological device and a CT were purchased. Together with the adaptation of the Department's infrastructure, this will be added value for students and Faculty service users.

### **2.5. Animal resources and teaching material of animal origin**

#### **2.5.1. Factual information**

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

The procedure of the organisation and implementation of the pre-clinical and clinical training of students is closely related to the core curriculum and organised by the Dean's board, heads of department/clinics and course leaders. The FVMUZ organizes pre-clinical and clinical training at its own clinics and facilities (game management area) and obligatory extramural work in veterinary and other institutions. During obligatory extramural work, students visit farms with ruminants, horses, pigs and poultry. Also, students visit abattoirs, food-processing plants, markets etc. and learn about the important role of veterinarians in FS&VPH. FVMUZ signs official collaboration agreements with various outside bodies, such as veterinary institutions (clinics, institutes, etc.) and all other institutions which include veterinarians in their scope of work (farms, reproduction centres, family farms, dairies, slaughterhouses, fish farms, apiaries, agriculture, ministries, etc.). (Appendix – List of Collaborating Institutions),  
More information can be found in SER 2013, pages 151-155.

#### **PRE-CLINICAL TEACHING**

For pre-clinical training, bones (individual or whole skeletons), fresh organs, whole carcasses

and other materials (microscopic slides, museum collections, software, models, etc.) are routinely used. Dogs, sheep, horses, hens, etc. are used as models, as well as laboratory and wild animals, birds, reptiles and sea mammals (dolphins). Dogs and horses used in practical anatomy training are donated upon euthanasia (selection is based on biosecurity risk); fresh organs are procured from abattoirs, and the quantity of both is decided on the basis of the number of students at the Department level, before the academic year or semester. It is important to note that students are in contact with live animals from the first year, either those available on the campus or during farm visits in the form of fieldwork related to the courses: *Introduction to Veterinary Medicine, Environment, Animal Behaviour and Welfare, Animal Breeds Characteristics, Basic Animal Nutrition, Domestic Animals Physiology, Animal Breeding and Production*, etc. For laboratory experiments, microscopic examination, computer-aided exercises, dissection, etc. a ratio of 10 students per teacher is ensured. In the 3rd year of study, as a part of the course on Veterinary Pathology, students actively participate in practical exercises and examine whole carcasses and internal organs. Carcasses are selected by pathologists from clinical patients or carcasses submitted by private practitioners without biosecurity risks (when allowed by the animal's owner), while internal organs are procured from abattoirs (cows, sheep, goats, pigs). In other cases students may observe dissection performed by pathologists.

#### **CLINICAL TRAINING AT THE FVMUZ**

The Faculty organizes practical clinical training at the FVMUZ clinics and obligatory extramural work at veterinary and other institutions. Students develop their clinical skills through problem-based teaching and obligatory clinical work, under adequate supervision. Clinical rotations are undertaken with small groups of students per teacher (from 4 to 6), also for night duty. Supervised volunteering at the clinics is also available. The inclusion of the core subjects Ambulatory Clinic (AMC), Herd Health (HH), Clinical Field Work (CFW) and Professional Clinic Work (PCW) creates the opportunities for significantly more extramural working hours by practising veterinary tasks on farms (cattle, horses, poultry and pigs), at abattoirs, food-processing plants, markets etc. In these cases, students are under the supervision of teachers and/or qualified mentors, nominated by the institutions and approved by FC. Each academic year, the Faculty adopts a plan of clinical rotations and determines in which veterinary organizations and institutions students will perform obligatory extramural work, as well their mentors. While conducting practical work, students are required to maintain a Practical Work Log (PWL) on a standardised form (one for AC and one for PCW). The PWL is accepted by the mentor, and the vice-dean for IUGS, and archived in each student's personal file.

"Day-One Skills" (DOS) are acquired by students gaining theoretical & practical knowledge, skills and clinical experience, together with an assessment process which determines whether the LOs have been met. The list of DOS is available to the students, staff and external stakeholders as written in both PWL or in other documents (as in *Application of LO at FVMUZ*). Besides the ISVU system for monitoring students' attendance and activities, there is software entitled "VEF Protocol" for recording case-loads during the students' practical training at the FVMUZ. It records all the details of patients and owners. It is intended for writing prescriptions, discharge letters, recording medical findings (patient dossier) in clinics and laboratories, scheduling patient appointments, and billing and is accessible to all users in any area.

#### **FOOD SAFETY AND VETERINARY PUBLIC HEALTH TRAINING**

Within the frame of extramural practical training performed from 9-11 semester related to courses *Food Hygiene and Technology* and *Veterinary Public Health*, students visit abattoirs

(pigs, cattle and broilers), meat processing facilities (SME and large scale), dairy, ice cream factory, Zagreb market and laying hen farm with egg packaging. In abattoirs students attend *ante mortem* examinations of ruminants, pigs and broilers and *post mortem* meat inspection in groups of up to 6 students. Under the supervision of veterinary inspectors and teachers, students perform independent examination. Practical training of students in food hygiene at the FVMUZ facilities (laboratory exercises) is based on animal products obtained from the local market (raw meat and milk, dairy products, meat products, eggs, fish, shellfish). Classes are held in groups of up to 10 students per teacher. During laboratory practical work students write protocols (sample identification, analytical method procedure, results obtained and interpretation). Protocols are approved by teachers and documented in students' personal file.

## **CLINICAL SERVICES**

FVMUZ clinics operate 24/7 throughout the year and serve as emergency care facilities for various species of animals. Clinical services are integrated in the VTH. Patients are referred by private practitioners due to the complexity of cases or if they require a specialist examination (cardiology, dermatology, neurology, gastroenterology, ophthalmology, reproduction, etc.).

### **2.5.2. Comments**

Some of the important research activities currently in progress at the FVMUZ are projects related to sea mammals, large carnivores and other wildlife. These projects allow ambitious students to participate in fieldwork and research, preparation of their graduate thesis, publication of articles, and also the acquisition of skills, such as service learning (<https://www.argonauta.hr/en/2018/11/27/presentation-of-the-blue-project-at-the-faculty-of-veterinary-medicine-in-zagreb/>). Since 2019 impregnated (plastinated) models have been used at the Department of Anatomy, Histology and Embryology, demonstrating the intention to discontinue completely the use of formalin embedded tissue in teaching. Changes in the AC, mentioned as one of the main developments since the last visitation, have increased the number of farm animal cases.

### **2.5.3. Suggestions for improvement**

According to the List of Indicators, the number and variety of animals and materials of animal origin for pre-clinical and clinical training, and the clinical services provided by the FVMUZ are within the given limits, with the only exception being the number of visits to ruminant and pig herds, and the number of ruminant and pig necropsies. Although there is a constant threat of African (and classical) swine fever in this part of Europe, steps are being taken to increase the number of visits to pig herds or the number of pigs available for necropsy, by meeting the farm managers and smaller producers located near the Faculty. The FVMUZ has applied to the ESF Call for Improvement of Practical Tuition with a project proposal aimed at large animal practice. Also, education of one clinician (currently finishing an internship and starting a residency program in Utrecht, Belgium, on equine medicine) will provide new possibilities to increase the number of equines available as patients at the FVMUZ.

## 2.6. Learning resources

### 6.1 Factual information

**Description of how (*procedures*) and by who (*description of the committee structure*) the learning resources (*books, periodicals, databases, e-learning, new technologies, ..*) provided by the Establishment are decided, communicated to staff, students and stakeholders, implemented, assessed and revised**

FVMUZ provides adequate resources for the continuous implementation of the study program, as well as student support. For successful studying, appropriate spatial resources (classrooms, library, student's rooms, etc.), equipment (computers, smart boards, microscopes, etc.), and literature (books, scripts, access to databases, electronic books and journals) are ensured. FVMUZ has the space, staff and equipment to fully satisfy the number of students, according to national regulations, which is regularly decided, communicated, assessed and revised by the head of departments/clinics, course leaders, Dean's board, Committees and FC. Support in the form of consultation, mentoring, and administrative services are provided on a daily basis, pursuant to the Statute and the Regulations on IUGS of the UNIZG and FVMUZ. A plan of the Faculty, as well the list of all available lecture rooms with size and equipment is available in SER 2013, pages 139-142 and in Appendix.

#### **FVMUZ LIBRARY**

The Faculty Library (FL) is located on the campus and is officially registered in the Registry of Libraries of the City of Zagreb. The FL uses a specially tailored electronic system, ALEF, for processing the complete library materials, enabling the establishment of a national network of libraries. The FL is open daily from 8-16 (during the exam period from 8-21). Students become users of the FL upon enrolment at the beginning of the winter semester. Books may be loaned within the library premises by presenting a student identification card. Student book loans are recorded electronically. Since its foundation, the majority of the library's book stock has been veterinary publications available to the general scientific community, especially to students, teachers and other scientists. The FL archives all the publications of the FVMUZ, as well students', masters' and PhD theses, thus creating a fund which reflects the intellectual potential of the employees and students. Orders of literature are performed according to requirements and the financial resources. All the requests for literature procurement are reviewed by the library council, which draws up a list for the Dean's approval. The FL has seats for 25 students in its reading room, as well as 15 more within its premises (12 PCs are also available in the FL). Apart from the reading room, students are free to use a student study room located underneath the library. Students also benefit from the *National and University Library Zagreb* (<http://www.nsk.hr/en/user-registration/>).

#### **E-LEARNING AND INTERNET**

E-learning is supported by a faculty-based learning management system called VEF-LMS. VEF-LMS is a password protected database that houses IUGS courses, and provides basic course information, student announcements, and various teaching materials (pdf files, videos, PowerPoint files, formative self-assessments, midterms, etc.). Posting of information and teaching content within the VEF-LMS is the responsibility of the teachers and course leaders. Each student should participate in the e-learning classes in a manner determined by the course syllabus of each particular subject. All students have an equal opportunity to access IT equipment. A user account ([address@vef.hr-AAI identity](mailto:address@vef.hr-AAI)) is assigned to students, which is part of the Croatian academic and research network CARNet. This account enables students to

access LMS, ISVU, email, literature databases, intranet etc. A wireless Internet connection is available on the campus. In order to provide students with full access to computing resources and the Internet, the Faculty has three computer labs, including a total of 72 computers and additional computers in the FL (12 computers).

## **VEF CLINICAL SKILLS LABORATORY**

Within the Clinics of the FVMUZ, a clinical skills laboratory will be established in near future. The acquisition of models and rebuilding of the existing rooms will be undertaken through two on-going projects – HKO and *Establishment of postgraduate specialist courses of veterinary medicine in English*. These project activities represent the continuous process of improving learning resources.

### **2.6.2. Comments**

Various sources for learning (teaching materials, a sufficient number of copies of the required literature, ensured availability of library space, the necessary computer programs, etc.) are provided and available to students. The specificity of the FVMUZ departments/clinic are their small libraries, equipped with books, journals and other literature related to their specific field of interest, which is an added value for students when they are preparing for midterms or exams, or need extra space to study. Students may also use the FVMUZ museum collections of pathology, anatomy, wildlife and the history of veterinary medicine.

### **2.6.3. Suggestions for improvement**

On the FVMUZ web page (<http://wwwi.vef.hr/3datlas/>) the University Handbook "3D Atlas of a Horse's limbs" is available. The handbook uses 3D model technology to bring the concepts of the osteology of a horse's limb closer to the student in a simple and concrete way. This atlas is primarily intended to help veterinary medicine students master the course matter "Anatomy with Organogenesis of Domestic Animals" which is taught in the first year of the IUGS program. One of the main activities planned in the HKO project is related to the improvement of learning resources at the FVMUZ. Specific activities includes new software solutions for the e-project of the vertical and horizontal integration of the courses; virtual atlases and microscopic collections; transfer of museum collections into 3D models, with descriptions available on the web page; and building the capacities of the skills lab.

## **2.7. Student admission, progression and welfare**

### **2.7.1. Factual information**

**Description of how (*procedures*) and by who (*description of the committee structure*) the admission procedures, the admission criteria, the number of admitted students and the services to students are decided, communicated to staff, students and stakeholders, implemented, assessed and revised**

### **ADMISSION OF STUDENTS**

FVMUZ enrolls students within the quota proposed by the FC and approved by the UNIZG Senate. A call for applicants is published at least six months before the beginning of the academic year, and the content is prescribed by legislation. Since the beginning of the 2009/10 academic year students have been enrolled on the basis of the individual ranking list created

by the National Centre for External Evaluation of Education (NCVVO). The NCVVO conduct the Final State High School Exam (FSHS-EX) (Matura). A national web site, [www.postani-student.hr](http://www.postani-student.hr), announces the results of the FSHS-EX and ranks students accordingly. Ranking lists are drawn up on the basis of the results of the FSHS-EX, grades obtained at secondary-school level, and specific achievements (sport and/or state-wide contests or fairs). The allocation of all admission criteria is decided on the FMVUZ level and approved by the FC. The list of applicants for admission to the IUGS is compiled according to the following scoring system:

1. Grades obtained at secondary-school level – up to 250 points (25%)
2. Results of the state exam for the subjects:
  - a) Croatian language at A level – up to 150 points (15%)
  - b) Mathematics at A level – up to 50 points (5%)
  - c) Foreign language at A level – up to 100 points (10%)
  - d) Elective subject (one of): Biology or Physics or Chemistry – up to 300 points (30%)
3. Psychomotoric test – up to 100 points (10%)
4. Specific achievements (1st to 3rd place in national or international competition in Biology, Chemistry, Physics or professional subjects of veterinary schools) – up to 50 points (5%)

Additionally, progression, welfare and services to students are described in details in SER 2013 (pages 183-192).

### **ADMISSION OF STUDENTS TO THE ENGLISH STUDY PROGRAM**

A new six-year programme of Veterinary Studies in English was introduced in the 2016-2017 academic year (<https://www.vef.unizg.hr/en>). Assessment is based primarily on academic achievement. One of the required application components is original or certified copies of Secondary School Certificates for all years of secondary school and the Final/Leaving Certificate of Secondary School Education, with an official grade transcript. Diplomas of university studies undertaken afterwards are an additional argument supporting and proving students' capacities and skills (and these are also taken into account when applications are evaluated). Particular attention is paid to the results obtained in hard science courses. Also, preference is given to students with the International Baccalaureate, who need at least 32 points from science subjects at the higher level. The school admits no more than 25 (from 2020/2021, 35) students per each year intake. The following documents are also considered for admission:

- Preparatory school certificate, if any;
- Proof of knowledge of English language
- Proof of knowledge of Latin language, if any;
- CV and a Motivation letter explaining the reasons for choosing the Veterinary Medicine program;
- Certificate (s) or proof of "hands-on" experience working with veterinarians in the veterinary field, if any.

These files are collected after the Call for Applicants has been published on the web site of the FVMUZ. Applications are received by email within 3 defined admission terms (January, April and July). Upon receipt of the applications, the Admissions Committee (composed of 3 professors from the FVMUZ) sends notice of its decision regarding acceptance of students' applications within a short period of time (defined in the Call for Applications). Also, a waiting

list is created for those candidates whose applications and files were evaluated and approved by the Admission Committee but who were not immediately accepted (due to an overwhelming number of files received of higher academic quality). (<https://www.vef.unizg.hr/en/studying/enrollment-to-veterinary-studies-in-english/>)

### **THE PROCEDURE FOR DEFINING THE ENROLMENT QUOTA**

When defining the enrolment quota a discussion is held each year at the FC. In the process of defining the quota, the Faculty takes into account an analysis of trends, teacher workload and spatial capacities, the expected interest for the study, as well as the number of currently unemployed graduates (which is checked every year in the Croatian Veterinary Chamber) (Appendix: Student Enrolment in the Past Decade).

### **STUDENT PROGRESSION**

Students gain the right of progression to the next year of the study by fulfilling all the prescribed obligations and passing the exams. The rules for student progression are described in the Information Package and Student Guide, which is available on the internet website at the beginning of each semester/academic year (<https://www.vef.unizg.hr/referada/ostale-obavijesti/vodic-za-upis-u-ljetni-semestar-ak-qod-2019-2020/>) and [https://www.vef.unizg.hr/wpcontent/uploads/2020/01/2019\\_2020\\_studentguide\\_SUMMER.pdf](https://www.vef.unizg.hr/wpcontent/uploads/2020/01/2019_2020_studentguide_SUMMER.pdf)). Also, each year in April, course leaders discuss and revise the progression rules, which are then forwarded to the Committee for IUGS and later accepted at a FC session (afterwards published on the web site and Student Guide). Students are granted progression to the higher study year if they have acquired at least 45 ECTS points. The remained of the 60 ECTS must be acquired before progression to the winter semester of the next academic year at the latest. Students must also approve each semester to progress to the next one (by the Students affairs office and vice-dean for undergraduate study). Students who have not met the requirements for full enrolment in the higher semester of study (45 ECTS) may only enrol in the courses from the mandatory list. For example, 30 ECTS earned in the first year of study will allow the student to enrol in courses providing 30 ECTS in the second year of study. Enrolment in elective courses is not allowed. Excellent students with the best grades per academic year receive awards and recognitions from the Faculty once a year, at a formal FC session, with award criteria prescribed by the Regulations for Awards of the FVMUZ.

### **STUDENT WELFARE**

The Student Office (SO) was founded in the 2010/11 academic year. One of its tasks is to promote, monitor and protect the rights and interests of the students of the FMVUZ. The SO provides advisory services from the day students apply to the Faculty to their graduation day. The SO publishes printed materials for the better wellbeing of students at the Faculty (Appendix - flyer with the information about SO). For students enrolled to the IUGS in English, Croatian language course is available (paid by the FVMUZ) for the first 3 years of the study.

### **STUDENT IDENTITY CARD (X-CARD)**

The *x-card* is the identification card for full-time students of the UNIZG, which allows them to exercise their rights. It is used to prove student status so that students can benefit from student privileges, such as subsidized food, preferential public transport rates and lower prices in some public institutions.

## **STUDENT LIFE AT THE FVMUZ**

Student participation in the Faculty's activities is described in the Statute of the FVMUZ, and other legal acts of the UNIZG. Cohesion and collaboration between FVMUZ staff and students are achieved by:

- The active participation of students in the FC bodies
- The active participation of students in decisions (student representatives on the Faculty's committees and the extended Dean's Board);
- Support for students in their scientific-research activities (mentoring);
- Support for students in mobility schemes;
- Support for students in publishing (student journals);
- Support for students in their extracurricular activities (student associations).

At the Faculty, there is a restaurant for students (*Veterina restoran*, open from 8-15) offering dishes at discounted and affordable prices. The main building of the Faculty houses newly renovated facilities where students may spend the whole day (opening time 8-21), or use them for their own organizational needs. Student associations also use these facilities. Coffee, beverage and snack vending machines are available in some buildings of the Faculty. Students who participate in night duties in clinics can use rooms equipped with beds.

The Ministry of Health approved the pre-exposure rabies vaccination for students and staff members of the FVMUZ Clinics. The vaccination is carried out for FVMUZC clinics' staff members and students from the third year of study, according to the schedule.

A medical examination in the first year of study is mandatory and undertaken to check health, gain insights into habits, behaviour and adjustment to the study, and to determine health risks.

## **STUDENTS ASSOCIATIONS**

The Faculty and students have established various student associations that enable students to participate in extracurricular activities (sports, music, etc.). Students can join the Students' Council of the UNIZG (SCUZ), IVSA, Equus, SportVef, Vet society or sing in *Ab Ovo* (academic FVMUZ choir). Student associations allow the exchange of experiences related to study, organize various events, trips, congress, workshops, exhibitions (*Reptilomanija*), etc.

## **MENTORING AND TUTORING**

The applicable Regulations define the participation of teachers and assistants in the mentoring system, which has been implemented at the FVMUZ since 2010/11. From the first year of study, freshmen are divided into smaller groups (of approximately 2 students) and a mentor (academic staff) is required to provide his/her students with basic instructions for their studies, and during the year s/he will be at their disposal for questions and advice. Introductory meetings are organized for first-year students to facilitate their introduction to academic life and to help them become familiar with the teaching and other activities of the Faculty. Consultation hours with students are announced before the beginning of classes.

## **STUDENT MOBILITY**

The Faculty encourages student mobility through bilateral agreements and participation in mobility programs (ERASMUS; CEEPUS), and gladly welcomes foreign students during their stays of different lengths, in study programme and placements. At this point, the FVMUZ is leading institution of the UNIZG in terms of the number of hours of student mobility and there is a waiting list available (all clinic placements are filled one year in advance). (Appendix: Student and Staff Mobility)



## **MANAGING DIFFICULTIES AND OBSTACLES**

Students have a daily opportunity to present their problems and questions to the SO, either in person or by email. Also, they can use the same services at the UNIZG. Any complaints are resolved in a timely manner, according to the legal acts of the UNIZG and FVMUZ. A student legal attorney is available at UNIZG for mediating between individuals to assure student rights and obligations (<http://www.unizg.hr/studiji-i-studiranje/podrska-studentima/studentiski-pravobranitelji/>). The purpose of counselling available at the UNIZG is to assist students in dealing with the most important problems related to: faculty adjustment, learning problems, reproductive health (sexually transmitted diseases, pregnancy and family planning), chronic health problems, drug abuse and other forms of addictions. In order to ensure that all candidates with disabilities enjoy their constitutionally guaranteed right to an equal education, it is necessary to provide conditions for successful studying to all present and future students with disabilities. Therefore, UNIZG has founded an Office for Students with Disabilities as a reference centre, where students can obtain information on the spot, as well as via telephone, e-mail, flyers, and brochures. The Office, through its activities, offers students direct assistance in solving specific problems that may occur during their study, and thus represents a mechanism for ensuring equal opportunities. The SO works closely with the aforementioned office of the UNIZG.

### **2.7.2. Comments**

The current enrolment procedure is adequate and meets the needs of FVMUZ. Although the number of students enrolled (150) represents the upper limit that the FVMUZ can accept, the demands of the labour market and the fact that more and more veterinarians are looking for work in EU countries, may have an impact on the number of students enrolled in the future. Given the negative demographic trends continuing analysis is necessary in the future.

### **2.7.3. Suggestions for improvement**

In order for the broader society and potential students to recognize that the FVMUZ offers a quality and attractive education programme for future work, it is important to work on continuous, designed promotion. The promotional campaign for the study programmes usually starts with the UNIZG Fair and the Open Day of the FVMUZ, and other public activities (social networks, Reptilomanija, Museum Night). For campaign purposes, a promotional video, brochures, and flyers, are produced. Also, the possibility of visiting high schools in the region should be taken into consideration.

## **2.8. Student assessment**

### **2.8.1. Factual information**

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

The curriculum clearly defines methods of testing and scoring, and the examination schedule. Students are objectively assessed as described in the current UNIZG and FVMUZ criteria and rules (Regulation of IUGS, Statute, etc.). The assessment of students correlates with the syllabus and the whole study programme, by targeting the LOs. Students are informed about

the method used in the exams and the criteria that will be applied at the beginning of each specific course.

## **THE EXAMINATION SYSTEM AND CENTRAL GRADING SYSTEM**

The criteria, rules and procedures for assessment of students are defined by the Regulations on IUGS of the FVMUZ, the Act on Quality Assurance in Science and Higher Education, and the Regulations on the Quality Assurance System at the UNIZG and the Statute of the UNIZG. In accordance with the ESG, the decision on the uniform implementation of the grading system was adopted at the FC session in 2009. According to this central grading system, students' attendance is registered taking into consideration all the students' activities, and is assessed throughout the course and by the final exam (max number of points is 100). During the teaching process a student can achieve up to 60% of their grade (attendance and activities in different forms of classes (lectures, exercises and seminars; preliminary exam/mid-terms) and up to 40% of the grade can be achieved from the final exam. Student achievement in each course is assessed using ECTS and a numerical system (see SER 2013, pages 121-127) (Appendix: Grading System).

There are two types of assessment at the Faculty:

- Preliminary exams (progress test/mid-terms/colloquiums) organized during teaching periods to check students' knowledge of part of the relevant course;
- Final exams assess their knowledge of the complete course (LO), as established by the study programme.

Exam methods (oral, written, practical) and grading of the final exam are specified in the syllabus of each course, and the dates and schedules of exams are set at the beginning of each academic year (semester). Exams may be held in a group and/or individual and, depending on the method of examination, the following may be used: only an oral exam, only a written exam, and a combination of written, oral and/or practical exams. The teacher keeps official records of exam results and stores them in the archives of the Department/Clinic, and in the ISVU system. The same exam may be taken a maximum of four times. The fourth time the exam is conducted by a three-member exam commission. A student who does not pass the exam on the fourth attempt has to enrol again in the same course in the next academic year. The Regulations on IUGS of the Faculty closely regulates the rights and obligations of students who re-enrol in the same course again.

Students with disabilities and other learning difficulties are allowed alternative forms of examination, following a decision based on their medical history and other relevant documents, rendered by the vice-dean for IUGS.

## **GRADE APPEAL PROCESS**

A student has the right to appeal against a grade for a period of 24 hours after the exam and the right to be examined by a commission (min. three members) following the appeal. The examination commission must be formed within 48 hours after the appeal, and the student will re-sit the exam within 3 days. The commission keep minutes of the exam, and the decision on the grade is made by a majority of votes.

### **2.8.2. Comments**

The criteria, forms and rules of assessment are published for each course in a standardized form. Students are provided with feedback on the results they achieved in the exam in due time. Feedback in the form of grades is given orally, in writing (notice board) or by ISVU, in accordance with the general and regulations on the protection of personal data. The best

students are awarded every year, during a formal session of the FC. Dean's awards are awarded according to the Regulations on awards and recognitions.

### **2.8.3. Suggestions for improvement**

The HKO project will enable the creation of written exams through new software that will generate exam questions so that all LO are verified. Also, there will be a possibility to produce random lists of questions or multiple tests with different questions for the same exam period.

## **2.9. Academic and support staff**

### **2.9.1. Factual information**

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

The Faculty ensures the quality and expertise of its teachers, associates, administrative and support staff, to provide the students with quality education and to achieve the appropriate LOs. (Appendix: List of Staff of the FVMUZ). In addition to teaching, university teachers are engaged in scientific and professional work which, by its quality, contributes to the national and international recognition of the Faculty.

### **ALLOCATING, RECRUITING, SUPPORTING AND PROMOTING STAFF**

In line with its strategic development, FVMUZ plans for the necessary number of teachers, associates, administrative and support staff through the Annual Plan, taking into account the available resources, study programmes and the number of students. A decision on allocation is made through several levels of approval: first the Committee for Award of Scientific, Scientific-educational, Educational and Associate titles, then the FC and finally UNIZG and MSE. UNIZG reviews compliance with the existing plan and the overall university quota for all employment positions. It then approves the position and submits its consent to initiation of employment. Calls for applications for job vacancies are prescribed by national, UNIZG and FVMUZ regulations and published in the official and public newspapers, on the web site and the Euraxess portal.

Academic staff are encouraged to participate in various training courses and acquire new knowledge, especially courses related to enhancing teacher competences, professional work, etc. These activities are organized by the FVMUZ or paid participation is available. Constant opportunities for administrative and support staff to build their additional competences are also available.

In addition to their teaching, the scientific and professional work of teachers within the entire framework of their scientific and educational activities is evaluated according to the national legislation every 5 years (optionally every 3). The procedure follows the national regulations and is carried out by the Committee for the Award of Scientific, Scientific-educational, Educational and Associate titles and the FC, and forwarded to UNIZG.

## **ASSESSING ACADEMIC AND SUPPORT STAFF**

Teachers' work is regularly evaluated on the basis of the published criteria and procedures. Evaluation of teachers' work is carried out through obligatory student surveys, on the official form available from the UNIZG (paper-pen), according to the Plan of teaching surveys created by the UNIZG and/or for the purpose of promotion of teachers to higher titles. Support staff, especially those working in the Students Affairs Office, are evaluated on an annual basis, using the available survey form (paper-pen method). UNIZG processes the surveys and sends the results back to FVMUZ. The results are confidential and may only be shown to the respective teacher. A general analysis of the surveys is presented at the FC session by the vice-dean for quality control.

## **TEACHERS' WORK LOAD**

Procedures for allocation of the teaching load of full-time teachers and associates are developed at the national and UNIZG level, as well as approval for the work of the Faculty's teachers at other institutions (approved by the FC for each semester).

Analysis of the teaching load for each teacher, course, and the Faculty as a whole is based on the database, which is linked to the syllabus and personnel data. All teachers with a scientific teaching title should have at least the minimum teaching load in accordance with the standards for the hourly schedule prescribed by the current legislation.

## **STAFF MOBILITY**

Mobility of teachers, associates and administrative staff is an integral part of the process of higher education, with clearly defined rules and procedures that ensure equal conditions for all applicants. Mobility and international cooperation at the FVMUZ are carried out through participation in international projects and mobility programs, as well as multilateral and bilateral agreements with national and foreign institutions (Appendix: Staff Mobility).

The English study programme contributes to the improvement of the professional and linguistic competences of teachers, and also promotes understanding, critical thinking and work in an international environment. The internship programme at the FVMUZ (internal mobility of associates) allows the adoption of interdisciplinary educational content and encourages the development of general and specific competencies and skills.

### **2.9.2. Comments**

Employment procedures and awards of titles are conducted in accordance with the regulations of the UNIZG and FVMUZ. The results of student surveys are taken into account during selection for scientific-educational titles. The Faculty gives awards to staff for special achievements in teaching and other work.

The percentage of veterinarians at the Faculty is over 90% of the total number of academic staff. Bearing in mind the specific characteristics of the study programme, this ratio is justified. Non-veterinarians participate in basic subjects (chemistry, biochemistry, physics, biology, English, etc.).

### **2.9.3. Suggestions for improvement**

As continuous improvement of teachers' professional and teaching competencies is one of the main goals of the QA system, within the HKO project special workshops will be organized that will enable teachers to upgrade their teaching competences. Also, through the SOFTVETS project (coordinated by FVMUZ, funded by ERASMUS) numerous workshops related to the acquisition of soft (life) skills of teachers and students (communication, entrepreneurial, digital

skills) are possible. English courses are provided through the project *Establishment of postgraduate specialist courses of veterinary medicine in English* for academic and administrative staff.

## **2.10. Research programmes, continuing and postgraduate education**

### **2.10.1. Factual information**

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

#### **POSTGRADUATE UNIVERSITY DOCTORAL STUDIES IN VETERINARY SCIENCES**

FVMUZ conducts postgraduate university doctoral studies in Veterinary Sciences which last three years or six semesters. According to the University regulations the course may be completed within a maximum of 8 years. Upon completion of the studies, at least 180 ECTS are acquired. It is the only program on a national level that allows veterinarians to acquire a doctorate degree in biomedicine and health, in the field of veterinary medicine. Since 2017 the Veterinary Sciences PhD programme has been a holder of the High Quality Certificate awarded by ASHE following the accreditation process. Candidates may apply following the Call for Candidates, by submitting all the required documents (listed on the Faculty web site). The Committee for Doctoral Study decides each year about the criteria and their suggestions must be accepted by the FC. Foreign students must undertake the procedure for Recognition of Foreign Diplomas, performed by the UNIZG and ASHE. Candidates that meet the criteria are interviewed by the three members of the Committee (the chairperson, vice-dean, and one member). Each candidate must present a letter of support signed by his/her preferred mentor. During the studies students evaluate their mentors, and mentors evaluate students on standardised forms. Beside these forms, prescribed by the UNIZG, students must complete an anonymous online questionnaire. (Appendix: Number of PhD students Enrolled)

#### **POSTGRADUATE UNIVERSITY SPECIALISED STUDIES (CPD)**

FVMUZ carries out postgraduate specialised study courses upon completion of which the academic title of University Specialist, Master of Veterinary Medicine is acquired. Specialist studies are part of the concept of lifelong learning and they increase professional knowledge, skills and competencies. The course lasts from one year (2 semesters) to two years (4 semesters). (Appendix: Number of Students Enrolled)

The Faculty conducts the following specialised courses:

- Animal welfare
- Hygiene and Technology of Foodstuffs of Animal Origin
- Surgery, Anaesthesiology and Ophthalmology with Veterinary Dentistry
- Microbiology and Epizootiology
- Pathology and Breeding of Domestic Mammals
- Swine Production and Health Care
- Implementation of Veterinary Food Safety Procedures in a Slaughterhouse Facility
- Sanitation
- Forensic Veterinary Medicine

- Theriogenology of Domestic Mammals
- Internal Diseases
- Game Breeding and Pathology
- Exotic and Pet Animals Breeding and Pathology
- Laboratory Animals Breeding and Pathology
- Veterinary Pathology

Candidates may apply each year following the Call for candidates. Candidates that fulfil the criteria are assessed by the programme committee (three professors from certain course form the programme committee). All candidates are evaluated and accepted/rejected by the Specialised Studies Committee and the final list is sent to the FC for approval.

### **CONTINUING/LIFE-LONG EDUCATION**

FVMUZ aims to achieve a positive impact on society through the professional activities of teachers and associates. Therefore, professional activities are encouraged, recorded and made recognizable throughout the veterinary profession. As part of Continuing Education (life-long learning) FVMUZG offers several core courses each year with a planned annual schedule. Furthermore, it also offers *ad hoc* courses required by the veterinary profession. Each course must follow the prescribed procedure for applications, be completed with a final report and offer anonymous questionnaires to attendees. (Appendix: List of Courses)

### **INTERNSHIP PROGRAMMES AT THE FVMUZ**

Internships are one-year educational programmes for veterinarians, in the field of clinical sciences that began in the 2018/2019 academic year with three interns enrolled. The goal of introducing the internship programme is to enable veterinarians to acquire clinical skills that are a prerequisite for continuing further education in specialist disciplines. The programme consists of 52 weeks of rotations across a variety of clinical disciplines (48 rotation weeks + 4 weeks annual leave). On rotations, (in-house) trainees work with patients and gain practical and theoretical knowledge under the supervision of scientific-teaching staff and residents. Interns keep notes on their work (case logs), and participate in the journal club, book club and professional meetings.

### **THE RESIDENCY PROGRAMME AND EUROPEAN VETERINARY SPECIALIST**

Currently there are six active specialist at the FVMUZ from the following Colleges: ECVF, ACVS-SA, ECVS-SA, ECWSMR, ACWSMR, ECVD, ECZM (WPH), ECPVS and EVPC. Three resident programmes have been established and approved by the ECZM, ECVD and ECVF. All three candidates are either in their final year of training or are preparing for exams. All the programmes must follow the admission and reporting procedures proscribed by the EBVS.

#### **2.10.2. Comments**

The Faculty collects data on the scientific and publishing activities of teachers and researchers (a list of publications is available in the Yearbook). The most successful scientists or scientific teams are awarded at the formal session of the FC. FVMUZ organizes PhD Day with the relevant lectures, to promote the scientific activities of PhD candidates and the doctoral studies programme. Also, the FVMUZ encourages obtaining diplomas from EBVS in various fields of veterinary medicine, which may also be seen in the current number of residents. Moreover, the Faculty's first own specialist, who has been fully trained through the FVMUZ's ECVF residency programme, just successfully finished his final exam. The FVMUZ regularly participates in the organization of various national and international conferences and summer

schools, and encourages employees to take an active role. The AMAC-VEF and the Club of former students and friends of the FVMUZ promote the FVMUZ and the veterinary profession worldwide, but also organize lectures and presentations for various stakeholders.

### **2.10.3. Suggestions for improvement**

FVMUZ has initiated the ESF funded project '*Implementation of the specialist courses in veterinary medicine in English*' that will enable internationalization of specialised studies and offer the possibility of continuing studies at the FVMUZ. Currently, the FVMUZ is preparing for the launch of its You Tube channel that will promote the veterinary profession and offer informative lectures on CPD issues. Applications for on-line programmes/parts of programmes are encouraged, and initial steps are being taken.

## Glossary

(Please use the same terminology and abbreviations as in the ESEVT SOP when possible)

**Ab Ovo** academic FVMUZ choir

**AMAC –VEF** Almae Matris Alumni Croaticae, Faculty of Veterinary Medicine Zagreb

**AC** Ambulatory Clinic

**ARTERlab** laboratory for equine viral arteritis, department of Microbiology and Infectious diseases with clinic

**ASHE** Agency for Science and Higher Education

**BV Bureau Veritas**

**CAA** Croatian Accreditation Agency

**CARNet** Croatian Academic and Research (NETwork)

**CEEPUS** Central European Exchange Program for University Studies

**CFW** Clinical Field Work

**CHLAMlab** laboratory for chlamydia, Department of Poultry diseases with clinic

**COURSE or subject** – form curriculum (defined and prescribed course of studies)

**CQF** Croatian Qualifications Framework

**CPD** Continuous Professional Development

**CVI** Croatian Veterinary Institute

**DS** Diploma Supplement

**DVM** Doctor of Veterinary Medicine

**DOS** “Day-One Skills”

**EAEVE** European Association of Establishment for Veterinary Education

**EBVS** European Board of Veterinary Specialist

**ECTS** European Credit Transfer System

**EHEA** European Higher Education Area

**ERA** European Research Area

**ERASMUS** European Community Action Scheme for the Mobility of University Students

**ESG** Standards and Guidelines for Quality Assurance in the European Higher Education Area

**ESF** European Social Fund

**EU** European Union

**Equus** Student Society at the FVMUZ

**FC** Faculty Council

**FL** Faculty library

**FS Food Safety**

**FSHS-EX** Final State High School Exam (Matura)

**FVE** Federation of Veterinarians of Europe

**FVMUZ** Faculty of Veterinary Medicine University of Zagreb

**GDPR** General Data Protection Regulation

**HH** Herd Health

**HKO project** “*Development of standards for occupations and qualifications and improvement of the integrated undergraduate and graduate studies of veterinary medicine at the Faculty of Veterinary Medicine Zagreb*”

**IAKlab** Laboratory for Equine Infectious Anemia, Department of Microbiology and Infectious diseases with clinic

**IP** Information Package (catalogue of all courses)

**IUGS** Integrated Undergraduate and Graduate Study

**ISO** International Organisation for Standardisation

**ISO 9001 Manual** Quality Manual according to the ISO 9001:2015

**ISVU** Information System of HEIs

**IVSA** International Veterinary Students Association

**LEPTOlab** Laboratory for leptospirosis, Department of Microbiology and Infectious diseases with clinic



**LMS** Nacionalni portal za učenje na daljinu, Learning Management System  
**LO** Learning outcomes  
**MPC** Minimal Practical Competencies  
**MSE** Ministry of Science and Education  
**NCVVO** Nacionalni centar za vanjsko vrednovanje obrazovanja, National centre for external evaluation of education  
**NISpVU** Nacionalni informacijski sustav prijave na visoka učilišta, National online application system  
**NN, OG** Narodne novine, Official Gazette  
**NSK** Nacionalna i sveučilišna knjižnica, National and University Libraries  
**OEW** Obligatory Extramural work  
**PCW** Professional Clinic Work  
**PDCA Plan-DO-Check-Act cycle**  
**PWL** Practical Work log  
**REPTILOMANIJA** Exhibition of the reptiles organized by students societies  
**QA** Quality Assurance  
**QA Manual** Quality Assurance Manual  
**QC** Quality Coordinator at the Department/Clinics  
**QM** Committee Quality Management Committee  
**QP** Quality Policy of the FVMUZ  
**RC** Republic of Croatia  
**SCUZ** Students' Council of the UNIZG  
**SO** Student Office  
**SER** Self Evaluation Report  
**SOP** Standard Operating Procedures  
**SOFTVETS** ERASMUS financed project "Pan-European soft skills curriculum for undergraduate veterinary education  
**SportVef** Student Society at the FVMUZ  
**SRCE** Sveučilišni računski centar, University Computing Centre  
**UNIZG** University of Zagreb  
**VEF. Protocol** Programme for centralized management of ambulatory protocol  
**VetNEST** Veterinary Network of Student and Staff Transfer  
**Vet society** Student Society at the FVMUZ  
**VPH** Veterinary Public Health  
**VTH Veterinary Teaching Hospital**  
**WGSP** Working Group for Study Programs, UNIZG  
**WVA** World Veterinary Association  
**X-CARD** student identity card ("iksica")

**List of appendices** (*which are provided in a separate document*)

*The information to be contained in the appendices must be carefully selected so that useful information is not swamped by large amounts of unnecessary detail. Hard copy of additional information must be provided on-site in the Team room.*

Appendix 1. Organisational chart of the FVMUZ.

Appendix 2. List of important documents and legal acts

Appendix 3. Financial report

Appendix 4. List of courses available at the FVMUZ (curriculum)

Appendix 5. Plan of the FVMUZ

Appendix 6. List of collaborating institutions

Appendix 7. Student enrolment in last three academic year

Appendix 8. Student and staff mobility

Appendix 9. Grading system at the FVMUZ

Appendix 10. List of staff at the FVMUZ

Appendix 11. Number of enrolled PhD students and students at specialist programmes

Appendix 12. List of Life-Long educations (courses)